

PUBLIC

**UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION
OFFICE OF ADMINISTRATIVE LAW JUDGES**

DOCKET NO. 9372

In the Matter of

**1-800 CONTACTS, INC.,
a corporation**

Respondent.

INITIAL DECISION

**D. Michael Chappell
Chief Administrative Law Judge**

Date: October 27, 2017

TABLE OF CONTENTS

I.	INTRODUCTION	1
A.	Summary of Complaint and Answer.....	1
1.	The Complaint	1
2.	Respondent’s Answer and Defenses.....	2
B.	Procedural History	3
C.	Evidence.....	4
D.	Summary of Initial Decision.....	7
II.	FINDINGS OF FACTS	8
A.	Jurisdiction.....	8
B.	Contact Lenses – Industry Background	8
1.	Contact Lens Manufacturers	8
2.	Contact Lenses are Prescription-Only Medical Devices	8
3.	Prescription Verification.....	9
4.	Contact Lenses are a Commodity Product.....	10
C.	1-800 Contacts	11
1.	Company Background	11
2.	Marketing Strategy.....	13
3.	1-800 Contacts’ Sales	14
D.	Categories of Contact Lens Retailers.....	15
1.	ECPs.....	15
a.	Independent ECPs.....	15
b.	Optical retail chains	16
c.	Mass merchants and club stores.....	16
2.	Online Retailers	17
a.	AC Lens	17
b.	Coastal Contacts.....	18
c.	Contact Lens King	18
d.	EZ Contacts USA.....	18
e.	Lens.com.....	18
f.	LensDirect.....	18
g.	Lens Discounters.....	18
h.	Lensfast	18
j.	Lenses for Less	19
k.	Memorial Eye.....	19
l.	ReplaceMyContacts	19
m.	Web Eye Care	19
n.	Walgreens and Vision Direct	19
3.	New Contact Lens Retail Companies	20
a.	Simple Contacts	20
b.	Sightbox	20
c.	Hubble Contacts.....	20
d.	Daysoft.....	21

E.	Internet Search Methods and Mechanics	21
1.	Organic or Natural Search Results.....	22
2.	Paid Search Advertising.....	22
3.	How Paid Search Results are Generated by Google.....	23
a.	Keywords and match types	23
i.	Broad match	24
ii.	Modified broad match.....	24
iii.	Phrase match	24
iv.	Exact match.....	25
v.	Negative keywords.....	25
b.	Ad Rank and its components	25
i.	Bids	26
ii.	Expected CTR.....	26
iii.	Ad relevance	27
iv.	Landing page experience	27
v.	Ad extensions and format	27
c.	The Auction Outcome: Ad Rank, Ad Position, and Actual CPC.....	28
i.	Minimum bids.....	28
ii.	Ad position.....	29
iii.	Actual cost-per-click	29
iv.	User information	30
v.	Whether an ad is shown may change over time.....	30
d.	Advertiser budgets	30
e.	AdWords keyword planner	31
4.	How Paid Search Results are Generated by Bing.....	31
5.	Other Marketing Channels on the Internet.....	32
a.	Display advertising	33
b.	Retargeting and remarketing advertising	33
c.	Social media advertising	33
d.	Affiliate marketing.....	34
e.	Email marketing.....	34
f.	Mobile applications.....	34
g.	Comparison shopping engines	35
h.	Product listing advertisements	35
i.	Knowledge graphs	36
F.	Search Engine Trademark Policies	38
1.	Google Trademark Policies.....	38
2.	Bing Trademark Policies.....	39
G.	The Challenged Agreements.....	40
1.	Trademark Litigation Settlements.....	40
a.	Early history: Vision Direct and Coastal Contacts	40
i.	Vision Direct.....	40
ii.	Coastal Contacts.....	42
b.	Trademark monitoring and cease and desist letters	42

	c.	Litigation.....	44	
	d.	Settlements.....	47	
	e.	Relevant provisions of the Settlement Agreements.....	48	
	f.	Post-settlement enforcement of the Settlement Agreements	50	
		i.	AC Lens.....	50
		ii.	Coastal Contacts.....	51
		iii.	Vision Direct.....	52
		iv.	Walgreens	52
		v.	EZ Contacts.....	53
		vi.	Lensfast.....	53
		vii.	Contact Lens King	53
		viii.	Empire Vision	54
		ix.	Lenses for Less	54
	2.	Luxottica Sourcing and Services Agreement.....	54	
H.		Relevant Product Market	54	
	1.	Convenience.....	55	
	2.	Industry Recognition.....	56	
	3.	Specialized Facilities	57	
	4.	Distinct Prices	59	
	5.	Critical Loss Analysis.....	62	
	6.	Unilateral Pricing Policies	65	
I.		Relevant Geographic Market	66	
J.		Market Shares	67	
K.		Anticompetitive Effects	67	
	1.	Commercial Importance of Advertising in Response to Searches for 1-800 Contacts’ Trademarks	67	
	a.	Importance of paid search advertising in marketing contacts online.....	67	
		i.	AC Lens.....	68
		ii.	Empire Vision	70
		iii.	LensDirect.....	70
		iv.	Lens Discounters.....	71
		v.	Lenses for Less	71
		vi.	Memorial Eye.....	72
		vii.	Vision Direct.....	72
		viii.	Walgreens	73
		ix.	Walmart.....	73
		x.	Web Eye Care	74
	b.	Expert opinion.....	75	
	c.	Importance of trademark paid search advertising in marketing contacts online	75	
		i.	1-800 Contacts	75
		ii.	AC Lens	77
		iii.	Coastal Contacts.....	79
		iv.	Empire Vision	79
		v.	LensDirect.....	79

	vi.	Lens Discounters.....	81
	vii.	Lenses for Less	81
	viii.	Memorial Eye.....	82
	ix.	Vision Direct.....	83
	x.	Walgreens	84
	xi.	Walmart.....	84
	xii.	Web Eye Care	85
	d.	Expert opinion.....	86
	e.	AdWords data	87
		i. Memorial Eye.....	87
		ii. LensDirect.....	89
	2.	Economic Theory as to Anticompetitive Effects of Advertising Restrains.....	91
	3.	Restricted Advertising	91
	4.	Price Information	92
	5.	Relationship Between Restricting Advertising in Response to Searches for 1-800 Contacts' Trademark Terms and Sales	95
	6.	Expert Opinion.....	98
	7.	Economic Modeling Facts	100
		a. Dr. Athey's model.....	100
		b. Dr. Evans' model	101
L.		Asserted Procompetitive Justifications	102
	1.	Dr. Van Liere's Survey.....	102
	2.	Dr. Goodstein's Opinion.....	105
	3.	Increased Search Costs	107
	4.	Increased Sales.....	107
III.		ANALYSIS	109
A.		Summary of Facts	109
	1.	Contact Lenses Generally	109
	2.	The Start of the Company 1-800 Contacts.....	110
	3.	Sources for Purchasing Contact Lenses	111
		a. Eye care practitioners.....	111
		b. Online retailers of contact lenses	112
	4.	Paid Search Advertising on the Internet	113
	5.	Summary of the Challenged Agreements	115
		a. The Settlement Agreements.....	115
		b. Luxottica Sourcing and Services Agreement.....	116
B.		Overview of Applicable Law	117
C.		Immunity Under <i>Actavis</i>	120
D.		Relevant Market.....	122
	1.	Relevant Geographic Market	123
	2.	Relevant Product Market	124
		a. Interchangeability and cross-elasticity.....	125

	b.	<i>Brown Shoe</i> factors	127
		i. Industry recognition	127
		ii. Peculiar characteristics and distinct customers.....	127
		iii. Distinct prices	129
		iv. Specialized vendors	130
	c.	Ordinary course of business documents	132
	d.	Economic expert testimony.....	133
		i. Critical loss analysis	133
		ii. Unilateral pricing policies.....	136
	e.	Summary	138
E.		Anticompetitive Effects	138
	1.	Overview.....	138
	2.	Context for the Challenged Agreements.....	139
		a. Competitive significance	139
		i. Paid search advertising generally.....	140
		ii. Trademark paid search.....	141
		b. Trademark litigation.....	146
		c. Summary of context.....	151
	3.	Actual Anticompetitive Effects.....	151
		a. Introduction.....	151
		b. Harm to consumers and competition	153
		c. Economic modeling	156
		i. Dr. Athey’s model.....	157
		ii. Dr. Evans’ model	159
		iii. Conclusion regarding economic modeling	160
	4.	Respondent’s Arguments Opposing a Finding of Actual Anticompetitive Effects	160
		a. Burden of proof.....	161
		b. <i>De minimis</i> harm	162
		c. Availability of other information to consumers.....	165
	5.	Conclusion Regarding Proof of Anticompetitive Effects	166
F.		Asserted Procompetitive Justifications	166
	1.	Overview.....	166
	2.	Avoidance of Litigation Costs	167
	3.	Trademark Protection.....	169
	4.	Consumer Confusion	172
		a. Opinion of Dr. Ronald Goodstein.....	172
		b. Opinion of Dr. Kent Van Liere.....	175
		c. Customer service records	181
		d. Opinion of Dr. Anindya Ghose.....	183
		e. Summary	184
	5.	Search Costs.....	184
	6.	Increased Sales.....	188
	7.	Summary and Conclusion.....	190

G.	Remedy	190
1.	Applicable Legal Standards	190
2.	Specific Provisions.....	191
a.	Paragraph I.....	191
b.	Paragraphs II.A and II.B	192
c.	Paragraphs II.C and II.D	194
d.	Paragraph III	196
e.	Paragraph IV	197
f.	Paragraphs V-VIII.....	198
IV.	SUMMARY OF CONCLUSIONS OF LAW	199
ORDER	202

I. INTRODUCTION

A. Summary of Complaint and Answer

1. The Complaint

The Administrative Complaint in this case (“Complaint”), issued by the Federal Trade Commission (“FTC” or “Commission”) on August 8, 2016, alleges that certain agreements between Respondent 1-800 Contacts, Inc., (“1-800 Contacts” or “Respondent”), a seller of contact lenses, and 14 competing online sellers of contact lenses, unlawfully restrain competition in online search advertising auctions, in violation of Section 5 of the Federal Trade Commission Act (“FTC Act”). Complaint ¶¶ 1, 4, 20, 33 (the “Challenged Agreements”).

According to the Complaint, search engine companies sell advertising space on search engine results pages by means of auctions, which advertisers may enter by bidding on particular words, referred to as “keywords.” Complaint ¶ 10, 10b. Search advertising refers to the paid advertisements that appear, in response to a search query, on a search engine results page above or adjacent to the unpaid “organic” or “natural” results. Complaint ¶ 7.

The Complaint further alleges that the Challenged Agreements, which include settlement agreements in connection with trademark claims brought by Respondent, restrict 1-800 Contacts’ competitors from bidding on 1-800 Contacts’ trademarked terms (*e.g.*, “1-800 Contacts”) or variations thereof (such as common misspellings), as keywords in search advertising auctions. Complaint ¶¶ 17-20, 22. The Complaint avers that 13 of the 14 Challenged Agreements further require the competitors to employ “negative keywords” to prevent the search engines’ algorithms from causing the display of the competitor’s advertisements in response to a search for 1-800 Contacts’ trademarked terms or variations thereof. Complaint ¶ 24. The Complaint further alleges that the Challenged Agreements are reciprocal, even though most of the settling parties had not raised any trademark claims against Respondent. Complaint ¶¶ 23, 24.

In addition, the Complaint alleges that the Challenged Agreements unreasonably restrain competition and injure consumers and others, including by unreasonably restraining price competition in search advertising auctions and restricting the availability of truthful, non-misleading advertising, in violation of Section 5 of the FTC Act. Complaint ¶¶ 3, 31, 33.

2. Respondent's Answer and Defenses

Respondent filed its Answer and Defenses (“Answer”) to the Complaint on August 29, 2016. Respondent avers that it has been a leader in increasing competition in the contact lens retail marketplace, which has resulted in greater convenience, better service, and lower prices for contact lens consumers. Answer at 1. Respondent further avers that the Challenged Agreements are legitimate, reasonable, and commonplace settlements of *bona fide* trademark litigation based on other contact lens retailers’ unauthorized use of 1-800 Contacts’ trademarks as keywords to trigger internet search advertising. Answer at 1, ¶¶ 22-24. Respondent denies that the Challenged Agreements unreasonably restrain competition or injure consumers or others, and further denies that its conduct violates Section 5 of the FTC Act. Answer ¶¶ 3, 31, 33.

The Answer includes twelve defenses, including its Second Defense, that the claim set forth in the Complaint is barred because the lawsuits that gave rise to the Challenged Agreements have not been alleged to be and have not been shown to be objectively and subjectively unreasonable; and its Third Defense, that the claim set forth in the Complaint is barred because Respondent’s conduct is protected under the *Noerr-Pennington* doctrine and the First Amendment to the United States Constitution. Answer at 7-8.

On November 1, 2016, Complaint Counsel filed with the Commission a motion for partial summary decision, arguing that Respondent’s Second and Third Defenses should be dismissed as invalid as a matter of law. Under the Commission’s Rules of

Practice, the motion was decided by the Commission.¹ The Commission held that Respondent's Second and Third Defenses failed as a matter of law and granted Complaint Counsel's motion. *In re 1-800 Contacts, Inc.*, 2017 FTC LEXIS 19 (Feb. 1, 2017). Thus, the Commission, who issued the Complaint, granted a motion filed with the Commission by Complaint Counsel, who prosecutes the Complaint, the effect of which was to eliminate two defenses raised by Respondent, before the trial of this case, conducted by the independent Administrative Law Judge, had even begun.

B. Procedural History

The evidentiary hearing began on April 11, 2017 and was completed on May 12, 2017. The hearing record was closed by Order dated May 17, 2017.²

Rule 3.51(a) of the Commission's Rules of Practice states that "[t]he Administrative Law Judge shall file an initial decision within 70 days after the filing of the last filed initial or reply proposed findings of fact, conclusions of law and order" 16 C.F.R. § 3.51(a). Complaint Counsel and Respondent ("the Parties") filed concurrent post-trial briefs and proposed findings of fact on June 15, 2017. The Parties filed replies

¹ The Commission amended Rule 3.22 of its Rules of Practice in 2009 to allow "the Commission to decide legal questions and articulate applicable law when the parties raise purely legal issues." Proposed rule amendments; request for public comment, 73 Fed. Reg. 58,832, 58,836 (Oct. 7, 2008). "[C]ommenters (including the [Section of Antitrust Law of the American Bar Association ('Section')], criticized the [Commission's] proposed Rule change as unfairly invading the province of the independent ALJ and compromising the Commission's dual roles as prosecutor and adjudicator." Interim final rules with request for comment, 74 Fed. Reg. 1804, 1809 (Jan. 13, 2009). "For example, the Section argued that the proposed changes . . . could raise concerns about the impartiality and fairness of the Part 3 proceeding by permitting the Commission to adjudicate dispositive issues, including motions to dismiss challenging the facial sufficiency of a complaint, shortly after the Commission has voted out the complaint finding that it has 'reason to believe' there was a law violation, without the benefit of an opinion by an independent ALJ." *Id.* A joint comment from former FTC Chairman Robert Pitofsky and Michael N. Sohn "similarly argued that the proposed rules, including Rule 3.22, would arguably infringe on the fairness of the Part 3 proceeding if the Commission more frequently 'invades what has heretofore been the province of an independent ALJ.'" *Id.* Dismissing these objections, the Commission amended its Rules of Practice to give to itself the authority to decide "[m]otions to dismiss filed before the evidentiary hearing, motions to strike, and motions for summary decision[.]" 16 C.F.R. § 3.22(a).

² Over 1,250 exhibits were admitted into evidence, 43 witnesses testified, either live or by deposition, and there are 4,554 pages of trial transcript. The Parties' post-trial briefs, proposed findings of fact and conclusions of law, reply briefs and replies to proposed findings of fact and conclusions of law total 3,514 pages.

to each other's proposed findings of fact, conclusions of law, and post-trial briefs on July 13, 2017. Pursuant to Commission Rule 3.41(b)(6), closing arguments were held on July 27, 2017.³

Seventy days from the last filed reply proposed findings and conclusions and briefs was September 21, 2017, and, absent an order pursuant to Rule 3.51, the Initial Decision was to be filed on or before September 21, 2017. Based on the voluminous and complex record in this matter, an Order was issued on September 11, 2017, finding good cause for extending the time period for filing the Initial Decision by 30 days. Accordingly, issuance of this Initial Decision by October 23, 2017 is in compliance with Commission Rule 3.51(a).

C. Evidence

This Initial Decision is based on a consideration of the whole record relevant to the issues, including the exhibits properly admitted into evidence, deposition transcripts, and the transcripts of testimony at trial, and addresses the material issues of fact and law. The briefs and proposed findings of fact and conclusions of law, and the replies thereto, submitted by the Parties, and all contentions and arguments therein were thoroughly reviewed and considered.

Proposed findings of fact submitted by the Parties but not accepted in this Initial Decision were rejected, either because they were not supported by the evidence or because they were not dispositive or material to the determination of the merits of the case. Similarly, legal contentions and arguments of the Parties that are not addressed in

³ On August 22, 2017, Respondent filed a Notice of Supplemental Authority. Complaint Counsel filed its Response to Respondent's Notice of Supplemental Authority on August 25, 2017. Rule 3.15(a) permits, upon reasonable notice and such terms as are just, service of a supplemental pleading setting forth transactions, occurrences, or events which have happened since the date of the pleading sought to be supplemented and which are relevant to any of the issues involved. 16 C.F.R. § 3.15(a). The materials in Respondent's Notice of Supplemental Authority have been considered and do not affect the analysis or the conclusions contained in the Initial Decision.

this Initial Decision were rejected, because they lacked support in fact or law, were not material, or were otherwise lacking in merit.⁴

Under Commission Rule 3.51(c)(1), “[a]n initial decision shall be based on a consideration of the whole record relevant to the issues decided, and shall be supported by reliable and probative evidence.” 16 C.F.R. § 3.51(c)(1); *see In re Chicago Bridge & Iron Co.*, 138 F.T.C. 1024, 1027 n.4, 2005 FTC LEXIS 215, at *3 n.4 (Jan. 6, 2005). Under the Administrative Procedure Act (“APA”), an Administrative Law Judge may not issue an order “except on consideration of the whole record or those parts thereof cited by a Party and supported by and in accordance with the reliable, probative, and substantial evidence.” 5 U.S.C. § 556(d). All findings of fact in this Initial Decision are supported by reliable, probative, and substantial evidence. Citations to specific numbered findings of fact in this Initial Decision are designated by “F.”⁵

⁴ Ruling upon a decision of the Interstate Commerce Commission, and interpreting language in the Administrative Procedure Act that is almost identical to language in FTC Rule 3.51(c)(1), the United States Supreme Court held that “[b]y the express terms of [that Act], the Commission is not required to make subordinate findings on every collateral contention advanced, but only upon those issues of fact, law, or discretion which are ‘material.’” *Minneapolis & St. Louis Ry. Co. v. United States*, 361 U.S. 173, 193-94 (1959). *Accord Stauffer Labs., Inc. v. FTC*, 343 F.2d 75, 82 (9th Cir. 1965). *See also Borek Motor Sales, Inc. v. NLRB*, 425 F.2d 677, 681 (7th Cir. 1970) (holding that it is adequate for the Board to indicate that it had considered each of the company’s exceptions, even if only some of the exceptions were discussed, and stating that “[m]ore than that is not demanded by the [APA] and would place a severe burden upon the agency”). Furthermore, the Commission has held that Administrative Law Judges are not required to discuss the testimony of each witness or all exhibits that are presented during the administrative adjudication. *In re Amrep Corp.*, 102 F.T.C. 1362, 1670, 1983 FTC LEXIS 17, at *566-67 (Nov. 2, 1983).

⁵ References to the record are abbreviated as follows:

CX – Complaint Counsel’s Exhibit
RX – Respondent’s Exhibit
JX – Joint Exhibit
Tr. – Transcript of testimony before the Administrative Law Judge
Dep. – Transcript of Deposition
CCB – Complaint Counsel’s Corrected Post-Trial Brief
CCRB – Complaint Counsel’s Post-Trial Reply Brief
CCFF – Complaint Counsel’s Corrected Proposed Findings of Fact
CCRRFF – Complaint Counsel’s Reply to Respondent’s Proposed Findings of Fact
CCCL – Complaint Counsel’s Corrected Conclusions of Law
RB – Respondent’s Post-Trial Brief
RRB – Respondent’s Corrected Post-Trial Reply Brief
RFF – Respondent’s Proposed Findings of Fact
RRCCFF – Respondent’s Corrected Reply to Complaint Counsel’s Proposed Findings of Fact
RCL – Respondent’s Conclusions of Law

The Parties' burdens of proof are governed by Federal Trade Commission Rule 3.43(a), Section 556(d) of the Administrative Procedure Act ("APA"), and case law. Pursuant to Commission Rule 3.43(a), "[c]ounsel representing the Commission . . . shall have the burden of proof, but the proponent of any factual proposition shall be required to sustain the burden of proof with respect thereto." 16 C.F.R. § 3.43(a). Under the APA, "[e]xcept as otherwise provided by statute, the proponent of a rule or order has the burden of proof." 5 U.S.C. § 556(d). The APA, "which is applicable to administrative adjudicatory proceedings unless otherwise provided by statute, establishes ' . . . the traditional preponderance-of-the evidence standard.'" *In re Rambus, Inc.*, 2006 FTC LEXIS 101, at *45 (Aug. 20, 2006) (quoting *Steadman v. SEC*, 450 U.S. 91, 95-102 (1981)), *rev'd on other grounds*, 522 F.3d 456 (D.C. Cir. 2008).

Pursuant to Commission Rule 3.45(b), several orders were issued in this case granting *in camera* treatment to material, after finding, in accordance with the Rule, that its public disclosure would likely result in a clearly defined, serious injury to the entity requesting *in camera* treatment or that the material constituted "sensitive personal information," as that term is defined in Commission Rule 3.45(b). In addition, when the Parties sought to elicit testimony at trial that revealed information that had been granted *in camera* treatment, the hearing went into an *in camera* session.

Commission Rule 3.45(a) allows the Administrative Law Judge "to grant *in camera* treatment for information at the time it is offered into evidence subject to a later determination by the [administrative] law judge or the Commission that public disclosure is required in the interests of facilitating public understanding of their subsequent decisions." *In re Bristol-Myers Co.*, Nos. 8917-19, 90 F.T.C. 455, 457, 1977 FTC LEXIS 25, at *6 (Nov. 11, 1977). As the Commission later reaffirmed in another leading case on *in camera* treatment, since "in some instances the ALJ or Commission cannot know that a certain piece of information may be critical to the public understanding of agency action until the Initial Decision or the Opinion of the Commission is issued, the Commission and the ALJs retain the power to reassess prior *in camera* rulings at the time of publication of decisions." *In re General Foods Corp.*, No. 9085, 95 F.T.C. 352, 356

n.7; 1980 FTC LEXIS 99, at *12 n.7 (March 10, 1980). Thus, in instances where a document or trial testimony had been given *in camera* treatment, but the portion of the material cited to in this Initial Decision does not in fact require *in camera* treatment, such material is disclosed in the public version of this Initial Decision, pursuant to Commission Rule 3.45(a) (the ALJ “may disclose such *in camera* material to the extent necessary for the proper disposition of the proceeding”). Where *in camera* information is used in this Initial Decision, it is indicated in bold font and braces (“{ }”) in the *in camera* version and is redacted from the public version of the Initial Decision, in accordance with Commission Rule 3.45(e).

D. Summary of Initial Decision

Complaint Counsel has met its burden of proving that the Challenged Agreements unreasonably restrain trade in violation of Section 5 of the FTC Act. Contrary to Respondent’s argument, *FTC v. Actavis*, 133 S. Ct. 2223 (2013), is not authority for the proposition that trademark settlement agreements are immune from antitrust scrutiny.

The evidence in this case demonstrates that the advertising restraints imposed by the Challenged Agreements cause harm to consumers and competition in the market for the sale of contact lenses online. This is sufficient to establish Complaint Counsel’s *prima facie* case that the agreements are anticompetitive. The evidence fails to prove that the Challenged Agreements have countervailing procompetitive benefits that outweigh or justify the demonstrated anticompetitive effects of the Challenged Agreements. Accordingly, the Challenged Agreements violate Section 5 of the FTC Act. An appropriate remedial order is entered herewith.

II. FINDINGS OF FACTS

A. Jurisdiction

1. 1-800 Contacts, Inc., (“1-800 Contacts”) is headquartered at 261 West Data Drive, Draper, Utah. (Joint Stipulations of Jurisdiction, Law, and Facts, JX0001 ¶ 1).
2. 1-800 Contacts is a corporation as “corporation” is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. § 44. (Joint Stipulations of Jurisdiction, Law, and Facts, JX0001 ¶ 2).
3. 1-800 Contacts, through its operations based in Draper, Utah, has engaged in and continues to engage in commerce and activities affecting commerce in each of the fifty states in the United States and the District of Columbia, as the term “commerce” is defined by Section 4 of the Federal Trade Commission Act, 15 U.S.C. § 44. (Joint Stipulations of Jurisdiction, Law, and Facts, JX0001 ¶ 3; CX1441 at 004 (Responses of Respondent 1-800 Contacts, Inc. to Complaint Counsel’s First Set of Requests for Admissions, Admission No. 3)).

B. Contact Lenses – Industry Background

1. Contact Lens Manufacturers

4. In the United States, the total sales of contact lenses at retail in 2015 was estimated to be about \$4.7 billion. (Bethers, Tr. 3551-52; RX0428 at 0006).
5. In the United States, total sales of contact lenses at retail grew about 4% to 5% annually from 2001 through 2015. (CCRFF 13; RX0428 at 0006; RX0904 at 0038).
6. Around 40 million consumers use contact lenses in the United States. (CX8006 (Evans Expert Report at 020 ¶ 46); CX0429 at 029).
7. There are four major manufacturers of contact lenses that account for about 95% of the United States market: Johnson & Johnson, Alcon, CooperVision, and Bausch & Lomb. (Clarkson, Tr. 183; RX0739 (Murphy Expert Report at 0085)).

2. Contact Lenses are Prescription-Only Medical Devices

8. Contact lenses are medical devices. (Clarkson, Tr. 177-78).
9. Labeling regulations of the U.S. Food and Drug Administration effectively require that contact lenses are sold only pursuant to a prescription. (RX0566 at 007 (Federal Trade Commission, 16 CFR Parts 315 and 456, Contact Lens Rule, Ophthalmic Practice Rules, Proposed Rule and Final Rule)).

10. A consumer interested in wearing contact lenses must go to an optometrist or ophthalmologist for a contact lens prescription. (Bethers, Tr. 3511-12).
11. Optometrists and ophthalmologists are commonly referred to as eye care practitioners or “ECPs.” (RX0569 at 0005).
12. ECPs are licensed and authorized to write the prescriptions required for the purchase of contact lenses pursuant to the laws of the states in which they deliver their services. (Joint Stipulations of Jurisdiction, Law and Facts, JX0001 ¶ 4; *see also* Bethers, Tr. 3511-12, 3526-27 (ECPs, who write contact lens prescriptions, are “gatekeepers” for contact lens wearers)).
13. Contact lenses originally were made of a rigid material and required an ECP to custom fit each pair. (RX0569 at 0009).
14. Beginning in the late 1980s, contact lens manufacturers began to make disposable lenses that were designed to be replaced on a daily, weekly, or monthly basis. (RX0569 at 0009).
15. Technological improvements in manufacturing contact lenses eliminated the need for an ECP to fit each pair of contact lenses during the contact lens fitting process. (RX0569 at 0009).
16. The evolution in contact lens technology allows the sale of contact lenses to be unbundled from the fitting exam by an ECP. (RX0569 at 0009).
17. On December 6, 2003, Congress passed the Fairness to Contact Lens Consumers Act, 15 U.S.C. § 7601, which requires that ECPs provide contact lens prescriptions to their patients upon completion of a contact lens fitting. (RX0566 at 002).
18. Contact lens prescriptions typically expire within one or two years. In most states, a contact lens prescription expires in one year. In seven states, a contact lens prescription expires in two years. (Bethers, Tr. 3601; CX8006 (Evans Expert Report at 020-21 ¶ 49)).
19. Because of the expiration of a contact lens prescription, a contact lens wearer must visit an ECP at least once every year (or every two years in seven states) to renew their prescription or obtain a new prescription. (Bethers, Tr. 3601).

3. Prescription Verification

20. Before selling contact lenses to a customer, contact lens retailers must either obtain a copy of the prescription or verify the information in the prescription with the prescribing doctor. (Clarkson, Tr. 177-78; 16 C.F.R. § 315.5(a): “*Prescription requirement.* A seller may sell contact lenses only in accordance with a contact lens prescription for the patient

that is: (1) Presented to the seller by the patient or prescriber directly or by facsimile; or (2) Verified by direct communication.”).

21. A contact lens prescription is verified if one of the following occurs: (1) The prescriber confirms the prescription is accurate by direct communication with the seller; (2) The prescriber informs the seller through direct communication that the prescription is inaccurate and provides the accurate prescription; or (3) The prescriber fails to communicate with the seller within eight (8) business hours after receiving from the seller the information described in Section 315.5(b) of the Contact Lens Rule. (Clarkson, Tr. 179-81; 16 C.F.R. § 315.5(c)).
22. If a prescriber does not actively verify the prescription within eight business hours of notice, the prescription is treated as verified. This is referred to as passive or presumed verification. (Clarkson, Tr. 178; Coon, Tr. 2719-20; Bethers, Tr. 3714).

4. Contact Lenses are a Commodity Product

23. A contact lens prescription specifies the power, base curve, and the specific brand of contact lens. (Clarkson, Tr. 185-86; Holbrook, Tr. 1880-81; CX0439 at 040; *see also* Bethers, Tr. 3592).
24. Contact lenses that consumers purchase will be identical, regardless of whether the patient receives the lens from his or her prescribing ECP or from another seller. (RX0569 at 0009).
25. At the point that a consumer has a prescription and is shopping for contact lenses, the lenses are a commodity product. (Clarkson, Tr. 202-03 (“[A] contact lens might be a highly differentiated product when it’s manufactured, but the moment the doctor writes a prescription for it, it becomes a pure commodity. I mean, a box of ACUVUE [is] a box of ACUVUE, it really doesn’t matter where you buy it.”); CX9029 (Bethers, Dep. at 22-23); Coon, Tr. 2688-89; Aloviz Tr. 993-94).
26. Even if multiple manufacturers manufacture contact lenses with the same parameters, there can be differences between the brands in terms of fit and comfort, which can be associated with slight differences in the materials used in the lens or the thickness of the lens, thus a consumer cannot switch brands once a prescription is written. (Clarkson, Tr. 186, 293; CX9000 (Batushanky, IHT at 13)).
27. 1-800 Contacts sells the same products as other retailers of contact lenses. (CX9029 (Bethers, Dep. at 22-23) (contact lens retailers “sell a commodity that [is] a mass-produced product. A consumer can only buy one product. They have no ability to buy a different product. And the product we sell is the exact same product they can buy from any other retailer.”); CX9035 (Coon, Dep. at 111) (“[Y]ou can’t compete on the product because there is no alternative, unless somebody can get a prescription for a different brand. So once a prescription’s been written, you’re only left with two things that you

can compete on, price and service”); CX9034 (Roush, Dep. at 177) (“[W]e sell the same contact lenses other retailers sell.”)).

C. 1-800 Contacts

1. Company Background

28. Jonathan Coon was the chief executive officer (“CEO”) of 1-800 Contacts from 1992 until approximately January 2014. (Coon, Tr. 2649).
29. Brian Bethers currently serves as the CEO of 1-800 Contacts and has been the CEO of 1-800 Contacts since January 2014. Mr. Bethers began his career with 1-800 Contacts in 2003 as a chief financial officer (“CFO”). (Bethers, Tr. 3506-07).
30. Mr. Coon started the business that became 1-800 Contacts from his college dormitory room in February 1992. (Coon, Tr. 2649).
31. Based on his own contact lens purchasing experience in 1992, Mr. Coon believed that the process of buying contact lenses was inconvenient, the service was not very good, and the prices were high. (Coon, Tr. 2649-50).
32. Mr. Coon believed that there was a good opportunity for a mail order business to provide contact lenses at lower prices and with better service than ECPs. (Coon, Tr. 2650-51).
33. Mr. Coon began a mail order contact lens business called Eye Supply, which he promoted by distributing fliers. Eye Supply initially carried four products that it sold exclusively to college students living in nearby dormitories on campus. (Coon, Tr. 2651-52).
34. After about a year of doing business under the name Eye Supply, Mr. Coon obtained the phone number for 1-800 Lens Now. (Coon, Tr. 2653).
35. After a few years, Mr. Coon combined his business with another mail order contact lens business, Discount Lens Club, which he operated out of a house. (Coon, Tr. 2654-55).
36. In June 1995, after obtaining the 1-800 Contacts phone number, the name of the business was changed to 1-800 Contacts. (Coon, Tr. 2658-61).
37. 1-800 Contacts’ sales more than doubled the first month after activating the 1-800 Contacts phone number. (Coon, Tr. 2661-62).
38. The company launched the 1-800 Contacts website in or about 1996. (Coon, Tr. 2664).
39. 1-800 Contacts designed its website to be as simple and efficient as possible for a customer to place an order and to minimize the amount of time spent on the website and the number of clicks a consumer had to make to purchase contact lenses. 1-800 Contacts’

repeat customers could place an order for contact lenses with two clicks on the website. (CX9027 (Larson, Dep. at 94)).

40. 1-800 Contacts has made recent changes to its website that allow potential customers to enter just their ECP's name and 1-800 Contacts will contact the ECP to obtain the necessary prescription information. (Bethers, Tr. 3643).
41. In 2011, 1-800 Contacts developed a mobile application for customers to order contact lenses online. (Coon, Tr. 2678-79, 2691-92; RX0428 at 0017; CX1775 at 001).
42. 1-800 Contacts recently expanded its mobile application features to allow customers to take a photo with their mobile device of their prescription and send it to 1-800 Contacts immediately. (Bethers, Tr. 3643; CX1446 at 012).
43. 1-800 Contacts' business objective from the company's inception was to make the process of buying contact lenses simple and it tries to distinguish itself from other contact lens retailers by making it faster, easier, and more convenient to get contact lenses. (Coon, Tr. 2669-70).
44. 1-800 Contacts has more inventory in stock than any other contact lens retailer, allowing 1-800 Contacts to fill 98% of all orders with inventory on hand. (Coon, Tr. 2690-91; Bethers, Tr. 3640; CX9029 (Bethers, Dep. at 136); RX0904 at 0016; CX1446 at 012).
45. 1-800 Contacts' customer care representatives answer most calls with a live person by the third ring and most emails within 10 minutes. (Coon, Tr. 2691; RX0904 at 0019; CX0525 at 020).
46. 1-800 Contacts offers free replacements for torn contact lenses. (Coon, Tr. 2700; RX0904 at 0016; CX1446 at 012).
47. 1-800 Contacts' customer service has been recognized by, and received awards from, many third parties, including J.D. Power and Associates, StellaService Elite award, and Foresee (a commonly used company to measure customer satisfaction). (CX9027 (Larson, Dep. at 71-72); RX0590 at 0002; RX0901 at 0001; RX0904 at 0019; RX0155 at 0001; *see also* Goodstein, Tr. 2396-98; RX0736 (Goodstein Expert Report at 012-16, Table 2); RX0739 (Murphy Expert Report at 0020)).
48. 1-800 Contacts currently has plans to expand its distribution network from one distribution center currently in Salt Lake City to add another hub in the eastern United States with five additional distribution spokes. This will allow 1-800 Contacts to deliver contact lenses to 98% of the United States population with free, standard two-day delivery. (Bethers, Tr. 3641-42).
49. 1-800 Contacts was a public company from February 1998 to July 2007, when it was acquired by the private equity firm Fenway Partners. 1-800 Contacts was later acquired in 2012 by Wellpoint/Anthem, and then by the private equity firm THL in 2014. Today,

1-800 Contacts is owned by the private equity firm AEA Investors. (Coon, Tr. 2672, 2677; RX0428 at 0023; CCRFF 62).

2. Marketing Strategy

50. 1-800 Contacts began marketing itself through Valpak, free-standing inserts, and other print advertising under the 1-800 Contacts name in or about September 1995. (Coon, Tr. 2661, 2663-64).
51. Once the company began advertising the 1-800 Contacts name and phone number, it saw a 20% to 25% increase in customer acquisition and customer retention. (Coon, Tr. 2662-63).
52. 1-800 Contacts began advertising on television in or about June 1998. (Coon, Tr. 2666).
53. 1-800 Contacts' business grew approximately 50% in a few months after it started advertising on television. (Coon, Tr. 2667).
54. 1-800 Contacts opened a new distribution center in 1999 that it believed had the largest inventory of contact lenses in terms of the number and variety of SKUs ("Stock Keeping Units") in one location and began promoting itself as "The World's Largest Contact Lens Store." (Coon, Tr. 2668-70).
55. 1-800 Contacts' marketing efforts have focused on offering consumers a better alternative to buying contact lenses from their ECP. (Coon, Tr. 2687, 2695).
56. A difficult challenge faced by 1-800 Contacts was persuading consumers to purchase a medical device like contact lenses from someone other than their ECP. (Coon, Tr. 2686).
57. 1-800 Contacts markets itself as having the highest levels of service and convenience, with retail prices below independent ECPs (F. 76) and optical retail chains. (Coon, Tr. 2708-10; CX9001 (Bethers, IHT at 80-81); RX0904 at 0016; CX0525 at 017; CX1446 at 012).
58. 1-800 Contacts' advertising message, which it repeated in many of its advertisements, was that the consumer could get the exact same contact lenses delivered to their door for less than they would pay to drive to their ECPs' office and pick them up. (Coon, Tr. 2666-67, 2687; CX9013 (Aston, Dep. at 182-83); RX0904 at 0002).
59. 1-800 Contacts' television advertising has emphasized that ECPs are not the only place where a consumer can buy contact lenses and that there is a choice of different contact lens retailers. (CX9017 (Blackwood, Dep. at 174)).
60. 1-800 Contacts has had a marketing strategy of generating brand awareness and new orders. (Schmidt, Tr. 2927-28).

61. 1-800 Contacts has sought a multichannel integrated marketing plan that took into account both online and traditional offline advertising channels and integrated them to ensure consistency in messaging across channels. (Schmidt, Tr. 2932).
62. 1-800 Contacts has used print advertising, television advertising, radio advertising, internet display advertising, affiliate marketing, social media advertising, and search engine optimization, in addition to internet search advertising. (Bethers, Tr. 3700-02).
63. 1-800 Contacts has found that there is a correlation between 1-800 Contacts' television advertisements and traffic to its website from clicks on a sponsored ad by 1-800 Contacts that appeared in response to a search for 1-800 Contacts' trademarks. (CX9017 (Blackwood, Dep. at 176); CX9032 (L. Schmidt, Dep. at 246-47); CX9029 (Bethers, Dep. at 98) ("as we increase our [television] advertising . . . , we have more potential customers and existing customers who come through trademark search. Those have been historically correlated.")).
64. 1-800 Contacts has spent a total of [REDACTED] on television advertising from 2002 through 2014. In 2002, 1-800 Contacts spent [REDACTED] on television advertising. In 2014, 1-800 Contacts spent [REDACTED] on television advertising. (RX0739 (Murphy Expert Report at 0092 Exhibit 8), *in camera*).
65. 1-800 Contacts has spent a total of [REDACTED] on internet advertising, growing from under [REDACTED] in 2002 to over [REDACTED] in 2014. (RX0739 (Murphy Expert Report at 0092 Exhibit 8), *in camera*).
66. In 2014, the most recent year for which data was available, [REDACTED] % of 1-800 Contacts' advertising budget was spent on internet advertising and between [REDACTED] % of 1-800 Contacts' internet advertising budget was spent on paid search advertising each year from 2004 through 2014. (RX0739 (Murphy Expert Report at 0092 Exhibit 8), *in camera*).

3. 1-800 Contacts' Sales

67. In 2004, 1-800 Contacts' internet sales surpassed its phone sales. (CX1775 at 001).
68. In 2015, 1-800 Contacts had revenues of approximately \$460 million. (Joint Stipulations of Jurisdiction, Law, and Facts, JX0001 ¶ 6).
69. The annual volume of contact lenses sold via the internet to U.S. consumers by 1-800 Contacts currently exceeds the annual volume of contact lenses sold via the internet to U.S. consumers by any other single company. (Joint Stipulations of Jurisdiction, Law, and Facts, JX0001 ¶ 5).
70. 1-800 Contacts' total customer orders for week 28 of 2015 were attributed to the following channels: [REDACTED] % by phone; [REDACTED] % by mobile app; [REDACTED] % by mobile website; [REDACTED] % by tablet computer; and [REDACTED] % by desktop computer. (Bethers, Tr. 3560-66, *in camera*; RX0428 at 0029, *in camera*).

71. 1-800 Contacts' total internet customer orders for the first and second quarters of 2015 were attributed to the following channels: ■■■% for mobile app; ■■■% for email; ■■■% for typed address (Uniform Resource Locator ("URL") and bookmark; ■■■% for paid search on 1-800 Contacts' trademarks; ■■■% for natural search; ■■■% for affiliates; ■■■% for other paid search; and ■■■% for other, which includes portals and media partners. (Bethers, Tr. 3569-80, *in camera*; RX0428 at 0030, *in camera*).

D. Categories of Contact Lens Retailers

72. There are tens of thousands of locations in the United States where contact lens consumers can go to purchase contact lenses. (Bethers, Tr. 3509, 3537-41; RX0739 (Murphy Expert Report at 0017)).
73. There are four different types of contact lens retailers: (1) independent ECPs; (2) optical retail chains; (3) mass merchants and club stores; and (4) online retailers. (Bethers, Tr. 3509; RX0739 (Murphy Expert Report at 0015-17)).

1. ECPs

74. There are approximately 40,000 optometrists and 18,000 ophthalmologists in the United States. (Bethers, Tr. 3509-10).
75. ECPs are permitted to sell the contact lenses that they prescribe. (Coon, Tr. 2685; Bethers, Tr. 3509-10; RX0569 at 0013).
76. ECPs can operate in independent practices ("independent ECPs"), with optical retail chains, and in conjunction with mass merchants and club stores. (Bethers, Tr. 3509-11; RX0739 (Murphy Expert Report at 0015-16)).
77. Independent ECPs, optical retail chains, and mass merchants and club stores have physical retail locations where consumers can purchase contact lenses. (Bethers, Tr. 3512, 3522, 3525-28).
78. Some independent ECPs, optical retail chains, and mass merchants and club stores also have websites through which consumers can purchase contact lenses. (Bethers, Tr. 3512-19, 3522, 3525-26, 3529-30, 3538-43).

a. Independent ECPs

79. There are about 16,000 independent ECP practices in the United States. (Bethers, Tr. 3509-10, 3546).
80. A number of independent ECPs sell contact lenses online through, or in conjunction with, services provided by contact lens manufacturers, contact lens wholesale distributors, or vision insurance providers. (Bethers, Tr. 3513-14).

81. Each of the major contact lens manufacturers offers to ship its contact lenses either to an ECP's office or directly to the ECP's patient, which gives independent ECPs the ability to provide home delivery of contact lenses to their patients. (Bethers, Tr. 3514).

b. Optical retail chains

82. In the United States, there are national and regional optical retail chains that sell contact lenses. (Bethers, Tr. 3520).
83. Optical retail chains provide eye care professionals on location and sell contact lenses. (Clarkson, Tr. 188; Bethers, Tr. 3509-11, 3520-22).
84. National optical retail chains include LensCrafters, Pearle Vision, Visionworks, America's Best Contacts and Glasses, and MyEyeDr. (Bethers, Tr. 3520-21).
85. Regional optical retail chains include Cohen Optical, Sterling Optical, and many others. (Bethers, Tr. 3520-21).
86. Luxottica Retail North America ("Luxottica") is an Ohio corporation that sells and distributes optical products, including contact lenses, through the brands LensCrafters, Pearle Vision, Sears Optical, and Target Optical, among others, and also operates internet websites for these stores. (CX0331 at 001, 006).
87. Visionworks of America, Inc. ("Empire Vision/Visionworks") provides optical services and products through its subsidiaries, including Visionworks, Inc. ("Visionworks") and Empire Vision Centers, Inc. ("Empire Vision"). Empire Vision/Visionworks operates more than 700 optical retail stores in 42 states and the District of Columbia. (CX0943 (Duley, Decl. at 001 ¶¶ 1, 5); *see also* CX9036 (Duley, Dep. at 23, 119-20)).
88. For many optical retail chains, a consumer can purchase contact lenses in the store, by phone, or on the chain's website. (Bethers, Tr. 3522).

c. Mass merchants and club stores

89. Many mass merchant and club stores have an onsite optometrist and a separate optical department located within the store unless they are in a state where employing optometrists is prohibited. (Bethers, Tr. 3526, 3528).
90. Mass merchants, such as Walmart, Target, Sears, Fred Meyer, and JCPenny, sell contact lenses in their stores. (Bethers, Tr. 3544, 3583; Clarkson, Tr. 188-89).
91. Walmart sells contacts lenses in its stores, over the phone, and through its own website. (Bethers, Tr. 3529; CX9037 (Owens, Dep. at 10)).

92. Walmart's retail prices for contact lenses are the same in-store and online. (CX9037 (Owens, Dep. at 26)).
93. Club stores – Costco, Sam's Club, and BJ's Wholesale Club – sell contact lenses in their stores and online through their own websites. (Bethers, Tr. 3525-26, 3530).
94. Costco had about \$230 million in contact lens sales in 2015. (CX8004 at 001).
95. Costco has been selling contact lenses to its members in its brick and mortar stores for over twenty-five years. (CX8004 at 001).
96. Costco began selling contact lenses online to its members in October 2016. (CX8004 at 001).
97. Costco's retail prices for contact lenses are the same in-store and online. (CX8004 at 002).

2. Online Retailers

98. Contact lens retailers who sell online but do not have a physical store are often referred to as "pure-play" online retailers. (Bethers, Tr. 3536-38).
99. 1-800 Contacts is generally categorized as a "pure-play" online retailer, although it recently opened four physical retail stores under the name Lumen Optical in the Chicago area. (Bethers, Tr. 3535).

a. AC Lens

100. Arlington Contact Lens Service, Inc. ("AC Lens") is an online retailer of contact lenses in the United States. AC Lens began selling contact lenses in 1996 and began search advertising in 1999. (CX1623; Clarkson, Tr. 173, 183; CX9039 (Clarkson, Dep. at 88; CX9003 (Clarkson, IHT at 89)).
101. AC Lens sells contact lenses online through several websites, primarily ACLens.com and DiscountContactLenses.com. (Clarkson, Tr. 182-83; CX9018 (Drumm, Dep. at 18-19, 172-73)).
102. AC Lens also provides "wholesale contact lens services" to several companies, including Sam's Club and Walmart. AC Lens' wholesale service entails shipping to stores or making shipments to partners' customers based on in-store orders. (Clarkson, Tr. 175-77).
103. AC Lens also provides "white label services" (F. 423) to allow rebranding for several partners including CVS, Sam's Club, Walmart and Giant Eagle. (Clarkson, Tr. 176-77; CX9003 (Clarkson, IHT at 9-10); CX9039 (Clarkson, Dep. at 192-93)).

b. Coastal Contacts

104. Coastal Contacts, Inc. (“Coastal Contacts”) headquartered in Vancouver, British Columbia, is an online retailer of contact lenses in the United States through the website coastalcontacts.com. (See CX1615 at 002 ¶ 4; CX0621 at 122; CX0310 at 018).

c. Contact Lens King

105. Contact Lens King, Inc. (“Contact Lens King”), founded in 2004, is an online retailer of contact lenses in the United States. (CX0461 at 002 ¶ 6; Murphy, Tr. 4262; RX0739 (Murphy Expert Report at 45 ¶ 115)).

d. EZ Contacts USA

106. As of 2008, EZ Contacts USA.com (“EZ Contacts USA”) was an online retailer of contact lenses in the United States. (CX0313 at 001, 003).

e. Lens.com

107. Lens.com, Inc. (“Lens.com”), founded in 1995, is an online retailer of contact lenses in the United States through the website lens.com. (See CX1125 at 003; CX0462 at 001).

f. LensDirect

108. LensDirect, LLC (“LensDirect”), founded in 1992, is an online retailer of contact lenses in the United States through the website lensdirect.com. (Bethers, Tr. 3538-41; Aloviss, Tr. 977, 979; CX1241; CX9023 (Aloviss, Dep. at 106)).

g. Lens Discounters

109. LD Vision Group, Inc. (“Lens Discounters”), founded in 2002, is an online retailer of contact lenses in the United States through websites, including LensDiscounters.com. (CX8003 (Mitha, Decl. at 001 ¶¶ 2-3)).

h. Lensfast

110. Lensfast, LLC (“Lensfast”), founded in 2001, is an online retailer of contact lenses in the United States through the websites lensfast.com, contactlens.com, and E-Contacts.com. (CX0315 at 006, 010; CX1618 at 017, Exhibit B).

i. LensWorld

111. As of 2008, LensWorld was an online retailer of contact lenses located in New Jersey with sales in the United States. (CX1622 at 003-04).

j. Lenses for Less

112. Lenses for Less, in business since 1999, sells contact lenses online in the United States and is a subsidiary of Oakwood Eye Clinic, a privately owned eye care provider company. (CX8000 (Studebaker, Decl. at 001 ¶¶ 1-3)).

k. Memorial Eye

113. Memorial Eye P.A. (“Memorial Eye”), founded in 1990, is based in Houston, Texas, and sells glasses, contact lenses, and optometry services through several brick and mortar facilities. (Holbrook, Tr. 1851, 1853; RX0072 at 0002-03 ¶¶ 7-8).
114. Memorial Eye sold contact lenses online directly to consumers in the United States through the internet from December 2004 through December 2013. (Holbrook, Tr. 1856-59, 1873-74; CX9024 (Holbrook, Dep. at 10-11); RX0072 at 0005 ¶ 17).
115. During the time it sold contact lenses online, Memorial Eye did so through two websites: ShipMyContacts.com and IWantContacts.com. (Holbrook, Tr. 1858-59).

l. ReplaceMyContacts

116. Tram Data, LLC d/b/a ReplaceMyContacts.com (“ReplaceMyContacts”) was an online seller of contact lenses in the United States. (CX0638 at 004-06).

m. Web Eye Care

117. Web Eye Care, Inc. (“Web Eye Care”), founded in 2009, is an online seller of contact lenses in the United States. (CX9000 (Batushansky, IHT at 8-9); Murphy, Tr. 4262; RX0739 (Murphy Expert Report at 45 ¶ 115)).
118. The vast majority of Web Eye Care’s net revenue is attributable to online sales of contact lenses. (CX9000 (Batushansky, IHT at 9)).

n. Walgreens and Vision Direct

119. Walgreens operates over 8000 retail pharmacy chains but does not sell contact lenses through its brick and mortar stores. (Hamilton, Tr. 388-90; CX8001 (Hamilton, Decl. at 001 ¶ 2)).
120. Walgreens sells contact lenses online through its website Walgreens.com and through the website VisionDirect.com. (Hamilton, Tr. 388-89).
121. Vision Direct is an online retailer of prescription optical products, which sells only contact lenses and related accessories. Vision Direct sells contact lenses through its website only and does not have brick and mortar stores. (Hamilton, Tr. 389-90).

122. Walgreens currently owns Vision Direct, which it acquired in or about 2011. (Hamilton, Tr. 389).

3. New Contact Lens Retail Companies

123. In the last two years, there have been new companies offering different services and new business models for selling contact lenses. (Bethers, Tr. 3584, 3588).

a. Simple Contacts

124. Simple Contacts is a new company that offers customers the ability to extend their contact lens prescription online and purchase contact lenses online from Simple Contacts. (Bethers, Tr. 3588-89).
125. To extend a contact lens prescription, Simple Contacts allows consumers to use the camera on a mobile device to record a video while looking at a visual acuity chart. The results are reviewed by an ophthalmologist who determines the prescription. (Bethers, Tr. 3588-89).
126. Simple Contacts sells online all of the major contact lenses manufactured in the United States. (Bethers, Tr. 3589).

b. Sightbox

127. Sightbox is a new company that sells contact lenses online and also arranges for its customers to obtain an eye exam with an ECP. (Bethers, Tr. 3589-90).
128. Sightbox operates on a subscription model whereby the customer pays a monthly subscription fee and Sightbox takes care of the customer for the whole year by supplying contact lenses, arranging an appointment for an eye exam with an ECP, and paying for the eye exam. (Bethers, Tr. 3589-90).

c. Hubble Contacts

129. Hubble Contacts is a new company that launched around the end of 2016, has its own brand of contact lenses, and sells those directly to consumers online. (Bethers, Tr. 3593-94; Clarkson, Tr. 289-90).
130. Hubble Contacts contact lenses are manufactured in Taiwan. (Bethers, Tr. 3594).
131. Hubble Contacts operates with a subscription model that costs a consumer \$30 per month for daily disposable contact lenses. (Bethers, Tr. 3595).
132. Hubble Contacts introduced its concept through Facebook and other vehicles of social media. (Bethers, Tr. 3594).

d. Daysoft

133. Daysoft is a manufacturer of contact lenses that sells its lenses directly to consumers online. (Bethers, Tr. 3591-92).
134. Daysoft is located in the United Kingdom, but consumers in the United States can use Daysoft's website and have contact lenses delivered to the United States. (Bethers, Tr. 3593).

E. Internet Search Methods and Mechanics

135. Internet search engines organize information to allow their users to access the vast amount of information on the internet. (Joint Stipulation Regarding Search Engines Mechanics and Glossary of Terms. ("Joint Stipulation on Search Engines") ¶ 1).
136. Search engines employ complex algorithms to match the end user's request with parts of the web that may contain relevant responses. (Joint Stipulation on Search Engines ¶ 1).
137. Google is the dominant internet search engine provider in the United States. It is generally recognized that Google receives 82% of search advertising spending. (Joint Stipulation on Search Engines ¶ 3); Van Liere, Tr. 3103; Evans, Tr. 1373-74).
138. Beginning in 2010, through an agreement with Yahoo!, Microsoft's Bing Network sold paid search advertising that appeared in response to user queries on Yahoo.com. Bing and Yahoo! together account for 18% of search advertising spending; Yahoo!'s percentage is significantly smaller than Bing's. (RX0704 (Iyer, Decl. at 0001-02 ¶ 2); Van Liere, Tr. 3102-03; Evans, Tr. 1373-74).
139. Users can access internet search engines through desktop computers, laptop computers, tablets, and mobile phones. (Joint Stipulation on Search Engines ¶ 2).
140. Internet search engines are free for users. These search engines derive the majority of their revenue through advertisements. (Juda, Tr. 1064-65) ("Google makes money predominantly by showing ads on the search results page, where ads can appear either above the organic search results or below the organic several results, and when a user clicks on an ad, the advertiser behind that ad will accumulate a cost."); CX8005 (Iyer, Decl. at 001 ¶ 7).
141. When a user enters a search query, the internet search engine generally displays two types of results on the search engine results page: (1) organic or natural search results and (2) search results that are paid advertisements ("ads"). (RX0704 (Iyer, Decl. at 0002 ¶ 3); RX0716 at 0068; Juda, Tr. 1330).
142. "Most searches . . . are ones where no ads appear." Google displays ads "when the inherent task of a user is commercial in nature." (Juda, Tr. 1080-81; CX9019 (Juda, Dep. at 24)).

1. Organic or Natural Search Results

143. Organic or natural search results are links to websites the search engine has determined are relevant to the user's search terms. In general, organic results are ranked in order of relevance, with the most relevant result at the top of the list. The relevance of organic results is determined by algorithms that are proprietary to each search engine. (RX0716 at 0068, 0099; Juda, Tr. 1330; RX0704 (Iyer, Decl. at 0002 ¶ 8)).
144. Organic links are "free," i.e., the company whose link appears is not charged any money by the search engine for the appearance of its link or if a user clicks on the link. No one can pay to have an organic result appear or to change the ranking of a particular organic result. (RX0716 at 0068; *see also* RX0716 at 0100 ("Ads will never appear within the organic search results themselves.")).
145. Companies are able to engage in "search engine optimization," to increase the likelihood that their website will be displayed in a prominent position in the organic listings of a search engine's results page. (Clarkson, Tr. 225; Alovis, Tr. 1030; Bethers, Tr. 3655).
146. Search engine optimization techniques include ensuring that a website has new content, new reviews, a lot of interaction, page load speed, multiple screen sizes, more content, and many links. (CX9033 (Mohan, Dep. at 111)).
147. Even with search engine optimization, the advertiser does not accrue any costs when a user clicks on an organic link. (Alovis, Tr. 985).

2. Paid Search Advertising

148. Paid search advertising, also referred to as sponsored advertisements, refers to a method of advertising where the advertiser pays the search engine to place its advertisement on the search engine results page, based on an advertiser's selected "keywords" (F. 162). (Juda, Tr. 1065; *see also* RX0733 (Ghose Expert Report at 0013-24)).
149. The format by which search engine advertisements are presented to consumers has varied over the years. (Jacoby, Tr. 2288; CX8008 (Jacoby Expert Report at 015)).
150. Currently, search engine advertisements consist of a blue headline, followed by the word ("Ad") (for Google, in a green box; for Bing, in gray bold text) and the actual URL of the site being advertised by the ad copy, which is text the advertiser provides to the search engine provider. (Joint Stipulation on Search Engines ¶ 11).
151. Paid search advertising consists of advertisements that are displayed above, below, and/or to the side of the organic results. (RX0704 (Iyer, Decl. at 0002 ¶ 3); RX0716 at 0099).
152. Paid search advertisements are text and do not include images. (Joint Stipulation on Search Engines ¶ 2).

153. Paid search advertising does not include product listing advertisements, known as PLAs (F. 271-277). (Juda, Tr. 1322-23, 1334; RX0715 at 0116, 0158, 0593-94, 0766).
154. Paid search advertising is sometimes referred to as “pay-per-click” or “cost-per-click” advertising. (Clarkson, Tr. 217, Coon, Tr. 2722; *see also* Athey, Tr. 723).
155. A cost-per-click (“CPC”) is the price that an advertiser pays to the search engine each time its advertisement is clicked. (Joint Stipulation on Search Engines at 3; F. 215-222).
156. A “conversion” refers to a sale made over the internet. The conversion rate is the number of times a conversion occurs divided by the total number of ad clicks. (Joint Stipulation on Search Engines at 2).
157. An advertiser has “more control over” the placement of its advertisements as compared to the placement of organic links. (Juda, Tr. 1330).

3. How Paid Search Results are Generated by Google

158. Google uses an “auction” to determine which ads will appear on a search engine results page. (RX0716 at 0038).
159. Every time a user enters a search query, Google runs an instantaneous auction to determine which, how many, and the position of paid ads to be displayed on the results page. (RX0716 at 0038; *see also* CX9019 (Juda, Dep. at 134)).
160. Google’s paid search platform is called AdWords. (Juda, Tr. 1065).
161. The Google AdWords auction has three steps. First, the AdWords system finds all ads whose keywords (F. 162) match the user search. Second, the AdWords system ignores any ads that the system determines are not eligible to appear, such as ads that target a different country or are disapproved. Third, of the remaining ads, only those with a sufficiently high Ad Rank (F. 181-185) may be displayed. (RX0716 at 0038).

a. Keywords and match types

162. Keywords are words or phrases the advertiser believes potential customers are likely to use when searching for products or services provided by the advertiser. (RX0716 at 0087). The advertiser matches the keywords with an ad or ads in an ad group (the “ad’s keywords”). (RX0716 at 0029).
163. An advertiser’s ad may be shown when the ad’s keywords match a user’s search query. (RX0716 at 0016, 0087; RX0119 at 0002).

164. Advertisers frequently bid on hundreds or thousands of keywords. Walmart, for instance, bids on somewhere under 5,000 keywords related to contact lenses. (CX9033 (Mohan, Dep. at 26-27)).
165. Keywords may consist of a single word (e.g., “contacts”), a set of words (e.g., “contacts,” “Accuvision,” and “coupon”), a phrase (e.g., “contact lens”), or a combination of words and phrases. (Joint Stipulation on Search Engines ¶ 21).
166. There are several “match types” or “matching options” in AdWords. (RX0716 at 0016-17).

i. Broad match

167. “Broad match” allows an ad to be matched to relevant variations of the ad’s keywords, “including synonyms, singular or plural forms, possible misspellings, stemmings (such as floor and flooring), related searches, and other relevant variations.” (RX0716 at 0090).
168. Broad match is a “semantic” match; it seeks to match with the “meaning of a user’s search.” For example, a broad match keyword “low-carb diet plan” may match with a search for “carb-free foods” or “Mediterranean diet plans.” (RX0119 at 0005; RX0716 at 0090).

ii. Modified broad match

169. “Modified broad match” allows the advertiser to “specify that certain broad match keyword terms, or their close variants, must appear to trigger [the] ad.” (RX0716 at 0090).
170. Modified broad match keywords are indicated by a “+” symbol. For instance, the modified keyword “+women’s +hats” would match to a search for “hats for women.” (RX0716 at 0016).

iii. Phrase match

171. “Phrase match” allows an ad to be matched to searches that include the ad’s “exact keyword and close variants of [the] exact keyword, with additional words before or after.” (RX0716 at 0094, 0117).
172. Phrase match keywords are indicated by quotation marks around the keyword phrase. For example, for the phrase match keyword “tennis shoes,” ads may be shown on searches for “red leather tennis shoes” or “buy tennis shoes on sale.” But such ads will not be shown on searches for “shoes for tennis” or “tennis sneakers laces.” (RX0716 at 0094).

iv. Exact match

173. “Exact match” allows an ad to be matched to searches that include the ad’s “exact keyword, or close variants of [the] exact keyword, exclusively.” (RX0716 at 0092).
174. Exact match keywords are indicated by square brackets. For instance, the exact match keyword “[tennis shoes]” may be matched to searches for “tennis shoes” but not for “red tennis shoes.” (RX0716 at 0092).

v. Negative keywords

175. “Negative keywords” are a type of keyword that prevents an “ad from being triggered by a certain word or phrase.” A negative keyword is a tool by which advertisers can specify search terms against which they wish their ads not to appear. For example, a retailer that sells eyeglasses may add the negative keyword “wine glasses” to prevent its ads from showing in response to searches for that term. (RX0716 at 0019, 0067; Juda, Tr. 1131).
176. Negative keywords override the search engine’s own determination of relevance. (Juda, Tr. 1131-33).
177. The “exact negative” match type “prevent[s] an ad from appearing on searches that identically match the term that’s expressed in the negative keyword.” (Juda, Tr. 1131).
178. The “phrase negative” match type “prevent[s] an ad from appearing on searches where the search term is a larger string of words that contain the negative keyword.” (Juda, Tr. 1131-32).
179. A “broad negative” match type will not “exclude queries that are synonyms or close variations of the negative keyword. It will only exclude queries that include all words within a keyword, irrespective of the order in which the words appear.” Queries “that are close variations of phrase and exact match negative keywords won’t be excluded.” (RX0119 at 011).
180. Google tells retailers that because of the matching behavior described in F. 179, an advertiser must separately add close variations as negative keywords. (RX0119 at 011).

b. Ad Rank and its components

181. In AdWords, which ads appear and the order in which an ad appears on a page (the ad position) is determined by a formula called Ad Rank. (RX0716 at 0030).
182. For those ads that have keywords that match the user’s search query and are otherwise eligible to be shown, the AdWords system determines each ad’s Ad Rank (F. 183). (RX0716 at 0038).

183. Ad Rank is a “score that’s based on [the advertiser’s] bid, auction-time measurements of expected CTR [(click-through rate (F. 188)], ad relevance, landing page experience, and the expected impact of extensions and other ad formats.” (RX0716 at 0001).
184. Google’s algorithms consider factors other than the advertiser’s bid and will show no ads in response to some searches to avoid the long-term “negative ramifications of users not clicking on ads.” (Juda, Tr. 1081). Based on experiments, Google has found that the “natural rate at which users are clicking on ads actually decreases over time” when AdWords shows “additional ads or lower-quality ads.” (Juda, Tr. 1083).
185. Google considers factors other than the advertiser’s bid because showing ads that do not meet Google’s criteria could lead to a reduction in clicks on paid search advertisements, which would negatively impact Google’s revenue. (CX9019 (Juda, Dep. at 129-30); Juda, Tr. 1198).

i. Bids

186. In AdWords, each advertiser specifies a bid for each keyword, which is the maximum the advertiser will pay for a click on its ad. This amount is the “maximum cost-per-click” or “maximum CPC.” (Joint Stipulation on Search Engines ¶ 54; RX0716 at 0041).
187. The advertiser’s bid, or maximum CPC, is one of the factors considered in calculating Ad Rank, which determines whether and in what position the ad may appear. (RX0716 at 0001).

ii. Expected CTR

188. The click-through rate (“CTR”) is the number of clicks an ad receives divided by the number of times the ad is shown. (Joint Stipulation on Search Engines at 2).
189. Expected CTR is a measurement of “how likely it is that [the advertiser’s] ads will get clicked when shown for [the particular] keyword.” (RX0716 at 0049).
190. Google’s algorithms calculate expected CTR based on a variety of inputs, including “the actual search of the user, information about the ad copy, the geography of the user, [and] the time and day in which the user’s search” was conducted. In addition, if “the user has personalization turned on,” the algorithm will also “use various historical information about that user and their past activities.” (Juda, Tr. 1096).
191. Expected CTR is not based solely on information regarding the particular ad. Rather, the “system looks, effectively, at all ads.” (CX09019 (Juda, Dep. at 31-32)). The assessment is based on “the totality of all impressions and clicks that the system has ever received.” (Juda, Tr. 1099).

192. The predicted CTR for a given ad could vary from auction to auction. (Juda, Tr. 1260-61) (“It’s hypothetically possible it could go [up or down] based on how the characteristics have changed.”).

iii. Ad relevance

193. Ad relevance is a measure of how closely related the advertiser’s keyword is to a user’s search term. (Juda, Tr. 1104; RX0716 at 0032).
194. Ad relevance is an important priority for Google because Google aspires to show relevant and useful commercial information to users. (Juda, Tr. 1072 (explaining that Google benefits from showing relevant ads because it generates users only when users click on ads)).
195. In the AdWords algorithms, ad relevance is based on models that use human-evaluated data as an input “to identify patterns that will allow [the system] to predict . . . what the human raters would have thought of the ads.” (CX09019 (Juda, Dep. at 38-39); *see also* Juda, Tr. 1105).

iv. Landing page experience

196. Landing page experience is a “measure that AdWords uses to estimate how relevant and useful [the advertiser’s] website’s landing page will be to people who click [on the advertiser’s] ad.” (RX0716 at 0061).
197. In the AdWords algorithms, landing page experience is based on models that use human evaluations of search terms and landing pages “to identify patterns between what [the system] can observe from the landing pages and the search terms . . . [to] predict what the human raters are going to say.” (CX9019 (Juda, Dep. at 40); Juda, Tr. 1101-02).
198. To determine the landing page experience “signal,” the AdWords algorithms take into account [REDACTED]. (Juda, Tr. 1101-02, *in camera*).
199. Google considers landing page experience in its algorithms because, based on its experiments, “when users encounter low-quality landing pages, their propensity for wanting to look at and click on ads in the future goes down,” which “can diminish future revenue opportunities for Google” and because Google wants to have high quality ads so that users return to Google. (CX9019 (Juda, Dep. at 121-22); RX0612A at 0004).

v. Ad extensions and format

200. Ad extensions are “a type of ad format that show extra information . . . about [the advertiser’s] business.” Examples of ad extensions include information about the advertiser’s location, consumer ratings of the advertiser, and links to different parts of the advertiser’s website. (RX0716 at 0045-46).

201. The AdWords algorithms estimate the influence of ad extensions on an ad's CTR as well as "the extent to which a particular advertisers' click-through rate uplift may compare to other advertiser's click-through rate uplifts with the same format . . ." (CX9019 (Juda, Dep. at 40-41); Juda, Tr. 1113).

c. The Auction Outcome: Ad Rank, Ad Position, and Actual CPC

202. The Google AdWords system combines the advertiser's bid with the auction-time measurements of predicted CTR, ad relevance, landing page experience, and the expected impact of extensions and other ad formats, in a functional form, which produces a signal number, referred to as "Ad Rank." (CX9019 (Juda, Dep. at 41-42)).

203. For each auction, the AdWords algorithms calculate Ad Rank for each ad that is eligible to be shown in response to the particular user query. (CX9019 (Juda, Dep. at 41-42)).

204. The quality signals used to determine CPC and Ad Rank (predicted CTR, ad relevance, and landing page experience) are recomputed at auction time. (Juda, Tr. 1260).

205. Ads must have an Ad Rank greater than zero to be eligible to be shown. If there are no ads with an Ad Rank greater than zero, the AdWords system will not show any ads in response to the particular user query. (CX9019 (Juda, Dep. at 41-42)).

206. Google requires higher quality scores to achieve an Ad Rank greater than zero for the ad positions at the top of the page. (Juda, Tr. 1094-95; CX9019 (Juda, Dep. at 182)).

i. Minimum bids

207. The requirement that an ad's Ad Rank be greater than zero means that each advertiser faces a minimum bid to have its ads shown in response to a particular user search. (CX9019 (Juda, Dep. at 168-69); Juda, Tr. 1093).

208. The minimum bid for an advertiser to enter an AdWords auction, even for the exact same ad, changes from auction to auction. (Juda, Tr. 1266-67).

209. In general, the lower the quality of the ad, the higher the minimum bid necessary to qualify to be shown. (CX9019 (Juda, Dep. at 169)).

210. Google requires a minimum bid to try to ensure a "positive net long-term experience" for users, to avoid a result where users click less on ads and possibly "start installing ad-blocking software onto their browsers to suppress any ads from being presented to them." (Juda, Tr. 1095).

ii. Ad position

- 211. Ads are positioned on the search results page based on Ad Rank; the ad with the highest Ad Rank is placed at the top of the page. (Juda, Tr. 1077; RX0716 at 0001; CX9019 (Juda, Dep. at 42)).
- 212. Google will show a maximum of four ads above the organic search results. (Juda, Tr. 1080; CX9019 (Juda, Dep. at 53)).
- 213. Because AdWords takes into account a number of factors other than the bid amount, advertisers that obtain the top ad positions may not be the highest bidders. (RX0612A at 0009).
- 214. Google's data shows that the expected click-through rate is higher for ads in positions higher on the page. (Juda, Tr. 1216-18).

iii. Actual cost-per-click

- 215. The actual amount an advertiser pays for a click, or "actual CPC," depends on the outcome of the auction process and may vary from auction to auction. (RX0716 at 0026; CX9019 (Juda, Dep. at 137)).
- 216. Even if an ad appears in response to a user search (thus generating an "impression" (RX502 at 0001)), the advertiser pays only if the user clicks on its ad. (RX0716 at 0026).
- 217. Google uses a modified second price auction to determine the advertiser's actual cost-per-click (the amount the advertiser will pay for a click on its ad). In a second price auction, the buyer does not have to pay its full bid; it only has to pay the amount of the next highest bidder below it. (RX0612A at 0005; Juda, Tr. 1114-15).
- 218. For each advertiser, Google's algorithms determine the lowest bid the advertiser could have made to still have an Ad Rank greater than the advertiser whose ad is in the position below (second place bidder). (CX9019 (Juda, Dep. at 54)).
- 219. Under the second price auction used by Google, the number of bidders may or may not affect the actual CPC. If a number of additional bidders were to enter the auction, and all of them had an AdWords score that was lower than the second-highest score, then the increase in bidders would have no influence on the price that the highest person was paying. Alternatively, if some of the additional bidders were to have a higher second highest AdWords score, then that would result in a higher actual CPC. (CX9019 (Juda, Dep. at 55); Juda, Tr. 1204-05).
- 220. Although it is not always the case, in general, more advertisers bidding on keywords results in higher CPCs. If an advertiser notices competitors entering the auction and that this is resulting in a decrease in traffic to the advertiser's website, the advertiser may respond by raising its bids. (Juda, Tr. 1205, 1337; CX9019 (Juda, Dep. at 55)).

221. Because of the effects of predicted CTR, ad relevance, landing page quality, ad extensions, and other ad formats in the AdWords system, an advertiser may have a lower actual CPC than advertisers whose ads appear in lower positions. (RX0612A at 0009-10).
222. Depending on the particular quality scores and relative ad ranks, an additional bidder who wins the top ad position above another advertiser may have a lower CPC (i.e., it may pay less for a click) than the advertiser previously in the top position. (Juda, Tr. 1213-15; *see also* RXD026 at 0003-04 (illustrating effect of additional bidder winning top position)). In such an instance, Google would make less money if the user clicked on the top ad. (Juda, Tr. 1215-17).

iv. User information

223. In Google's paid search advertising system, the ads shown can vary from consumer to consumer even if two consumers enter the same search query. This can occur for a number of reasons, such as the algorithm's predictions of quality have changed, some advertiser's budgets may have been exhausted, an advertiser has chosen to pause its advertising, or the consumers are using different types of devices. (Juda, Tr. 1264-65; CX9019 (Juda, Dep. at 136-37)).
224. The ads shown, as well as the number of ads shown, can vary from consumer to consumer based on each user's prior search history and propensity to click on ads. (Juda, Tr. 1265-66; CX9019 (Juda, Dep. at 134-36)).

v. Whether an ad is shown may change over time

225. Given the dynamic nature of the AdWords algorithms, the quality score for a particular advertiser with a particular ad may change. (Juda, Tr. 1262).
226. Because an ad's quality scores may change over time, a particular advertiser's ads may show up in response to a particular search query, but may not show up in response to the very same search query at a later point in time. (Juda, Tr. 1263).

d. Advertiser budgets

227. In the AdWords system, advertisers may set a daily budget. When an advertiser's budget is reached, its "ads will typically stop showing for that day." The AdWords system may show ads on a given day accruing up to 20% of the daily budgeted costs, but the advertiser's monthly costs will not exceed its daily budget times the average number of days (roughly 30.4) in a month. (RX0716 at 0004, 0025, 0042).
228. Most advertisers [REDACTED]
[REDACTED]. (Juda, Tr. 1122, *in camera*).

e. AdWords keyword planner

229. Google AdWords Keyword Planner is a tool that Google provides to companies that are engaged in search advertising “to research new keywords to add to their account.” (Hamilton, Tr. 418; *see also* Juda, Tr. 1290-91; CX8002 (Hamilton, Decl. at 005-06 ¶ 18)).
230. The Google AdWords Keyword Planner allows an advertiser to input keywords and then provides the advertiser with estimates of the upper limit of the number of ad impressions and clicks (as well as other information such as cost-per-click and at times, expected number of orders or conversions) that would result from that advertiser bidding on those keywords. (Juda, Tr. 1290-91; Hamilton, Tr. 418; CX9038 (Hamilton, Dep. at 82-83); *see also* CX8002 (Hamilton, Decl. at 005-06 ¶ 18)).

4. How Paid Search Results are Generated by Bing

231. Microsoft launched the Bing Network in 2009. The Bing Network consists of numerous websites that provide search functionality, known as publisher partners, including Microsoft’s search engine Bing, available at www.bing.com. (RX0704 (Iyer, Decl. at 0001-02 ¶ 2)).
232. The Bing Network displays two kinds of results on the search results pages: (1) “organic” or “natural” search results, and (2) search results that are paid advertisements. (RX0704 (Iyer, Decl. at 0002 ¶ 3)).
233. On the Bing Network, paid search advertisements appear above, to the right side of, and beneath the organic search results on the search engine results page. (RX0704 (Iyer, Decl. at 0002 ¶ 3)).
234. Today, Microsoft displays a maximum of four paid search advertisements on the top of the search engine results page for searches conducted on Bing.com using a desktop or laptop computer and a maximum of four paid search advertisements on the top of the search engine results page for searches conducted on Bing.com using a mobile device such as a smartphone. (RX0704 (Iyer, Decl. at 0002 ¶ 3)).
235. Microsoft uses a different algorithm with a different computer code to determine how to display paid search advertisements on the Bing Network than the algorithm that it uses to determine how to display organic search results. (RX0704 (Iyer, Decl. at 0002 ¶ 8)).
236. Microsoft earns revenue each time that a user clicks on a paid search advertisement. (RX0704 (Iyer, Decl. at 0003 ¶ 9)).
237. The amount of revenue that Microsoft earns depends upon the amount per click that each advertiser bids in a generalized second-price auction (F. 242) that Microsoft’s algorithm conducts each time a user enters a user query. (RX0704 (Iyer, Decl. at 0003 ¶ 9)).

238. In general, an advertisement's rank in response to a user query depends on (1) the bid by the advertiser, (2) Microsoft's determination of the relevance of the advertisement to the user query, (3) Microsoft's determination of the relevance of the advertiser's website to the user query, and (4) certain information about the user, such as the user's search history and geographic location. (RX0704 (Iyer, Decl. at 0003 ¶ 10)).
239. Microsoft's algorithm for determining how to display paid search advertisements in response to a user query also takes into account the website's relevance to the user query, as determined by a number of factors, including the attractiveness of the advertising copy, the predicted CTR, the quality of the landing page, and [REDACTED]. [REDACTED]. (RX0704 (Iyer, Decl. at 0003-04 ¶ 12, *in camera*)).
240. In many cases, Microsoft's algorithm for determining how to display paid search advertisements also takes into account the user's location and past search history. Accordingly, two users entering the same user query at the same time might see different paid search advertisements on the search results page. (RX0704 (Iyer, Decl. at 0004 ¶ 13)).
241. In general, the more an advertiser bids, the less relevant its advertisement needs to be to be displayed on the search engine results page. (RX0704 (Iyer, Decl. at 0003 ¶ 11)).
242. Generally, an advertiser pays Microsoft an amount per click that it would have had to pay for the advertisement to maintain its rank above the advertisement ranked immediately below it. (RX0704 (Iyer, Decl. at 0003 ¶ 9)).
243. Because each advertiser does not pay the maximum amount of its bid, but rather just enough to keep its position in Bing's ranking of advertisements, removing one bidder from an auction can reduce the price paid by one or more other bidders. (CX8005 (Iyer, Decl. at 006 ¶ 36)).

5. Other Marketing Channels on the Internet

244. In addition to keyword-based paid search advertising, there are multiple, varied marketing channels available to retailers on the internet. These include display advertising, retargeting advertising, social media advertising, affiliate marketing, email marketing, mobile applications, comparison shopping engines, and product listing advertisements. (RX0426 at 0002 at 6-17; CX9005 (Dansie, IHT at 23-24); Clarkson, Tr. 219-29).
245. 1-800 Contacts has used each of the internet marketing channels listed in F. 244 to market its products and services. (RX0426 at 0002 at 6-17; CX9005 (Dansie, IHT at 23-25); CX0764 at 003-04, 010-14).

a. Display advertising

246. Display advertising refers to various methods of displaying a graphic advertisement to consumers on the internet. (*See* Clarkson, Tr. 228-29; Alovis, Tr. 1030; *see also* Athey, Tr. 716; Evans, Tr. 1674-75).
247. One type of display advertising, banner advertising, involves displaying a graphic advertisement to a consumer in a certain space on a third-party website. The third-party leases a portion of its website to an advertising publisher, such as Google, who then sells the right to place advertisements in that portion of the third-party website to advertisers. (CX9000 (Batushansky, IHT at 106)).
248. When a consumer visits the third-party website (F. 247), the banner advertisement is visible to the consumer. (CX9000 (Batushansky, IHT at 106); CX9010 (Larson, IHT at 22-23)).

b. Retargeting and remarketing advertising

249. One type of display advertising is retargeting or remarketing advertising. (Clarkson, Tr. 229; Alovis, Tr. 1030; Evans, Tr. 1674).
250. Retargeting or remarketing refers to a type of advertising where a specific advertisement is displayed to a consumer based on the consumer's past browsing history. (Evans, Tr. 1674-75; Alovis, Tr. 1030; CX9000 (Batushansky, IHT at 35-36); CX9004 (Coon, IHT at 285)).
251. “[R]etargeting is where a consumer has visited a website, and then they go away. If they haven’t purchased, the third party providing the retargeting service, which could be Google [or it] could be others, will show them [an advertisement for the initial website] in display form when they visit other websites.” (Clarkson, Tr. 229; *see also* Alovis, Tr. 1030; CX9000 (Batushansky, IHT at 35-36); CX9004 (Coon, IHT at 285)).

c. Social media advertising

252. Social media advertising involves displaying advertisements and other content to consumers on social media websites, such as Facebook, Instagram, and Twitter. (Clarkson, Tr. 223; CX9000 (Batushansky, IHT at 57); CX9008 (Hamilton, IHT at 64)).
253. Social networks, such as Facebook, maintain demographic information about their users, such as age, gender, hobbies, and interests, to allow advertisers to target their advertisements to specific consumers based on the consumer's demographics and interests. (CX9003 (Clarkson, IHT at 55-56); CX9043 (Athey, Dep. at 279)).

d. Affiliate marketing

254. Affiliate marketing is a method of advertising where an advertiser enlists the assistance of an affiliated website to refer traffic to the advertiser's website in return for a commission on sales resulting from the referred traffic. (Clarkson, Tr. 221; Craven, Tr. 639-40; Schmidt, Tr. 2891; Bethers, Tr. 3578).
255. Affiliate marketing can be an efficient method for generating new customers because an advertiser only pays a commission when a sale is realized and because affiliates frequently offer discount coupons for the advertisers' products. (Clarkson, Tr. 221-22; CX9001 (Bethers, IHT at 86); CX9023 (Alovis, Dep. at 26); CX9008 (Hamilton, IHT at 65-66)).
256. In 2015, approximately [REDACTED] % of 1-800 Contacts' online orders were received through affiliate marketing. (RX0428 at 0030, *in camera*; Bethers, Tr. 3569, 3578, *in camera*).

e. Email marketing

257. Email marketing allows advertisers to send promotions and advertisements to current and prospective customers by email. (Clarkson, Tr. 222-23; Bethers, Tr. 3572-73; CX9000 (Batushansky, IHT at 17); CX9036 (Duley, Dep. at 18)).
258. Online contact lens retailers contact former customers by email to let them know it is time for them to reorder their contact lenses and to provide them with an easy method to take advantage of current promotions. (Holbrook, Tr. 1892; CX9010 (Larson, IHT at 48)).
259. The cost of email marketing "is minimal to nothing." (Holbrook, Tr. 1892).
260. In 2015, approximately [REDACTED] % of 1-800 Contacts' online orders were received through email marketing. (RX0428 at 0030, *in camera*; Bethers, Tr. 3569, 3575, *in camera*).

f. Mobile applications

261. A mobile application is a program downloaded from the Apple or Android application store onto a smartphone or tablet device that allows consumers to interact with a retailer using a mobile device. (Bethers, Tr. 3565).
262. Mobile applications are important marketing tools for returning customers because they permit returning customers to easily repurchase products. (Bethers, Tr. 3565).
263. Mobile applications allow a retailer to remind customers when it is time to reorder. (CX9010 (Larson, IHT at 48)).
264. In 2015, approximately [REDACTED] % of 1-800 Contacts' online orders were received through its mobile application. (RX0428 at 0030, *in camera*; Bethers, Tr. 3569, 3575, *in camera*).

g. Comparison shopping engines

265. A comparison shopping engine, also called a comparison shopping feed, is “a website that will list different website offers of the same product with their price, so it allows a consumer to go to a single page and do a price comparison between different websites.” (Clarkson, Tr. 224).
266. Examples of comparison shopping engines include Shopping.com and Shopzilla.com. (CX9018 (Drumm, Dep. at 14)).
267. On Google, at the top of a Google search results page is a link titled “Shopping.” (E.g., RX0310 at 0001; RX0311 at 0001; RX0312 at 0001).
268. Clicking the link titled “Shopping” on the top of a Google search results page takes the user to the shopping-specific Google property (“Google Shopping”). (Juda, Tr. 1324-25; *see also* RXD022 (illustrating testimony)).
269. The Google Shopping page may contain listings for different types of contact lenses in response to a search on the term “1800contacts.” (Juda, Tr. 1325; *see also* RXD024 (illustrating testimony)).
270. The Google Shopping page displays a series of product listing advertisements (F. 271-273). (Juda, Tr. 1324-26; CX9000 (Batushansky, IHT at 51-52)).

h. Product listing advertisements

271. Product listing advertisements, known as PLAs, are a type of targeted advertisements that appear on search engine results pages in response to a search for a particular type of product. (RX0715 at 0115; RX0739 (Murphy Expert Report at 0026); Juda, Tr. 1321-22; CX9000 (Batushansky, IHT at 50-51); CX9002 (Craven, IHT at 25)).
272. In November 2009, Google introduced PLAs. PLAs appear in their own box in response to a Google search, separate from text ads, and on the Google Shopping page (F. 267-268). (RX0715 at 594; RX0716 at 0074).
273. PLAs typically have photographs or images of the product for sale, the prices of the product, the specific names of retailers who sell the product, and links to the websites of the retailers who sell the product. (Juda, Tr. 1322; RX0715 at 0115; CX9000 (Batushansky, IHT at 50-51); CX9002 (Craven, IHT at 25)).
274. In Google’s PLAs, PLAs are not displayed in response to advertisers selecting specific keywords. Rather, Google will automatically show the most relevant products, along with the associated image, price, and product name. (Juda, Tr. 1322-23, 1334; RX0715 at 0116, 0158, 0594, 0766).

275. In Google’s PLAs, an advertiser pays for a PLA only when a user clicks on the ad and completes a purchase on the advertiser’s website. (RX0715 at 0593-94).
276. A search for the keyword “contact lenses” using either Google or Bing will display a box in the upper area or on the right-hand side of the search engine results page with prices for contact lens brands at different online retailers. (RX0739 (Murphy Expert Report at 0026)).
277. The image below (RX0739 (Murphy Expert Report at 0094) depicts the position of PLAs relative to the organic search results and the sponsored ads with respect to a Google search for “contact lens.”

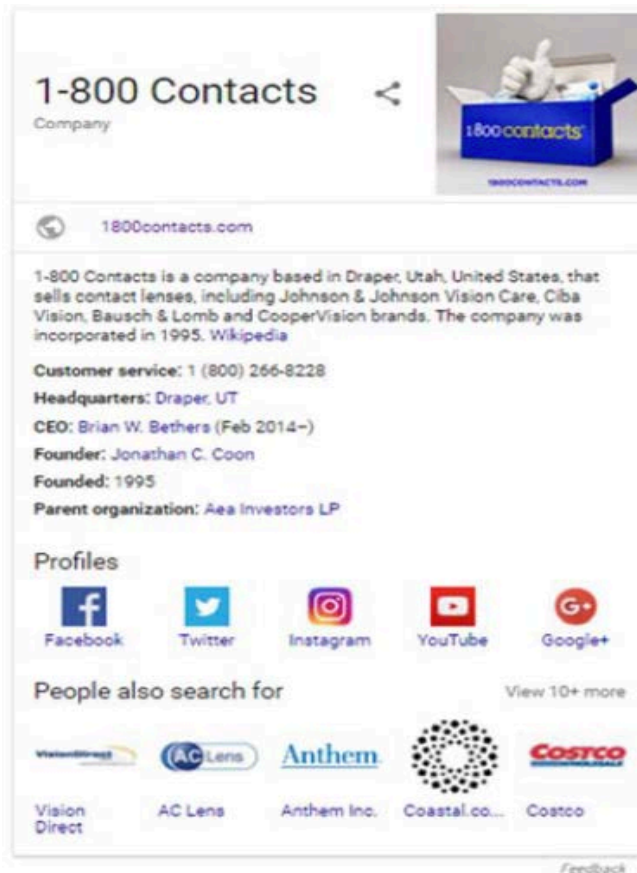


i. Knowledge graphs

278. In May 2012, Google began displaying a “Knowledge Graph” or “Knowledge Card” on some search engine results pages. The Knowledge Graph or Knowledge Card is a

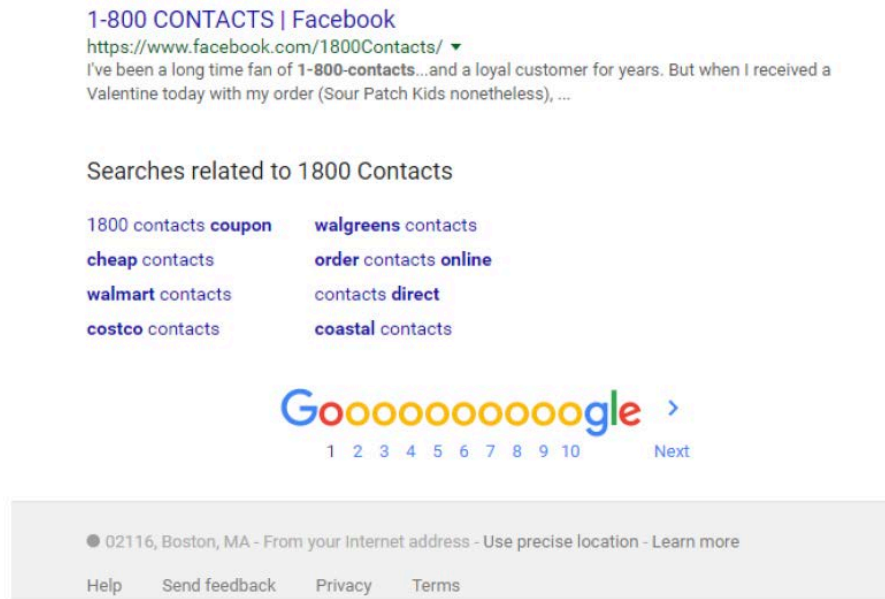
summary of content relevant to a user's search query, which is displayed on the right side of certain Google search results. (RX0721 at 0001-04).

279. Information displayed in the Knowledge Graph is based on Google's assessment of user searches about the particular item. For instance, the Knowledge Graph for a user query on "Marie Curie" includes information and links to further information about her husband, children, and the family's Nobel Prizes. (RX0721 at 0004).
280. The Knowledge Graph also contains a "People also searched for" feature, which includes links to other sites. (RX0721 at 0005).
281. The links in the "People also searched for" feature are not generated as a result of any payment to Google. (Juda, Tr. 1307-08).
282. Google search results for the query "1-800 Contacts" and variants of that search term include a Knowledge Graph regarding 1-800 Contacts. (See, e.g., RX0310 at 0001, 0005; RX0311 at 0001-03; see also CX8007 (Athey Expert Report at 010)).
283. Below is an example of a Knowledge Graph shown in response to the search query "1-800 contacts," as shown in the report of one of Complaint Counsel's expert witnesses:



(CX8007 (Athey Expert Report at 010)).

284. The Knowledge Graph displayed in F. 283 includes links to other contact lens retailers, Vision Direct, AC Lens, Coastal Contacts, and Costco. (F. 283).
285. Below is an example of the “Searches related” to section displayed in response to the search query “1-800Contacts” as shown in the report of one of Complaint Counsel’s expert witnesses:



(CX8010 (Athey Rebuttal Expert Report at 020)).

286. The “Searches related to” section displayed in F. 285 includes links to other contact lens retailers, Walmart, Costco, Walgreens, Contacts Direct, and Coastal Contacts. (F. 285).

F. Search Engine Trademark Policies

1. Google Trademark Policies

287. Prior to 2004, Google permitted a trademark owner to restrict the use of its trademark by third parties both (a) as keywords in AdWords advertising auctions, and (b) in the text of advertisements. (CX1148; CX9022 (Charlston, Dep. at 19-20, 179) (“ . . . so pre April 2004 in the U.S. and Canada . . . , even if we had a trademark complaint on file for a trademark term, we would still serve ads if the user’s query included the trademark term and another non-trademark term on which the advertiser had broad matched.”)).
288. In early 2004, Google determined that its trademark policy had created an “AdWords marketplace restriction” that prevented “[u]sers . . . from seeing relevant ads.” (CX0470 at 002 (Feb. 23, 2004, Domestic Trademark Policy Change Transition Plan Discussion presentation); CX9022 (Charlston, Dep. at 23-24)).

289. Google concluded that users who entered a search using the brand of one trademark owner may be interested in information from competing firms, and thus “[the policy change] was ‘correcting’ a bit of the balance that [it had] in place between users, advertisers, and trademark owners. The pre-2004 policy was really overly protective, as far as trademarks were concerned, and, again, as a result, was limiting the information that was available to users.” (CX9022 (Charlston, Dep. at 23-24)).
290. In April 2004, Google changed its U.S. trademark policy to allow third parties to bid on trademarks, including on competitors’ trademarks, as keywords in AdWords advertising auctions. (CX1148; CX9022 (Charlston, Dep. at 19-21); CX1785 at 003-04).
291. Under Google’s April 2004 trademark policy, advertisers were still prohibited from using others’ trademarks in the text of their ads without authorization. (CX1148; CX9022 (Charlston, Dep. at 19-21); CX0471).
292. Google acknowledged in its filing with the Securities and Exchange Commission that its April 2004 change in the U.S. trademark policy could subject Google “to more trademark infringement lawsuits.” (RX0140 at 0028).
293. After it changed its U.S. trademark policy in 2004, Google stated on its website that “Google is not in a position to arbitrate trademark disputes between advertisers and trademark owners.” Google accordingly encouraged “trademark owners to resolve their disputes directly with the advertisers.” (RX0159 at 0004).
294. In June 2009, Google again revised its U.S. trademark policy. Under Google’s U.S. trademark policy since June 2009, in response to a complaint by a trademark holder, advertisers are not permitted to include the holder’s trademark in the text of their ads. (CX9022 (Charlston, Dep. at 16); CX1148).
295. To submit a complaint under Google’s U.S. trademark policy, a trademark holder can submit a Google-provided form to Google. (RX0716 at 0053-54).

2. Bing Trademark Policies

296. At the time that Microsoft launched the Bing Network in 2009, Microsoft did not permit advertisers to bid on keywords consisting of a trademark owned by a third party. (RX0704 (Iyer, Decl. at 0004 ¶ 16)).
297. At the time that Microsoft launched the Bing Network in 2009, Microsoft also adopted a policy that it would not mediate disputes between advertisers related to trademarked keywords and communicated that policy to advertisers. This remains Microsoft’s policy today. (RX0704 (Iyer, Decl. at 0005 ¶ 17)).
298. In 2011, Bing changed its policy and began permitting advertisers to bid on competitors’ trademarked keywords. (RX0704 (Iyer, Decl. at 0004 ¶ 16)).

299. In 2013, Microsoft implemented [REDACTED]. (RX0704 (Iyer, Decl. at 0005 ¶ 18, *in camera*)).
300. [REDACTED] (RX0704 (Iyer, Decl. at 0005 ¶ 18, *in camera*)).

G. The Challenged Agreements⁶

1. Trademark Litigation Settlements

a. Early history: Vision Direct and Coastal Contacts

i. Vision Direct

301. 1-800 Contacts filed a complaint in federal court against Vision Direct and WhenU.com, Inc. on October 9, 2002, alleging trademark infringement, among other causes of action. The complaint alleged in part that Vision Direct had caused “pop-up” advertisements⁷ for Vision Direct to appear when internet users visited the www.1800contacts.com website. The complaint did not contain any allegations regarding the use of 1-800 Contacts’ trademarks as keywords to trigger search engine advertisements. (CX1614).
302. On January 22, 2004, counsel for Vision Direct wrote a letter to counsel for 1-800 Contacts in response to a January 16, 2004 letter from 1-800 Contacts “alerting” Vision Direct that a link to Vision Direct was appearing on Google results pages in response to searches for 1-800 Contacts’ trademark. Vision Direct indicated it would notify its affiliates to cease their activities, but also advised that 1-800 Contacts could file a trademark complaint with Google requesting that the search engine take down advertising on 1-800 Contacts’ trademark. (RX0100).

⁶ The Complaint in this matter challenges as unlawful 14 agreements between 1-800 Contacts and other online sellers of contact lenses. Complaint ¶¶ 1, 20, 33. *See also* CCB at 71. Of these agreements, 13 were settlement agreements to resolve trademark litigation (“the Settlement Agreements”). F. 343. The remaining agreement is a Sourcing and Services Agreement with Luxottica. F. 393. Collectively, the agreements at issue in this case are referred to as the “Challenged Agreements.”

⁷ Pop-up ads are triggered by software in response to specific keywords or types of websites by which an ad will pop-up in front of another website when the consumer browses to that website. (Clarkson, Tr. 320).

303. On or about February 13, 2004, 1-800 Contacts filed a complaint with Google regarding advertisements being triggered by keywords that were trademarks of 1-800 Contacts. (CX1397; RX0796).
304. In April 2004, Google modified its policies to permit advertisers to purchase each other's trademarks as keywords. (F. 290).
305. During negotiations, Vision Direct requested changes to 1-800 Contacts' draft settlement with regard to comparative advertising, which 1-800 Contacts accepted. (CX0058 at 001 (deleting provision from draft and stating "[w]e should both retain the right to participate in lawful comparative advertising, parodies, etc."); Coon, Tr. 2742-43. *See* CX0311 § 4(B)i (stating that prohibited acts do not include "use of the other Party's Trademarks on the Internet in a manner that would not constitute an infringing use in a non-Internet context, e.g., comparative advertising, parodies, and similar non-Infringing uses.")).
306. In June 2004, after negotiations, 1-800 Contacts and Vision Direct resolved their dispute by executing a settlement agreement. The settlement agreement included terms related to pop-up advertising and use of trademark keywords. (CX0058; CX0311 (2004 Vision Direct settlement agreement)).
307. The 2004 Vision Direct settlement agreement included as "prohibited acts" "causing a Party's website or Internet advertisement to appear in response to any Internet search for the other Party's brand name, trademarks or URLs." (CX0311 § 4(A)d).
308. The prohibited acts set forth in the 2004 Vision Direct settlement agreement include "causing a Party's brand name, or link to the Party's Restricted Websites to appear as a listing in the search results page of an Internet search engine, when a user specifically searches for the other Party's brand name, trademarks, or URLs." (CX0311 § 4(A)e).
309. The 2004 Vision Direct settlement agreement stated that the prohibited acts did not include "(i) use of the other Party's Trademarks on the Internet in a manner that would not constitute an infringing use in a non-Internet context, e.g., the use on the Internet of comparative advertising, parodies, and similar non-Infringing, uses; and (ii) the purchase by either Party of the key words that are generic words such as 'contacts,' 'contact lens,' and 'lens'." (CX0311 § 5(B)).
310. Between June 2004 and September 2007, 1-800 Contacts and Vision Direct had an "established practice" of using negative keywords to ensure no ads would show up on branded queries. (CX0843 at 012; CX0134 at 001; CX0137 at 002 ("As illustrated by over 30 email communications, Vision Direct and 1-800 Contacts, Inc. have both interpreted the Settlement Agreement as requiring each party to implement negative keywords.")).
311. In late October 2007, Vision Direct represented to 1-800 Contacts that Vision Direct did not believe that the 2004 Vision Direct settlement agreement required Vision Direct to

use negative keywords to prevent its ads from appearing on searches for 1-800 Contacts' trademarks. (CX0136).

ii. Coastal Contacts

312. On March 18, 2004, 1-800 Contacts filed a complaint in federal court against Coastal Contacts alleging trademark infringement, among other causes of action. The complaint alleged that Coastal Contacts had caused pop-up advertisements for Coastal Contacts to appear when internet users visited the www.1800contacts.com website. The complaint did not contain any allegations regarding the use of 1-800 Contacts' trademarks as keywords to trigger search engine advertisements. (CX1615).
313. Coastal Contacts answered 1-800 Contacts' complaint and filed counterclaims. (CX0310 at 001).
314. 1-800 Contacts and Coastal Contacts reached a settlement agreement effective October 29, 2004. (CX0310).
315. Pursuant to the Coastal Contacts settlement agreement, 1-800 Contacts and Coastal Contacts agreed to refrain from and not to cause in the future certain "prohibited acts," which include "causing a Party's website or Internet advertisement to appear in response to any Internet search for the other Party's brand name, trademarks or URLs but not through a search employing Generic or Descriptive terms." (CX0310 § 3(A)d).
316. The prohibited acts set forth in the Coastal Contacts settlement agreement include "causing a Party's brand name, or link to that Party's websites to appear as a listing in the search results page of an Internet search engine, when a user specifically searches for the other Party's brand name, trademarks, or URLs but not through a search employing Generic or Descriptive terms." (CX0310 § 3(A)e).

b. Trademark monitoring and cease and desist letters

317. Trademark owners are often advised to obtain information as to how their marks are being used and to prepare appropriate steps to enforce their rights. (Hogan, Tr. 3265-66).
318. The failure to police third-party use of a trademark could lead to a finding by a court that the mark is no longer enforceable. (Hogan, Tr. 3265 ("[A] court could find that a mark is not enforceable because there is extensive third-party use. In a specific case, a court could find that because the plaintiff did not take steps with respect to the specific practice or use at issue by the defendant that the [equitable] defense of laches . . . creates a defense to a trademark infringement claim.")).
319. In 2006, 1-800 Contacts' internal marketing personnel began regularly monitoring competitors' advertisements appearing response to searches for 1-800 Contacts' key trademark terms and providing that information to the legal team in trademark monitoring reports. (CX0067 at 073; Craven, Tr. 685-86; CX9002 (Craven, IHT at 121, 128-29);

- CX9020 (Craven, Dep. at 45); Pratt, Tr. 2513 (“I received reports, periodic reports, from my client as they monitored those results. They monitored – they did searches for their trademarks themselves on Google and other search engines. They kept track of who was coming up in response to those searches.”). *See, e.g.*, CX0078; CX0256; CX0508; CX0507; CX0505; CX0255; CX0944; CX1068; CX1069; CX1070; CX0279; CX1071; CX0887; CX1072).
320. 1-800 Contacts’ legal personnel and its outside counsel monitored competitors’ advertisements to evaluate whether and when the appearance of competitor advertisements in response to searches for 1-800 Contacts’ trademarks constituted trademark infringement or was otherwise unlawful. (CX9031 (C. Schmidt, Dep. at 105); CX9002 (Craven, IHT at 128-29)).
321. Outside counsel to 1-800 Contacts with respect to trademark matters were Bryan Pratt and Mark Miller. (Pratt Tr. 2493-95; CX0904 (Miller, Dep. at 10-11)).
322. 1-800 Contacts’ outside counsel reviewed trademark monitoring reports in order to provide legal guidance to 1-800 Contacts, by evaluating potential infringement, potential misappropriation of goodwill, and similar issues. Mr. Pratt and Mr. Miller also typed in their own search queries for 1-800 Contacts’ trademark terms and confusingly similar variations, to see which advertisements were displayed in response. (CX9021 (Pratt, Dep. at 20-21, 25-26); Pratt, Tr. 2513).
323. In addition to trademark monitoring reports, 1-800 Contacts relied on reports generated by Keyword Spy and BrandVerity, which services enabled 1-800 Contacts to see if advertisers were using certain keywords to generate advertising. (CX9021 (Pratt, Dep. at 27-30, 140-41); CX9040 (Miller, Dep. at 127-29); CX9020 (Craven, Dep. at 62-63)).
324. In addition to seeing which advertisements appeared in response to a search for 1-800 Contacts’ trademark terms and confusingly similar variations, Mr. Pratt and/or Mr. Miller would conduct an analysis of pertinent factors to determine if there was a good faith basis to allege trademark infringement. (CX9040 (Miller, Dep. at 19, 129, 132) (“There’s a lot of factors that – outside of just looking at a search results page that you take into account when you’re evaluating potential infringement. And then if you have the basis to argue there’s a likelihood of confusion or we’ve got a good faith basis to allege trademark infringement here, then you’ve got a claim. And then discovery will prove out what kind of evidence you have.”); CX9021 (Pratt, Dep. at 78-79, 131-32)).
325. In the years between 2005 and 2010, 1-800 Contacts sent cease and desist letters to multiple online contact lens retailers whose advertisements appeared in response to an internet search for 1-800 Contacts’ trademark terms. (Pratt, Tr. 2498-2500, 2526-29, 2553; CX9040 (Miller, Dep. at 150-52). *E.g.*, CX1472 (Contact Lens King, May 12, 2009); CX1235 (Lens Discounters, September 20, 2005); CX1751 (Memorial Eye, September 13, 2005); CX1318 (Memorial Eye, February 27, 2008); CX1513 (Lens.com, September 20, 2005); CX1229 (Lens Discounters, May 12, 2009); CX1623 at 001-04 (AC Lens, February 2, 2010); RX1010 (Lensfast, September 12, 2007); RX1011

(Lensfast, March 14, 2008); Lenses for Less (CX0637, November 9, 2009). *See also* CX0643 at 001-03 (Web Eye Care); CX0965 at 001-03 (Standard Optical, July 14, 2010); CX0638 at 001-03 (Tram Data, May 6, 2010)).

326. 1-800 Contacts' cease and desist letters referenced in F. 325 charged that the recipient had "purchased sponsored advertisements at Google . . . for at least one of" 1-800 Contacts' trademarks, "or a confusingly similar variation thereof, to trigger a link to your directly competitive" website or affiliate. The letters continued in pertinent part:

[W]e are concerned that you have continually purchased sponsored advertisements at Google, and possibly other search engines, that are triggered upon a search for "1800 CONTACTS," or a confusingly similar variation thereof. Your use of the 1800 CONTACTS trademark as a triggering keyword to advertise for your directly competitive goods and services is an obvious attempt to trade off the goodwill established by 1800 CONTACTS, INC. in its famous 1800 CONTACTS trademark. . . . The use of the mark 1800 CONTACTS and/or any confusingly similar variation of the mark as a keyword in the United States may constitute trademark infringement under state and federal law in that it is likely to cause initial interest confusion, or likely to cause the public to mistakenly assume that your business activities originate from, are sponsored by, or are in some way associated with 1800 CONTACTS, INC. For the same reasons, such use may constitute unfair competition, and false advertising under state law and similarly may [violate federal law against] 'false designation of origin' . . . [and] may also violate the Federal Dilution Act"

327. 1-800 Contacts' cease and desist letters referenced in F. 325 "request[ed] that you cease and desist from further use" of 1-800 Contacts' trademarks and "confusingly similar variations thereof in the United States." (*E.g.*, CX1513 (Sep. 20, 2005 letter to Lens.com); CX1754 (Sep. 12, 2007 letter to Memorial Eye); RX1010 (Sep. 12, 2007 letter to Lensfast)).

c. Litigation

328. On December 28, 2007, 1-800 Contacts sued Vision Direct in state court for breach of the 2004 Vision Direct settlement agreement. 1-800 Contacts alleged that Vision Direct was violating the 2004 settlement agreement (F. 306) by purchasing advertisements without utilizing negative keywords to prevent the appearance of Vision Direct advertisements when users search for the 1-800 Contacts brand name. (CX1062).
329. In February 2008, 1-800 Contacts filed a complaint against Vision Direct in federal court, based on alleged breach of the 2004 Vision Direct settlement agreement. (CX0314).
330. In addition to the lawsuits against Vision Direct and Coastal Contacts (F. 328-329, 312), 1-800 Contacts filed complaints in federal court against the following online contact lens sellers, asserting claims for trademark infringement under 15 U.S.C. § 1114, in addition

to federal unfair competition (15 U.S.C. § 1125(a)), state and common law unfair competition (Utah Code Ann. § 13-5-1 *et seq.*), misappropriation, and unjust enrichment: AC Lens (CX1623 at 029-39, February 18, 2010); Contact Lens King (CX0461, March 8, 2010); Empire Vision (CX0808, February 25, 2010); EZ Contacts USA (CX1617, December 6, 2007); Lensfast (CX1618, December 23, 2008); Lenses for Less (CX0452 at 003-13, January 20, 2010); Lens.com (CX1125, August 13, 2007); LensWorld (CX1622, January 8, 2008); Memorial Eye (RX0072, December 23, 2008); Standard Optical (CX0965 at 004-15, July 13, 2010); Tram Data (CX0638 at 004-14, May 6, 2010); Walgreens (CX1620, June 8, 2010); Web Eye Care (CX1621, August 10, 2010); CX9021 (Pratt, Dep. at 163-64) (collectively the “lawsuits” or the “litigation”).

331. In general, the lawsuits alleged that the defendant contact lens seller had purchased 1-800 Contacts’ trademarks “and/or confusingly similar variations or misspellings thereof” as keywords to trigger the defendant’s paid search advertising and/or failed to implement negative keywords to prevent the triggering of defendant’s advertisements in response to a consumer searching for 1-800 Contacts; and that the defendant’s use of the trademarks “caused, and will continue to cause, confusion and mistake, including initial interest confusion, as to the source or origin” of the defendant’s products, and “is likely to falsely suggest a sponsorship, connection, license, endorsement or association” by or with 1-800 Contacts. (*See, e.g.*, CX1623 at 032-33 (AC Lens); CX0461 at 004-05 (Contact Lens King); CX0808 at 004-05 (Empire Vision); CX1618 at 006-09 (Lensfast); CX0452 at 006-07 (Lenses for Less); RX0072 at 0005-09 (Memorial Eye); CX0965 at 007-09 (Standard Optical); CX0638 at 007-08 (Tram Data); CX1620 at 004-06 (Walgreens); CX1621 at 004-06 (Web Eye Care)).
332. Some of the lawsuits listed in F. 330 contained alleged infringing conduct in addition to the allegations summarized in F. 331. (*See, e.g.*, CX1617 at 012 (EZ Contacts USA) (allegations included “wholesale copying of portions of [1-800 Contacts’] website, including [1-800 Contacts’] Marks”); CX1622 at 005-10 (LensWorld) (same); CX1125 at 005-11 (Lens.com) (allegations included using 1-800 Contacts marks in Lens.com ads)).
333. In the initial years of paid search advertising litigation, which began in approximately 2004, the issue of whether the purchase of trademark keywords to generate paid search advertising constituted a “use in commerce” for trademark law purposes was unsettled. Eventually, after the 2009 decision by the Second Circuit Court of Appeals in *Rescuecom Corp. v. Google, Inc.*, 562 F.3d 127 (2d Cir. 2009), the circuit courts came to agree that “keyword advertising programs constitute ‘use in commerce’ because search engines make trademarks available for purchase and display them in search results,” and the focus of infringement analysis shifted to the issue of the likelihood of consumer confusion from that use. (RX0734 (Hogan Expert Report at 0059-60); Hogan, Tr. 3256; CX9044 (Tushnet, Dep. at 59-60) (The use in commerce question is now “basically settled with respect to keyword advertising.”)).
334. The multi-factor tests applied by courts to determine the likelihood of confusion vary between the circuits, but the tests are generally considered fact-intensive, to be resolved by judges and juries. (Hogan, Tr. 3258).

335. In search engine advertising cases, courts have generally focused on the “species of confusion known as initial interest confusion.” (Hogan, Tr. 3359; CX9044 (Tushnet, Dep. at 101) (“There are cases adopting the concept of initial interest confusion as part of actionable confusion.”)).
336. Respondent’s expert witness on trademark law, Mr. Hogan, is unaware of any United States court holding one way or the other as to whether the appearance of an ad in response to a trademark search due to broad matching (F. 167-168) to the advertiser’s purchase of a generic keyword constitutes a use in commerce. (Hogan, Tr. 3476, 3478, 3480).
337. In September 2008, the federal court entered a default judgment in 1-800 Contacts’ litigation against LensWorld. The court’s order prohibited LensWorld from purchasing 1-800 Contacts’ “federally registered trademarks” as keywords “for any search engine advertising program” and required LensWorld to implement certain negative keywords, attached as an exhibit to the order, “where possible.” (CX0162).
338. On December 14, 2010, the United States District Court for the District of Utah issued an opinion granting summary judgment in favor of Lens.com on 1-800 Contacts’ trademark infringement claim. 1-800 Contacts appealed to the Tenth Circuit Court of Appeals. (*1-800 Contacts, Inc. v. Lens.com, Inc.*, 755 F. Supp. 2d 1151 (D. Utah 2010); *1-800 Contacts v. Lens.com*, 722 F.3d 1229 (10th Cir. 2013)).
339. On July 16, 2013, the Tenth Circuit Court of Appeals upheld the district court’s decision granting Lens.com’s summary judgment motion except with respect to issues regarding Lens.com’s potential secondary liability for its affiliates. The appellate court did not resolve whether or not initial interest confusion could arise, as a matter of law, from an ad triggered by a trademark keyword where the trademark was not used in the ad text. (*1-800 Contacts, Inc. v. Lens.com, Inc.*, 722 F.3d 1229 (10th Cir. 2013)).
340. Memorial Eye filed an answer and counterclaims to 1-800 Contacts’ complaint (F. 330), including a counterclaim alleging sham litigation. The district court dismissed Memorial Eye’s counterclaim and the case proceeded to discovery. (Pratt, Tr. 2535. *See 1-800 Contacts, Inc. v. Memorial Eye, P.A.*, No. 2:08-CV-983 TS, 2010 WL 988524, *6 (D. Utah Mar. 15, 2010)).
341. In the litigation between 1-800 Contacts and Memorial Eye (F. 340), Memorial Eye produced 100,000 documents and reviewed 250,000 to 260,000 customer orders. In Memorial Eye’s document production, Mr. Holbrook “located only seven instances that could be remotely considered as some type of confusion.” (Holbrook, Tr. 1957) (testifying that those were “the only ones that I know of ever, and I never heard of any other instances in office of any other possible confusion.”)).

342. In December 2010, 1-800 Contacts and Memorial Eye agreed to stay the case pending the outcome of a then-pending appeal in litigation between 1-800 Contacts and Lens.com. (Pratt, Tr. 2535; Holbrook, Tr. 2021-22; RX1793).

d. Settlements

343. During the time period 2004 through 2013, 1-800 Contacts entered into settlement agreements with 13 contact lens retailers to resolve trademark litigation (the “Settlement Agreements”). (F. 306-307, 314-315, 344-345, 348, 351, 359-360).

344. 1-800 Contacts settled with EZ Contacts effective May 2008. (CX0313).

345. In May 2009, 1-800 Contacts and Vision Direct entered into a settlement agreement which, by joint request of the parties, was entered as a permanent injunction by the federal court. (CX0314; CX0316).

346. The 2009 Vision Direct settlement agreement provided that the 2004 Vision Direct agreement would “remain in full force and effect except that the Parties’ sole obligations with respect to the use of negative keywords” would be governed by the 2009 Vision Direct settlement agreement. (CX0314 at 004).

347. Pursuant to the 2009 Vision Direct settlement agreement and the injunction referred to in F. 345, 1-800 Contacts and Vision Direct were required to implement certain negative keywords, attached as exhibits to the injunction, “for the purpose of preventing a Party’s Internet advertising from appearing in response to a search for another Party’s trademarks, URLs, or variations.” (CX0314, CX0316 and Exhibits A and B).

348. Between the fall of 2009 and February 2011, 1-800 Contacts entered into settlement agreements with the following online contact lens retailers: AC Lens (RX0028 (March 2010)); Lensfast (CX0315 (December 2009)); Empire Vision (CX0319 (May 2010)); Lenses for Less (CX0320 (March 2010)); Tram Data (CX0321 (May 2010)); Walgreens (CX0322 (June 2010)); Contact Lens King (CX0323 (March 2010)); Web Eye Care (CX0324 (September 2010)); and Standard Optical (RX0408 (February 2011)).

349. In 2013, Memorial Eye decided to settle the case because of the cost of litigation and legal uncertainty regarding the issue of advertisements that are triggered by broad matching of keywords. (Pratt, Tr. 2535; Holbrook, Tr. 1942 (“[W]e knew that the Lens.com/1-800 Contacts case was still going on and they had spent \$2 million. We knew that the broad matching issue had not firmly been put to rest by the court.”); CX9024 (Holbrook Dep. at 63)).

350. Memorial Eye settled with 1-800 Contacts to avoid paying an expected \$150,000 in expert witness fees. (Holbrook, Tr. 2032; CX9024 (Holbrook, Dep. at 63, 160-61)).

351. 1-800 Contacts settled with Memorial Eye effective November 2013. (CX0326).

352. AC Lens made a business decision to settle with 1-800 Contacts in light of the potential costs and protracted nature of the litigation between the companies. (Clarkson, Tr. 342; CX9039 (Clarkson, Dep. at 86-87, 144); CX9003 (Clarkson, IHT at 108-10)).
353. Web Eye Care settled with 1-800 Contacts in part because the costs of litigation were “way more than what we wanted to spend” and “not worth it.” Web Eye Care settled with 1-800 Contacts in part because of the risks of losing the litigation. (CX9000 (Batushansky, IHT at 93-94); CX9014 (Batushansky, Dep. at 46-48)).
354. Empire Vision settled with 1-800 Contacts in order to avoid the litigation expense of defending the case. (CX0943 (Duley, Decl. at ¶¶ 5, 10)).
355. Settling lawsuits is generally efficient. (RX0739 (Murphy Expert Report at 0053 ¶ 137); Murphy, Tr. 4208; CX 9042 (Evans, Dep. at 196)).
356. Economists generally assume that firms act rationally in settling litigation. Complaint Counsel’s expert witness, Dr. David Evans, sees no reason that this general economic assumption should not apply in this case. (Evans, Tr. 1830).
357. Dr. Evans agrees that, from the settling parties’ perspectives, the settlements were economically rational. (CX9042 (Evans, Dep. at 119-20)).
358. Dr. Evans agrees that economists analyzing a settlement generally assume that, in deciding whether to proceed with litigation, parties evaluate the cost of litigation and the likely benefits of a favorable outcome, accounting for the likelihood of that outcome. (Evans, Tr. 1830-31; CX8009 (Evans Rebuttal Expert Report at 045 n.103) (“As a purely general matter I agree that parties in litigation bargain to reach settlements and they take expected values and costs into account. Most litigation, and particularly routine litigation, settles for this reason.”)).

e. Relevant provisions of the Settlement Agreements

359. The Settlement Agreements include recitals describing the litigation between the parties and stating that “the Parties have determined that, in order to avoid the expense, inconvenience, and disruption” of litigation, “it is desirable and in their respective best interests to terminate” the litigation and “settle any claims related thereto.” (RX0028 at 0001; RX0408 at 0001; CX0310 at 001; CX0311 at 001; CX0313 at 001; CX0315 at 001; CX0319 at 001; CX0320 at 002; CX0321 at 001; CX0322 at 001; CX0323 at 001; CX0324 at 001; CX0326 at 001).
360. The Settlement Agreements include a “Release” of “any and all liability, claims, counterclaims, demands, debts, charges, liens and causes of action” arising from the various claims asserted in the litigations, and required the dismissal of pending litigation. (RX0028 § 1; RX0408 § 3; CX0310 § 1; CX0311 § 1; CX0313 § 2; CX0315 § 2; CX0319 § 1; CX0320 § 2; CX0321 § 1; CX0322 § 1; CX0323 § 2; CX0324 § 2; CX0326 § 1).

361. In general, the Settlement Agreements prohibit each party from causing advertisements to appear in response to an internet search for the other party's trademarks or URLs, or variations thereof, although some agreements more broadly encompass internet searches that "include" the other party's trademarks or URLs, or variations thereof. (*See, e.g.*, CX0310 § 3(A)d (Coastal Contacts); CX0313 § 5(A)a (EZ Contacts); CX0315 § 4(A)a (Lensfast); CX0311 § 4(a)d (Vision Direct). *See also* RX0028 § 2(A)a (AC Lens); CX0320 § 4(A)a (Lenses for Less); CX0321 § 3(A)a (Tram Data); CX0323 § 4(A)a (Contact Lens King); CX0319 § 2(A)a (Empire Vision); CX0324 § 4(A)a (Web Eye Care); RX0408 § 5(A)a (Standard Optical)).
362. Four of the thirteen Settlement Agreements specifically prohibit a party's link from appearing in the organic search results, when a user searches for the other party's brand name, trademarks, or URLs, but not through a search employing generic or descriptive terms. (CX0310 § 3(A)e; CX0311 § 4(A)e; CX0313 § 5(A)b; CX0315 § 4(A)b).
363. Although the specific language may vary, the Settlement Agreements forbid each party from using the other party's trademarks, URLs, and certain variations thereof, as set forth on an attached exhibit list, as keywords to trigger advertisements "or other content." (*See, e.g.*, RX0028 § 2(A)b (AC Lens); CX0310 § 3d, e (Coastal Contacts); CX0323 § 4(A)b (Contact Lens King); CX0319 § 2(A) a, b (Empire Vision); CX0313 § 5(A)b (EZ Contacts); CX0320 § 4(A)b (Lenses for Less); CX0315 § 4(A)a (Lensfast); CX0326 § 3a (Memorial Eye); RX0408 § 5(A)b (Standard Optical); CX0311 § 4(A)d, e (Vision Direct); CX0322 § 3a (Walgreens); CX0321 § 3(A)b (Tram Data); CX0324 § 4(A)b (Web Eye Care)).
364. Although the specific language may vary, the Settlement Agreements require the parties to implement as negative keywords those trademark and URL terms and variations thereof listed on an attached exhibit, in order to prevent the display of advertisements in response to an internet search for, or as stated in some agreements, an internet search that "includes" or "contains," the other party's trademarks or URLs. (RX0028 § 2(C) (AC Lens); CX0323 § 4(C) (Contact Lens King); CX0319 § 2(C) (Empire Vision); CX0313 § 5(B) (EZ Contacts); CX0320 § 4(C) (Lenses for Less); CX0315 § 4(B) (Lensfast); CX0326 § 3b (Memorial Eye); RX0408 § 5(C) (Standard Optical); CX0314 § 4, CX0316 § 1 (Vision Direct settlement and permanent injunction); CX0322 § 3b (Walgreens); CX0321 § 3(C) (Tram Data); CX0324 § 4(C) (Web Eye Care)).
365. The Settlement Agreements do not state whether or not the required negative keywords are to be implemented in broad match, phrase match, or exact match. (F. 364).
366. Although the specific language may vary, the Settlement Agreements do not prohibit the purchase of generic keyword terms, provided that the parties implement the required negative keywords to prevent the advertisement from appearing in response to a search for the designated trademark terms. (*See, e.g.*, CX0326 § 3 (Memorial Eye) (stating: "Nothing in this Section shall be construed to prohibit the use or purchase of generic words such as contact, contacts, lenses, contact lenses, glasses, eyeglasses, eyewear,

frames, or other, similar generic terms as long as the appropriate negative keywords are implemented”); CX0323 § 4(A)c, (C) (Contact Lens King) (prohibiting using generic keywords in an internet advertising campaign without also using the listed trademark and URL terms as negative keywords); CX0315 § 5(B) (Lensfast) (stating that prohibited acts “shall not include” purchase of “generic, non-trademarked words,” provided that the parties “use the prohibited key words as listed in Exhibit 2” as negative keywords); CX0320 § 4(B), (C) (Lenses for Less) (exempting purchase of generic keywords but requiring implementation of negative keywords, “such that advertisements and/or links will not be displayed when the negative keywords are part of a search . . . unless” the internet search provider does not permit negative keywords)).

367. The Settlement Agreements do not restrict the purchase or appearance of advertisements in response to searches for generic terms, such as “contacts,” “contact lens,” and “contact lenses.” (F. 359-366; *see* Hamilton, Tr. 453-54; CX9031 (C. Schmidt, Dep. at 234)).
368. Absent the implementation of negative keywords, a retailer that bids on the generic keyword “contacts” in broad match might cause its ads to appear in response to a search for 1-800 Contacts. (CX9033 (Mohan, Dep. at 185-87); CX9040 (Miller, Dep. at 27-28, 65-66); CX1787; Clarkson, Tr. 237-40; *see also* F. 175-179).
369. Ten of the thirteen Settlement Agreements provide that the prohibited acts “shall not include (i) use of the other Party’s trademarks on the Internet in a manner that would not constitute an infringing use in a non-Internet context, e.g., the use on the Internet of comparative advertising, parodies, and similar non-Infringing, uses.” (RX0028 § 2(B)(i) (AC Lens); CX0311 § 4(B)(i) (2004 Vision Direct); CX0313 § 5(B)(i) (EZ Contacts); CX0315 § 4(B)(i) (Lensfast); CX0320 § 4(B)(i) (Lenses for Less); CX0319 § 2(B)(i) (Empire Vision); CX0321 § 3(B)(i) (Tram Data); CX0323 § 4(B)(i) (Contact Lens King); CX0324 § 4(B)(i) (Web Eye Care); RX0408 § 5(B)(i) (Standard Optical)).
370. From a marketing perspective, the fact that an ad appears in response to a search for “1-800 Contacts” is not considered to be comparative advertising. Comparative advertising is an advertisement that makes reference to a competitor and compares a given feature, price, or characteristic. (Goodstein, Tr. 2470-71; CX9031 (C. Schmidt, Dep. at 237, 239-40)).

f. Post-settlement enforcement of the Settlement Agreements

371. 1-800 Contacts enforced the Settlement Agreements in accordance with their design, which was to prevent the settling parties’ advertisements from appearing in response to an internet search for 1-800 Contacts. (F. 372-396).

i. AC Lens

372. In April 2010, Mr. Miller, counsel for 1-800 Contacts, wrote to Peter Clarkson of AC Lens claiming that AC Lens had breached the settlement agreement between the two

parties, attaching screenshots that Mr. Miller stated demonstrate the breach by affiliates of AC Lens. (CX1107; F. 509).

373. In a May 30, 2014 letter, Mr. Miller of 1-800 Contacts notified Mr. Clarkson of AC Lens of a claimed breach of the AC Lens Agreement, claiming that “sponsored links for the aclens.com and discountcontactlenses.com websites” had been “triggered by searches for the term ‘www800contacts.’” In a June 4, 2014 reply, Mr. Clarkson denied any breach because the specified search term was not on the list attached to the settlement agreement, but agreed to add the term “[r]egardless.” (CX0006).

ii. Coastal Contacts

374. In August 2006, Ed McCready of 1-800 Contacts sent an email to Coastal Contacts stating that “[s]earch engine advertisements from Coastal Contacts and their affiliates are being triggered by searches on variations of 1-800 CONTACTS’ trademarks . . . in violation of the settlement agreement . . .” and asked Coastal Contacts to “ensure the proper steps are taken to remedy this.” Sarah Villeneuve Bundy of Coastal Contacts responded that Coastal Contacts was “not aware of this discrepancy” and would remove the ads “immediately.” (CX0260).
375. On November 13, 2006, Mr. McCready of 1-800 Contacts wrote to Ms. Bundy of Coastal Contacts regarding their advertisements being triggered by searches for variations of 1-800 Contacts’ trademarks, and attached screenshots of the “violating ads.” These screenshots showed Coastal Contacts advertisements appearing in response to searches for “800 contacts”; “800contacts”; “1800 contacts”; and “1-800 contacts.” (CX0751 at 002-08).
376. On November 15, 2006, Ms. Bundy of Coastal Contacts wrote to Mr. McCready of 1-800 Contacts that the advertisements referenced in Mr. McCready’s email of November 13, 2006 (F. 375) were being displayed as a result of an “Advanced Match” of the term “contacts” or a misspelling thereof, and stated it could “do a negative on ‘800’ to help remove them. Mr. McCready replied on November 16, 2006 that “[s]ince the agreement . . . prohibits one company’s ads from appearing in response to any search for the other company’s brand name . . . we’ve added negative keywords, like ‘coastal’ to prevent our general keywords from triggering ads on your company’s brand names.” Mr. McCready asked that Coastal Contacts implement negative keywords as described in Ms. Bundy’s email of November 15, 2006. (CX0751 at 001).
377. On March 2, 2011, Bryce Craven, then senior marketing manager of 1-800 Contacts, emailed Curtis Petersen of Coastal Contacts to notify him that “Lensway.com ads” were “showing up on our trademarked terms . . .” Mr. Craven asked Mr. Petersen to “double check to ensure the appropriate negatives are implemented . . .” Mr. Petersen responded that he had complied. (CX0432).

378. In June 2011, Mr. Petersen of Coastal Contacts wrote to Mr. Craven of 1-800 Contacts that the “issue has been addressed” and that the list of negative keywords had been added, “across the entire US Google Contacts account” for Coastal Contacts. (CX0757).
379. On June 10, 2014, Brady Roundy of 1-800 Contacts emailed Braden Hoepfner of Coastal Contacts. Mr. Roundy listed terms alleged to be in violation of the parties’ settlement agreement and attached screenshots. The listed terms included 1-800 Contacts’ trademark terms as well as trademark terms combined with other terms, such as “1-800contacts coupon” and “1-800contacts rebate.” Mr. Roundy stated that “[a] few negative keywords should take care of the problem,” and requested that Mr. Hoepfner, “[p]lease let me know when these are added to the account.” Mr. Hoepfner replied later that day that the issue “should now be resolved.” (CX0703 at 001).

iii. Vision Direct

380. In December 2009, David Zeidner of 1-800 Contacts emailed Yukio Morikubo of Vision Direct, stating that Vision Direct “has been showing up on several terms for the last two weeks, and my marketing guy has not . . . heard back from Colin. . . . We need to get this resolved ASAP, as it has already been up for two weeks.” (CX0481 at 003).
381. In March 2010, Mr. Craven of 1-800 Contacts wrote to Rick Mitchell of Drugstore.com (then owner of Vision Direct), stating: “We’ve seen Vision Direct ads showing up periodically for these terms,” referencing a list of 1-800 Contacts related terms, “during the past few weeks” and asked Mr. Mitchell to “double check [the] negative keywords” in place. (CX0845 at 002; Hamilton, Tr. 389, 469).
382. In January 2013, Mr. Miller, counsel for 1-800 Contacts, sent a notice of “Breach of . . . Settlement Agreement” to Drugstore.com alleging that Vision Direct had breached the agreement because Vision Direct’s ad appeared on the Yahoo! and Google search engine results pages in response to a search for “1800contacts coupon,” and on the Google search engine results page in response to a search for “1800contacts contact lenses.” (CX0837).

iv. Walgreens

383. In April 2010, David Zeidner of 1-800 Contacts emailed Cary Pumphrey of Walgreens, regarding “a spike in Walgreens ads showing up on our [1-800 Contacts] marks,” and asked to “[p]lease let me know . . . how your company is handling the situation.” (CX1177 at 001).
384. In December 2010, Mr. Miller, counsel for 1-800 Contacts, emailed Peter Wilson, an attorney for Walgreens, asserting that “1-800 Contacts discovered Walgreens ads coming up on Google searches for 1-800-contacts, 1800contacts.com and 1800 contacts coupon” and asserting that this was a violation of the parties’ settlement agreement. In May 2011, the parties agreed to implement a weekly audit of the ad campaigns to ensure the necessary negative keywords were in place. (CX1521 at 001; RX1029).

385. In a series of email communications between 1-800 Contacts and Walgreens in July 2013, 1-800 Contacts complained to Walgreens that Walgreens ads were continuing to appear in response to 1-800 Contacts' trademark terms, which Walgreens agreed to "fix" through its application of negative keywords. (CX1058; CX1060).
386. In June 2014, Brady Roundy of 1-800 Contacts emailed screenshots to Glen Hamilton, senior manager for online marketing for Walgreens, asserting that they showed that "Walgreens is showing up for a handful of our Trademark terms," and asked Mr. Hamilton to add a list of additional negative keywords to Walgreens' advertising campaigns, saying that doing so "should take care of it." (CX0042).

v. EZ Contacts

387. In January 2008 and August 2008, Mr. Pratt, counsel to 1-800 Contacts, communicated with William Thomashower of EZ Contacts regarding EZ Contacts ads appearing in response to searches for 1-800 Contacts' trademark terms, which Mr. Pratt asserted was a violation of the parties' settlement agreement. (CX0816 at 001-02).

vi. Lensfast

388. In May 2014, Mr. Miller, counsel for 1-800 Contacts, sent a "Notice of Breach" to Randolph Weigmer of Lensfast, asserting that advertisements for Lensfast were being displayed in results for the search term "1800 contact lenses." Mr. Miller notified Lensfast that he was adding the term "1800 contact" as a supplemental prohibited trademark term pursuant to the parties' settlement agreement. (CX0453; *see* CX0315 § 4(E)).

vii. Contact Lens King

389. In April 2010, Mr. Miller, counsel to 1-800 Contacts, sent a letter to Jacques Matte of Contact Lens King, asserting that Contact Lens King had breached the parties' settlement agreement, based on screenshots showing ads in response to searches for 1-800 Contacts and variations thereof. (CX0796).
390. In May 2014, Mr. Miller, counsel to 1-800 Contacts, sent a letter to Mr. Matte of Contact Lens King, asserting that advertisements for Contact Lens King had been triggered by a search for certain variations of the 1-800 Contacts' trademark terms that were provided under the parties' settlement agreement, including "1800 contact coupon." Mr. Miller notified Mr. Matte that 1-800 Contacts was adding these terms as supplemental prohibited trademark terms pursuant to the parties' agreement. (CX0800; CX0323 § 4(F)(b)).

viii. Empire Vision

391. In July 2010, Mr. Miller, counsel to 1-800 Contacts, notified Empire Vision that, pursuant to the terms of the parties' settlement agreement, 1-800 Contacts was amending the list of prohibited trademark terms to include the term "1800 contact," based on advertisements having appeared in response to searches for this term. (CX0811; CX0319 § 2(F)(b)).

ix. Lenses for Less

392. In August 2010, Mr. Miller, counsel to 1-800 Contacts, sent a letter to Lenses for Less asserting that Lenses for Less had breached the parties' settlement agreement, based on screenshots and other data on advertisements in response to searches for 1-800 Contacts and variations thereof. (CX0822).

2. Luxottica Sourcing and Services Agreement

393. On December 23, 2013, 1-800 Contacts and Luxottica entered into a sourcing and services agreement ("Luxottica Sourcing and Services Agreement"). (CX0331; CX9001 (Bethers, IHT at 221-22)).
394. Pursuant to the Luxottica Sourcing and Services Agreement, 1-800 Contacts provides fulfillment services by shipping contact lenses to Luxottica's retail chain stores (e.g., LensCrafters, Pearle Vision, Sears Optical, and Target Optical). The agreement further provides for other services including assistance with sourcing contact lenses from the four major contact lens manufacturers. (CX0331; Bethers, Tr. 3524-25, 3694-95; CX9001 (Bethers, IHT at 225)).
395. As a result of the agreement between 1-800 Contacts and Luxottica (F. 393-394), 1-800 Contacts is [REDACTED]. (CX1336 at 003, *in camera*).
396. Within the Luxottica Sourcing and Services Agreement is a section that contains provisions prohibiting the parties, and their affiliates (including, for Luxottica, retailers such as EyeMed, LensCrafters, Pearle Vision, Sears Optical, and Target Optical), from purchasing or using the other party's trademarks or confusingly similar variations thereof "as triggering keywords in any internet search engine advertising campaign" and requiring each party to enter the other party's trademarks, and variations thereof, as listed in the agreement, as "exact match" negative keywords in all advertising campaigns. (CX0331 §§ 17.10-17.11; Bethers, Tr. 3697-99, 3721-22; CX9001 (Bethers, IHT at 221-22)).

H. Relevant Product Market

397. Online sales of contact lenses constitute a relevant product market. (Evans, Tr. 1432; CX8006 (Evans Expert Report at 014, 111-12 ¶¶ 30, 245-46); F. 398-487).

1. Convenience

398. For consumers who purchase contact lenses online, ECPs are not close substitutes, and for consumers who purchase contact lenses from their ECPs, online retailers are not close substitutes. (CX8006 (Evans Expert Report at 116 ¶ 254); F. 399-409).
399. Convenience is a key factor in determining where consumers buy contact lenses. (CX8006 (Evans Expert Report at 112-13 ¶ 248) (citing CX1743 at 009)).
400. Consumers who tend to shop online place a high premium on the convenience of online shopping, home delivery, low prices, and fast (and often free) shipping. (CX9003 (Clarkson, IHT at 17-18) (characterizing the category of online contacts retailers as having a combination of the best service, convenience, and relatively low pricing compared to ECPs and most other retail channels); Holbrook, Tr. 1889 (“online customers are looking primarily for low price and quick delivery.”)).
401. Online purchasing is more convenient than purchasing from any other channel because the consumer does not need to return to the store to pick up his or her purchase. (Coon, Tr. 2693; Clarkson, Tr. 189-91).
402. A consumer may find it is inconvenient to order contact lenses at a physical store if they are not already at the store for an eye exam, if they need to make a separate trip to the store to fill a prescription that was not in stock or is a refill, or if they need to go out of their way to travel to the ECP. (Coon, Tr. 2693; Clarkson, Tr. 189-91; CX8006 (Evans Expert Report at 113 ¶ 249)).
403. A consumer may find it is convenient to order contact lenses at a physical store if they have just had an eye exam and if the ECP has his or her contact lenses in stock. (CX8006 (Evans Expert Report at 112-13 ¶ 248); CX0547 at 036 (Only 40 to 50% of all contact lens sales are addressable by online vendors, because 52% of purchases “occurs at [the] same time and place as [an] ECP visit.”)).
404. Some consumers buy their initial contact lenses from their ECP when they have had their eye exam, but then buy their refill contact lenses online because that is more convenient than going back to the store. Online retailers account for less than 20% of initial orders, but account for almost 50% of refill orders. Thus, while consumers may appear to be switching between brick and mortar retailers and online retailers, they are choosing the different types of stores under different circumstances. (CX8006 (Evans Expert Report at 114 ¶ 251) (citing CX1449 at 034 (Dec. 1, 2015 Bain & Company Presentation: Project Mars – Integrated Materials))).
405. ECPs are generally not able to fill a patient’s prescription with on-hand inventory. ECPs typically carry only a small assortment of retail products. Those ECPs that maintain an

inventory are able to fill a patient's prescription about 25% of the time from the on-site inventory. (CX1449 at 119).⁸

406. 1-800 Contacts' founder, Mr. Coon, distinguished his business from ECPs by conveying to consumers that purchasing from 1-800 Contacts is simple, easy, convenient, and fast, and that 1-800 Contacts delivers to your door the exact same contacts as your doctor for less than you pay to travel to your doctor to pick them up. (Coon, Tr. 2693).
407. 1-800 Contacts recognizes that 1-800 Contacts and other online retailers compete on the basis of convenience and price. (CX1743 at 009 (1-800 Contacts Management Presentation, September 2015) ("Online penetration within the contact lens industry continues to increase steadily due to superior convenience and price. Strong secular trends toward smartphones and ease of re-ordering via mobile enhance the value proposition of online's convenience."); CX0439 at 0014 ("Consumer[s] are primarily going online for convenience and better pricing.")).
408. Online retailers, including 1-800 Contacts, are not well positioned to capture sales made to consumers with vision insurance who prefer to purchase from in-network retailers, which typically includes ECPs, but excludes major online retailers (F. 409). (Evans, Tr. 1440-41; CX8006 (Evans Expert Report at 114 ¶ 252); CX1449 at 189; RX0428 at 0040 (2015 1-800 Contacts Management Presentation noting: "Today consumers cannot use their vision benefits to buy contact lenses online.")).
409. 1-800 Contacts and most other online retailers are, for purposes of insurance coverage, out-of-network providers. (CX8006 (Evans Expert Report at 114 ¶ 252); CX1449 at 189; RX0428 at 0040; CX1818 (showing that Vision Service Provider's network includes only ECPs, Walmart, Costco, and participating retail chains, and listing 1-800 Contacts and all "other online" as out-of-network providers); CX9017 (Blackwood Dep. at 165) ("We did not actually – we did not execute insurance policies. We did not accept insurance."); CX9034 (Roush Dep. at 199) (1-800 Contacts is out-of-network for insurance carriers, "which means the customer has to fill out a form," while "[d]octors a lot of times can take insurance just simply by asking them for an insurance card, and then they can process it. That's in-network insurance.")).

2. Industry Recognition

410. Online contact lens retailers recognize the online contact lens retail market as a distinct market. (F. 411-417).
411. A 2004 1-800 Contacts document identified one of its "growth strategies," as the development and execution of a plan to dominate the "Internet contact lens market." (CX0055 at 006 (2004 Strategy Offsite Summary)).
412. Documents prepared and presented by 1-800 Contacts refer to the online market as a separate economic entity. (██████████ at 0005, *in camera* (1-800 Contacts has "#1

⁸ See JX0002-A at 030 (CX1449 admitted for all purposes).

overall market share in the contact lens industry and 60%+ share of the online contact lens market.”)). See Bethers, Tr. 3807-08 (testifying that he personally presented [REDACTED]).

413. Documents prepared by 1-800 Contacts to present at Board of Directors Meetings refer to the online market as a separate entity. (E.g., CX0621 at 117, 120 (analyzing status of trademark litigation in relation to share of online market for sales of contact lenses); CX0535 at 010 (describing pricing strategy: “price below independent ECPs, close to retail chains, but above our online competitors and Costco.”)).
414. A [REDACTED] focused on 1-800 Contacts’ competitive position compared to its online rivals. ([REDACTED] at 0005, *in camera* (2015 1-800 Contacts Management Presentation) (“20x the unaided brand recognition of the next largest online competitor”), 0008 (analyzing 1-800 Contacts’ share of online contact lens market), 0010 (“Only online player with scale to conduct broad advertising such as TV.”)).
415. 1-800 Contacts’ CEO and president Mr. Bethers has publicly described online retailers as 1-800 Contacts’ major competitors. (Bethers, Tr. 3724-28) (confirming statements made in an October 2016 radio interview).
416. Other online retailers of contact lenses consistently identify online retailers as their main or closest competitors. (Clarkson, Tr. 187-88; Hamilton, Tr. 391-93; Holbrook, Tr. 1887-88, 1898-1900; CX9018 (Drumm, Dep. at 115-16); CX9000 (Batushansky, IHT at 19-20); CX8003 (Mitha, Decl. at 001 ¶ 4); CX8001 (Hamilton, Walgreens, Decl. at 001 ¶ 3); CX8002 (Hamilton, Vision Direct, Decl. at 001 ¶ 3); CX9003 (Clarkson, IHT at 23-24)).
417. LensDirect’s CEO Ryan Aloviz does not consider any brick and mortar retailers to be among its “main competitors” or its “primary competition.” (Aloviz, Tr. 988 (LensDirect’s “primary competition” consists exclusively of online firms); CX9023 (Aloviz, Dep. at 108, 110) (LensDirect’s “main competitors” are exclusively online firms, and none of its main competitors are “companies that sell contact lenses in brick-and-mortar stores.”)).

3. Specialized Facilities

418. Specialized facilities are required in order to sell contact lenses online on a significant scale. (F. 419-429).
419. 1-800 Contacts has specialized facilities, including a 130,000 square foot distribution center and “[f]ully-automated packaging, sealing, sorting and validation system.” (RX0428 at 0034. See also Bethers, Tr. 3642 (1-800 Contacts is looking to open an east coast distribution hub and five additional “spoke” facilities in order to provide two-day delivery, which online customers often expect.)).

420. 1-800 Contacts sells fulfillment services to physical retailers including LensCrafters, Pearle, Sears, and Target Optical. “1-800 CONTACTS’ robust infrastructure” provides a “strong[] value proposition” to “brick and mortar retailers” which do not have such an infrastructure and are instead “focus[ed] on core prescription business (e.g. selling higher margin glasses.” (Bethers, Tr. 3519-20; RX0428 at 0045; *see also* CX0439 at 014 (“Fulfillment and distribution capabilities [are] critical for online” sellers and even “[l]arge scale B&M [(brick and mortar)] players even have issues managing this part of the business.”))).
421. 1-800 Contacts recognizes that its specialized assets created a “growth opportunity” to provide “e-commerce, fulfillment, distribution and sourcing services” to brick and mortar retailers. (RX0428 at 0045).
422. Walmart contracted with 1-800 Contacts for its online operations, including prescription verification, distribution, customer service, and marketing from January 2008 until December 31, 2012. (CX0526 at 039; RX0428 at 0019).
423. In 2013, AC Lens began providing “white label services” to Walmart. White label service allows rebranding and is an e-commerce service that entails building a website for its partner, providing customer service such as answering telephone calls on the partner’s behalf, fulfilling orders, providing prescription verification, and providing customer retention services such as sending emails to existing customers. Under the arrangement between AC Lens and Walmart, AC Lens fulfilled orders placed on Walmart’s websites and handled customer retention efforts for Walmart customers, but Walmart conducted its own marketing activities, including internet search marketing. (CX9037 (Owens, Dep. at 40-42); CX9018 (Drumm, Dep. at 53-54); Clarkson, Tr. 176-77; CX9003 (Clarkson, IHT at 9-10); CX9039 (Clarkson, Dep. at 192-93)).
424. 1-800 Contacts and other online retailers have extensive inventories of contact lenses. (Coon, Tr. 2881 (1-800 Contacts had an inventory of 65,000 SKUs worth millions of dollars); RX1228 at 0010 (1-800 Contacts stocks over 60,000 SKUs); Clarkson, Tr. 191-92 (AC Lens has 37,000 SKUs in stock); Holbrook, Tr. 1869-70 (Memorial Eye made “a huge investment” in purchasing inventory, which was significantly larger than the inventory carried by its brick and mortar stores); CX9014 (Batushansky, Dep. at 108-09, *in camera*) (Web Eye Care is able to fill the vast majority of orders quickly from its stock or through distributors, with only approximately █% of orders going on backorder)).
425. ECPs and brick and mortar retail stores do not carry nearly as extensive inventories of contact lenses as online retailers. (Coon, Tr. 2876 (Costco could fill at most 30% of its prescriptions from inventory, which was higher than most eye doctors); Clarkson, Tr. 191-92 (Walmart and Sam’s Club have a selection of maybe four different lenses, perhaps a total of 400 SKUs in the store. “A doctor usually would have even less [than Walmart and Sam’s Club], and many doctors don’t carry any inventory.”)).
426. Online retailers must invest in, build out, and maintain sophisticated websites. (Holbrook, Tr. 1860-62 (designing and building out website was an investment); CX0525

at 016 (2012 1-800 Contacts management presentation notes that 1-800 Contacts invests in having a “best-in-class website,” with continuing “site optimization through constant user monitoring and surveys,” “new customer tutorials to help enter order and prescription information,” “simple and streamlined order process for new and repeat customers,” and 24/7 “click-to-chat” services)).

427. To participate in online sales at scale, online contact lens retailers must invest in prescription verification systems. (Clarkson, Tr. 180-81; *see also* CX9003 (Clarkson, IHT at 26) (“larger companies now would have an online database of all of the doctors in the United States” for prescription verification)).
428. Online retailers of contact lenses, other than 1-800 Contacts, rely almost exclusively on internet search advertising to reach potential customers. (*Infra* II.K.1).
429. Brick and mortar retailers, including independent ECPs and club stores, generally do not engage in substantial internet search advertising to reach potential customers. (*See, e.g.*, CX8004 (Salas, Decl. at 002 ¶ 8) (Costco does not use search advertising to promote sales of contact lenses); CX9024 (Holbrook, Dep. at 26-28) (for its brick and mortar stores, Memorial Eye relies mostly on direct mailing; but for its online stores it relied primarily on internet search advertising).

4. Distinct Prices

430. Online retailers of contact lenses charge distinct prices which differ from prices charged by physical retailers. (F. 431-453).
431. On average, independent ECPs have the highest prices for contact lenses. (Bethers, Tr. 3543-44; RX0428 at 0012; Clarkson, Tr. 189-90 (“historically we have thought of eye doctors as being 25-plus percent higher”); Coon, Tr. 2709-10 (“doctors . . . have generally higher prices and relatively poor service”)).
432. On average, retail optical chains, such as LensCrafters, Pearle Vision, and Visionworks, are priced just below independent ECPs, but generally above online retailers and club stores (Costco, Sam’s Club, and BJ’s Wholesale). (Bethers, Tr. 3544; RX0428 at 0012).
433. 1-800 Contacts sets its prices by looking primarily at independent ECPs’ and optical retail chains’ prices. (Bethers, Tr. 3542, 3549-50).
434. 1-800 Contacts on average has retail prices for contact lenses below independent ECPs and retail optical chains, but higher than mass merchants, club stores, and other online retailers. (Bethers, Tr. 3544).
435. A 2015 analysis shows that 1-800 Contacts’ net prices were [REDACTED] % lower than independent ECPs and [REDACTED] % lower than LensCrafters. (RX1228 at 0036, *in camera*).

A 2014 analysis of prices shows that based on a subset of high-volume products, 1-800 Contacts prices were █████% lower than independent ECPs for an annual supply and █████% lower than independent ECPs for a 6-month supply. (CX0549 at 063, *in camera*).

436. In 2011, in response to competition from “aggressive price messaging” by other online retailers, 1-800 Contacts reinstated a price matching policy, pursuant to which 1-800 Contacts’ online advertising copy was changed to state: “We Beat Any Online Price.” (CX0658 at 001; CX9012 (L. Schmidt, IHT at 251-54)).
437. When the unilateral pricing policies (“UPP”) (F. 476) was in place after the first half of 2014, 1-800 Contacts offered to beat any price where they could by 2% or to match any price. (CX9032 (L. Schmidt, Dep. at 130)).
438. In 2016, 1-800 Contacts price matching policy states: “We’ll beat any price on every product we carry by 2%” (“price matching policy”). (CX9034 (Roush, Dep. at 158); CX1334 at 013).
439. To take advantage of 1-800 Contacts’ price matching policy, a customer needs either to make a phone call to 1-800 Contacts or to utilize the chat function on the 1-800 Contacts’ website. (CX1334 at 013; Bethers, Tr. 3798).
440. 1-800 Contacts’ decision to implement the price matching policy was not influenced by the prices charged by physical retailers. (CX9012 (L. Schmidt, IHT at 258)).
441. On average, mass merchandisers, such as Walmart, Target, Sears, and J.C. Penney, have contact lens prices below independent ECPs, optical retail chains, and 1-800 Contacts, but higher than club stores and other online retailers. (Bethers, Tr. 3544; RX0428 at 0012).
442. Online retailers other than 1-800 Contacts generally offer the lowest prices for contact lenses, except for membership clubs. (Bethers, Tr. 3536-37, 3544-45; Clarkson, Tr. 189-90 (“[I]t’s also generally true that in most cases online pricing is significantly lower than for any of the brick-and-mortar channels, with the exception of the clubs.”); Holbrook, Tr. 1888 (Memorial Eye’s small chain of brick and mortar stores priced contact lenses “quite a bit higher” than its national pure-play online storefront)).
443. LensDirect looks at its online competitors’ prices and sets its prices below 1-800 Contacts’ prices to be competitive with the other online retailers. (Alovis, Tr. 989; CX9023 (Alovis, Dep. at 108)).
444. AC Lens sets its prices to be in line with other online retailers such as Vision Direct, Coastal Contacts, and Lens.com. AC Lens’ prices are not based on prices charged by ECPs because “[t]hose prices are typically so much higher that they’re not going to be relevant in the [pricing] decision.” AC Lens’ prices are not based on prices charged by brick and mortar stores because those prices are higher to cover overhead costs, such as a trained optical staff and rent costs for retail space. (Clarkson, Tr. 196).

445. Web Eye Care does not “consider the prices for contact lenses at brick and mortar stores” and focuses exclusively on online rivals’ prices. (CX9000 (Batushansky, IHT at 18-21); CX9014 (Batushansky, Dep. at 68)).
446. During the time period that Memorial Eye sold contacts both online and in physical stores, it charged significantly lower prices online than it did in its physical stores. (Holbrook, Tr. 1888-89).
447. In setting its online prices, Memorial Eye considered only the prices of other online retailers and did not consider the prices charged by ECPs or brick and mortar retailers because those prices were not “relevant” to its online business. (Holbrook, Tr. 1898-1900).
448. Membership clubs, such as Costco, Sam’s Club, and BJ’s Wholesale, generally have the cheapest prices for contact lenses. (Bethers, Tr. 3544-45; RX0428 at 0012).
449. Prices charged by membership clubs such as Costco are distinct from the prices charged by online retailers because of the separate membership fee charged to their members. (CX9017 (Blackwood, Dep. at 288) (Costco and BJ’s pricing strategies take into account that part of the pricing comes from the membership fee); Clarkson, Tr. 196-97 (“[E]ven though club stores have very competitive pricing, they’re not a big part of . . . [our] analysis to figure out where to put prices because, for one thing, it’s a very different category of customer. They’ve paid a membership fee and in some cases, especially Costco, they’re incredibly loyal to Costco.”); CX9000 (Batushansky, IHT at 19) (Web Eye Care does not “consider the prices for contact lenses at brick and mortar stores” including Costco, because customers are “not comparing us to Costco.”); CX9017 (Blackwood, Dep. at 288); CX9034 (Roush, Dep. at 156) (warehouse clubs have a distinct pricing model that includes membership fees)).
450. 1-800 Contacts’ stated price matching policy (F. 438) is that it does not match membership clubs, such as Costco or Sam’s Club. (CX1334 at 013 (Sept. 2016 Price Matching Review); RX0428 at 012 (price matching excludes membership clubs); CX9034 (Roush, Dep. at 156) (“[O]ur price matching has typically excluded clubs as a policy. And the reason for that is pretty simple, and that is that there’s a fee, a membership fee that’s associated with clubs, and so you have to pay that fee.”); CX9017 (Blackwood, Dep. at 288); CX9032 (L. Schmidt, Dep. at 140-41); CX1337 at 001-02)).
451. “[O]nline customers are looking primarily for low price and quick delivery.” (Holbrook, Tr. at 1889 (“low price is a substantial part of what goes into them making a decision as to where they buy”); Aloviss, Tr. 1034; Clarkson, Tr. 218).
452. 1-800 Contacts’ price-matching program is an attempt to compete on price against online retailers. (Bethers, Tr. 3629, 3774).
453. Dr. Evans concluded that the price difference between online retailers and physical stores was strong evidence that the online channel is a separate relevant market: “[W]e have a

set of firms, the doctors and other physical retailers, that are charging higher prices and offer less convenience and service. It is not possible for that situation to exist in a market where they're all close substitutes and they're competing" (Evans, Tr. 1522-24).

5. Critical Loss Analysis

454. Complaint Counsel's expert witness, Dr. Evans, analyzed whether the proposed market for the online sale of contact lenses would satisfy the hypothetical monopolist test. The hypothetical monopolist test asks whether a hypothetical monopolist could profitably impose a "small but significant non-transitory increase in prices" ("SSNIP"). (CX8006 (Evans Expert Report at 116-17 ¶¶ 255-56) (citing DOJ & FTC, Horizontal Merger Guidelines § 4.1.1 (2010)); RX0739 (Murphy Expert Report at 0076-77 ¶ 211)).
455. If a hypothetical monopolist is able to raise prices significantly, this indicates that consumers in the proposed market do not have the ability to turn to other substitutes easily enough to defeat that price increase and thus the proposed market is a relevant antitrust market since it excludes products that are not materially important substitutes. (Evans Tr. 1448-49; CX8006 (Evans Expert Report at 116 ¶ 255)).
456. A commonly used method for implementing the SSNIP test is referred to as a "critical loss analysis." Respondent's expert witness, Dr. Kevin Murphy, agrees that a critical loss analysis can provide useful information for defining a relevant market. (RX0739 (Murphy Expert Report at 0076-77 ¶¶ 211-12); CX8006 (Evans Expert Report at 117-18 ¶¶ 257-58)).
457. Performing a critical loss analysis requires a determination of: (1) profit margins; and (2) diversion ratios (F. 458). (Evans, Tr. 1448-49; CX8006 (Evans Expert Report at 117 ¶ 257; RX0739 (Murphy Expert Report at 0077 ¶ 212)).
458. A diversion ratio is the share of a firm's lost sales that would be diverted to other firms in the candidate market in response to a price increase of some specified level. (Evans, Tr. 1448-49; RX0739 (Murphy Expert Report at 0077 ¶ 212); CX8006 (Evans Expert Report at 117 ¶ 257)).
459. Dr. Evans found 1-800 Contacts' contribution profit margin⁹ to be about █% and calculated other online sellers' contribution profit margins to be about █%.¹⁰ (Evans, Tr. 1455; CX8006 (Evans Expert Report at 123 ¶ 268), *in camera*).

⁹ Dr. Evans explained that 1-800 Contacts defines contribution margin as Net Revenue less the sum of cost of goods sold, credit card expense and Variable SG&A (Selling, General, and Administrative expenses), where Variable SG&A does not include most marketing. Dr. Evans further explained that exclusion of most marketing expenses as a variable cost makes sense in performing a critical loss analysis because a rival would not need to increase its marketing to obtain additional customers that were driven to it because of a price increase by its rivals. (CX8006 (Evans Expert Report at 123 ¶ 268)).

¹⁰ Dr. Evans calculated "other online sellers'" margins based on data from Walgreens, Vision Direct, Lens Discounters, and AC Lens. (CX8006 (Evans Expert Report at 123-24 ¶ 268 n.294)).

460. Given the profit margins (F. 459), a diversion ratio of 23% or higher would support a finding that a SSNIP would be profitable. (Evans, Tr. 1454-56; CX8009 (Evans Rebuttal Expert Report at 061-62 ¶ 106); *see also* Murphy, Tr. 4168 (if the diversion ratio is below the mid-20s, then it would not pass the SSNIP test)).
461. Dr. Evans determined the diversion ratio from 1-800 Contacts to other online retailers to be 40%, based principally on a January 2013 1-800 Contacts presentation titled, “Where’s the love? Deadfile Customer Survey,” combined with other available evidence (F. 464). (CX8006 (Evans Expert Report at 121-22 ¶ 266); CX1117).
462. A January 2013 1-800 Contacts presentation titled, “Where’s the love? Deadfile Customer Survey” (“the 2013 Deadfile Customer Survey”) reported the results of a survey conducted by 1-800 Contacts of its customers. The 2013 Deadfile Customer Survey reports that for those customers who are unlikely to buy from 1-800 Contacts for their next purchase, 40% responded they would purchase from an online retailer other than 1-800 Contacts. (CX8006 (Evans Expert Report at 121-22 ¶ 266); CX1117 at 015).
463. Dr. Evans did not know if the results in the 2013 Deadfile Customer Survey on which he relied (F. 462) asked consumers what they would do if 1-800 Contacts raised prices. (Evans, Tr. 1777).
464. Dr. Evans supported his selection of 40% as his diversion ratio by other evidence showing consistent percentages of 1-800 Contacts’ customers who switched to other online retailers. (CX8006 (Evans Expert Report at 120-23 ¶¶ 263-68) (citing survey data showing that for participants who previously purchased from 1-800 Contacts, 34% switched to other online retailers; survey data showing that for participants who previously purchased from 1-800 Contacts, “the high 20 percent range” switched to other online retailers; a presentation prepared by Bain & Company which reports “[p]rice-driven lapsers are more likely to move to another online player” and shows 50% of price-driven lapsers shifting to other online retailers); *see also* CX1117 at 006 (The 2013 Deadfile Customer Survey reporting that of former customers who have purchased elsewhere and self-report that they will not make their next purchase from 1-800 Contacts, 38% say they will make their next purchase from another online supplier.)).
465. 1-800 Contacts’ documents show that many customers switch between making their initial purchase of contact lenses (after receiving a new prescription) from an ECP and their refill purchases from 1-800 Contacts. Thus, much of the switching to ECPs and brick and mortar retailers reflects switching due to a change in circumstance rather than a change in competitive factors. (CX8006 (Evans Expert Report at 121-22 ¶ 266); [REDACTED], *in camera*).
466. In Dr. Evans’ critical loss analysis, his 40% diversion ratio was based on former customers who have actually left 1-800 Contacts, rather than customers switching back and forth between ECPs and 1-800 Contacts. (CX8009 (Evans Rebuttal Expert Report at 060 ¶ 104)).

467. Dr. Evans assigned a 40% diversion ratio from other online sellers to 1-800 Contacts based on evidence that suggested that a large share of customers at other online retailers previously shifted from 1-800 Contacts to these retailers to get better prices and an assumption that those customers would presumably shift back to 1-800 Contacts if prices at all other online retailers rose. (CX8006 (Evans Expert Report at 122 ¶ 267)).
468. Dr. Murphy used a 17% diversion ratio to calculate that a hypothetical monopolist consisting of all online retailers of contact lenses could profitably increase prices by only 3.5%, which is below the 5% SSNIP threshold. (Murphy, Tr. 4168; RX0739 (Murphy Expert Report at 0078 ¶¶ 214-16)).
469. Dr. Murphy acknowledged that documents provided by 1-800 Contacts show a wide range of lost sales diverted from 1-800 Contacts to other online retailers, with some documents reporting that as few as 17% of 1-800 Contacts' former customers have substituted to other online suppliers, but other documents reporting as many as 40% or 50% of 1-800 Contacts' former customers would purchase from an online retailer other than 1-800 Contacts. (RX0739 (Murphy Expert Report at 0078 ¶ 214)).
470. Dr. Murphy derived his 17% diversion ratio from a different slide in the same document relied upon by Dr. Evans, the January 2013 1-800 Contacts presentation titled, "Where's the love? Deadfile Customer Survey." The 2013 Deadfile Customer Survey reports that for those customers whose last purchase was not from 1-800 Contacts, 49% reported their most recent contact lens purchase was from an eye doctor and 17% reported their most recent contact lens purchase was from another online supplier. (RX0739 (Murphy Expert Report at 0078 ¶ 214); CX1117 at 016).
471. Every customer of 1-800 Contacts must go back to an ECP to renew their prescription or obtain a new prescription and when they do so, they often make purchases from their ECP. (Bethers, Tr. 3626-27).
472. Dr. Murphy's reliance on a high percentage of 1-800 Contacts' customers who made purchases from ECPs compared to those who switch to other online sellers is not an appropriate diversion ratio because it does not rely on customers who are actually lost. Dr. Murphy errs by treating as a "lost sale" a 1-800 Contacts customer who cycles between buying from ECPs when they require a new prescription and buying from 1-800 Contacts when they need a refill. (Evans, Tr. 1538-39 (discussing CX1117 at 015-16 (1-800 Contacts 2014 Board Meeting Presentation); Murphy, Tr. 4155-57; CX8009 (Evans Rebuttal Expert Report at 060-061 ¶¶ 104-05)).
473. Using the estimates of profit margins in F. 459 and diversion ratios of 40%, Dr. Evans concluded that a hypothetical monopolist consisting of all online retailers of contact lenses could profitably increase prices by 12.1%. (CX8006 (Evans Expert Report at 124 ¶ 269)).
474. The other surveys discussed by Dr. Evans (F. 464) suggest a diversion ratio from 1-800 Contacts to other online retailers of either 26% or 34%. (CX8009 (Evans Rebuttal Expert

Report at 061-62 ¶ 106 n.143); RX0739 (Murphy Expert Report at 0078 ¶ 214 and Exhibit 15)).

475. Because both Dr. Evans and Dr. Murphy found that a diversion ratio of 23% or higher would support a finding that a SSNIP would be profitable (F. 460), accepting 26% or 34% as diversion ratios would lead to a conclusion that the critical loss test supports a relevant market consisting of online sellers of contact lenses. (CX8009 (Evans Rebuttal Report at 061-62 ¶ 106)).

6. Unilateral Pricing Policies

476. In 2014, major contact lens manufacturers prohibited retailers that bought their products from reselling certain of those products at prices below specified levels. This resale price maintenance is referred to within the industry as unilateral pricing policies (“UPP”). (CX8006 (Evans Expert Report at 125 ¶ 271); CX1336 at 130; *see also* Murphy Tr. 4172).
477. Johnson & Johnson introduced its UPP for its Acuvue Oasys contact lens line on July 1, 2014 and for its other products on August 1, 2014. Other manufacturers applied their respective UPPs in 2013 and 2014, largely to new products rather than to existing products. Johnson & Johnson terminated its UPP program on April 13, 2016, but other manufacturers have continued their programs. (CX8006 (Evans Expert Report at 125 ¶ 271); CX1336 at 130).
478. The manufacturers’ intent and purpose with UPP was to help ECPs be more competitive against non-ECP retailers by increasing the prices of the online retailers and other contact lens discounters to the level of prices charged by ECPs. (CX8006 (Evans Expert Report at 125-26 ¶ 272); Murphy, Tr. 4154-55, 4172).
479. Because UPP set a price floor for covered products, discount sellers (online retailers and club stores) had to increase their prices substantially, by roughly 20 to 25%, on many of the affected products. (CX8006 (Evans Expert Report at 125-26 ¶ 272); *see also* CX1346 at 018, *in camera* [REDACTED]).
480. With the exception of club stores, brick and mortar sellers were already largely pricing close to or above the levels required by Johnson & Johnson’s UPP, so their prices did not change substantially. The ECPs that were lower priced before the UPP went into effect may have had some price increases, but those increases would have been significantly less than those of the online retailers. (Evans, Tr. 1445; CX8006 (Evans Expert Report at 125-26 ¶ 272); *see also* CX1346 at 004, *in camera* [REDACTED]).
481. Dr. Evans examined the change in profits on sales of Johnson & Johnson products at four discount online retailers that were forced to substantially increase their prices as a result

J. Market Shares

491. The approximate shares for the four types of contact lens retailers (*supra* II.D) are: (1) independent ECPs, 40%; (2) optical retail chains, 20%; (3) mass merchants and club stores, 23%; and (4) online retailers, including 1-800 Contacts, 17%. (Bethers, Tr. 3551-56; RX0904 at 0039; CX0525 at 040; CX1446 at 009; RX1117 at 0024; RX0736 (Goodstein Expert Report at 009); RX0739 (Murphy Expert Report at 0086)).
492. 1-800 Contacts' sales account for about 10% of total contact lens sales in the United States. (Bethers, Tr. 3551-53; CX0526 at 007; RX0904 at 0039).
493. 1-800 Contacts' sales account for greater than 50% of online sales of contact lenses in the United States. (CX8007 (Athey Expert Report at 007 ¶ 17); CX8006 (Evans Expert Report at 007 ¶ 8)).
494. In 2015, 1-800 Contacts estimated that it had the number one position of market share of all sellers in all retail sales of contact lenses in the United States and more than 60% share of the online contact lens market in the United States. (CX1446 at 005; *see also* CX9001 (Bethers, IHT at 159-60) (1-800 Contacts CEO testifying that 1-800 Contacts' sales constituted approximately 62% of the online contact lens market)).
495. In 2015, the shares of online sales of contact lenses in the United States were as follows: 1-800 Contacts (██████ %); Vision Direct (██████ %); Lens.com (██████ %); Walgreens (██████ %); Lens Discounters (██████ %); AC Lens (██████ %); Walmart (██████ %); Coastal (██████ %); WebEyeCare.com (██████ %); EZ Contacts USA (██████ %); Lensfast, LLC (██████ %); LensDirect (██████ %); Others (██████ %). (CX8006 (Evans Expert Report at 022-23 ¶ 54, Table 1, *in camera*)).
496. 1-800 Contacts and the 14 parties that have formal written agreements with 1-800 Contacts account for 79% of online sales of contact lenses in the United States. (Evans, Tr. 1376; CX8006 (Evans Expert Report at 130 ¶ 279)).

K. Anticompetitive Effects

1. Commercial Importance of Advertising in Response to Searches for 1-800 Contacts' Trademarks

a. Importance of paid search advertising in marketing contacts online

497. Paid search advertising (also referred to as "pay-per-click" advertising or "search advertising") is an important method for marketing contacts online, including for increasing brand awareness and obtaining new customers. (F. 499-564).

498. Search advertising is an important method for marketing contacts online, including because the advertising is presented to a consumer at a time when the consumer is more likely to be looking to buy. (F. 499-564).

i. AC Lens

499. Search advertising accounts for between 60 and 70% of AC Lens' advertising expenditures, not including search advertising that AC Lens' affiliates engage in on AC Lens' behalf. (Clarkson, Tr. 220).

500. The reason AC Lens spends a large portion of its advertising budget on pay-per-click search advertising is that pay-per-click search advertising is "consistently the channel that [AC Lens] ha[s] found productive in terms of bringing in customers at an acquisition cost that [the company has determined] is consistent with [its] financial goals." (Clarkson, Tr. 220-21).

501. Among the marketing channels used by AC Lens, paid search advertising generates the most new customer orders and the most revenue. (CX9018 (Drumm, Dep. at 123-24); CX9039 (Clarkson, Dep. at 174)).

502. In the view of AC Lens, pay-per-click search advertising is the most effective and important marketing channel that AC Lens uses to grow its business. (Clarkson, Tr. 230 (pay-per-click "has been historically the lifeblood of [AC Lens'] growth."); CX9039 (Clarkson, Dep. at 175-76 (search advertising has played a "tremendous role" in AC Lens' success); CX9018 (Drumm, Dep. at 124-25); CX9018 (Drumm, Dep. at 124-25 (search advertising is particularly effective because it is high volume, in that it presents AC Lens with a high "[t]otal number of potential impressions." The "volume from search is massive, so that's why it's the most important probably."))).

503. To AC Lens, search advertising is a particularly valuable type of advertising because it can be used to target customers who are specifically looking to purchase contact lenses. (CX9039 (Clarkson, Dep. at 173-75) ("[B]road-based marketing that does not target is inherently far less efficient in reaching a target audience. Search is beautiful in the sense that you get right in front of the customer who's looking to buy your product, and you don't pay unless they click on your ad. It's a wonderful thing."))).

504. Pay-per-click advertising allows AC Lens to track performance "at the ad group level and the campaign level" and even "down to the keyword level." (CX9018 (Drumm, Dep. at 118-21); Clarkson, Tr. 230-31).

505. AC Lens' Director of Marketing views search advertising as "cost-effective" as compared to "other marketing channels." (CX9018 (Drumm, Dep. at 124-25)).

506. AC Lens does not advertise contact lenses through online marketplaces such as Amazon.com and eBay.com because [it is AC Lens' understanding that] an advertiser

- cannot list prescription items such as contacts on those marketplaces. (CX9039 (Clarkson, Dep. at 171-72)).
507. Some years ago, AC Lens attempted to market to new customers via “email blasts,” whereby AC Lens purchased email lists of people who were not its customers. The attempt did not generate a lot of sales. AC Lens no longer purchases any external email lists. (CX9039 (Clarkson, Dep. at 212); Clarkson, Tr. 222).
508. AC Lens uses email for “retention marketing . . . to our own customers” and for prospecting to people who have already “visit[ed] the site,” and “sign[ed] up [to] receive special offers.” (Clarkson, Tr. 222-23; CX9039 (Clarkson, Dep. at 171)).
509. AC Lens also has a “fairly large affiliate program” through which it operates websites for its partners and fulfills customers’ orders. (Clarkson, Tr. 218-19; CX9039 (Clarkson, Dep. at 171); CX9018 (Drumm, Dep. at 100) (estimating that AC Lens has approximately 8,000 affiliates)).
510. Affiliate advertising accounts for approximately 15% of AC Lens’ advertising expenditures. (Clarkson, Tr. 221; CX9039 (Clarkson, Dep. at 171, 173); CX9018 (Drumm, Dep. at 100)).
511. AC Lens uses Product Listing Ads (F. 271) on Google, which AC Lens believes “are a very important piece of the puzzle.” (CX9018 (Drumm, Dep. at 65)).
512. AC Lens has had “a limited presence” on Facebook, Twitter and Instagram. Social media marketing accounts for on average no more than 5% of AC Lens’ advertising expenditures. Social media marketing has “[n]ot really” been a successful type of marketing for AC Lens. (Clarkson, Tr. 223).
513. AC Lens has placed advertisements on Facebook “off and on” over the past few years. (CX9018 (Drumm, Dep. at 24)).
514. AC Lens “tested Twitter,” but does not currently use Twitter advertising because “[i]t didn’t reach the acquisition cost that we needed to reach.” (CX9018 (Drumm, Dep. at 24-25)).
515. AC Lens believes that display advertising is less effective than search advertising because display advertising is less targeted. However, one area where AC Lens uses display advertising is for retargeting (F. 249-251). (Clarkson, Tr. 228-30 (“[I]f you buy a banner [advertisement] on, say, the Yahoo health page, you’re targeting a pretty broad section of the population, and only roughly 10 percent of people in America wear contact lenses. . . . If someone searches ‘buy contact lenses,’ that is a very, very targeted consumer.”)).
516. The amount of business that AC Lens has been able to derive from comparison shopping engines has declined over time. (Clarkson, Tr. 224).

517. AC Lens has tested direct mail, Valpak, radio, and Google TV and concluded that these methods did not reach customers at an affordable price. (Clarkson, Tr. 219-20; CX9039 (Clarkson, Dep. at 210-11 (customer acquisition cost of magazine advertising was not consistent with company goals); CX9018 (Drumm, Dep. at 23-24 (AC Lens attempted radio advertising and found it to be unsuccessful); CX9039 (Clarkson, Dep. at 178 (AC Lens tested a Google TV ad that turned out to be “quite ineffective in terms of its acquisition cost.”))).
518. AC Lens uses “email prospecting,” which involves collecting emails from consumers who visit AC Lens’ websites but who do not make an immediate purchase, and found it “surprisingly productive” for AC Lens. (Clarkson, Tr. 222-23).
519. Organic search has become less effective in driving business to AC Lens. AC Lens attributes this to search engines’ “forcing all organic (free) ads down the search engine results page so [the search engines] can make more money,” and to search engines’ disfavoring AC Lens’ use of multiple websites.¹¹ (CX9018 (Drumm, Dep. at 65); Clarkson, Tr. at 225; CX9039 (Clarkson, Dep. at 175-76)).
520. AC Lens has not used TV or billboard advertising because those methods are too expensive and target too broad of a population to be cost effective for AC Lens. (CX9039 (Clarkson, Dep. at 178-79, 210-14)).

ii. Empire Vision

521. “[M]ost of” of the Visionworks/Empire Vision’s contact lens marketing budget is spent on keyword search advertising. (CX9036 (Duley, Dep. at 54)).

iii. LensDirect

522. Paid search advertising accounts for a significant majority of LensDirect’s marketing expenditures. (CX9023 (Alovis, Dep. at 53 (in 2016, search advertising accounted for “the vast majority,” approximately 85% to 90%, of LensDirect’s marketing expenditures); Alovis, Tr. 992 (LensDirect spends more money on paid search advertising through Google than on any other marketing channel)).
523. LensDirect believes that paid search advertising through Google and Bing constitutes the most important of LensDirect’s marketing channels, and has been effective in generating growth for LensDirect. (Alovis, Tr. 992-93).
524. LensDirect was able to assess data regarding the performance of LensDirect’s search advertising on a daily basis, including information as to overall expenditures per day, conversion rate, cost per acquisition, and the number of conversions. (Alovis, Tr. 994-95).

¹¹ AC Lens uses multiple websites to provide “white label services” (F. 423) for its affiliates. (Clarkson, Tr. 176, 225).

525. LensDirect does some display advertising, including for remarketing. With remarketing, if a visitor comes to the LensDirect website and does not make a purchase, LensDirect can “follow” them on the internet and display banners and “remarket” to them. (Alovis, Tr. 1030).
526. During Mr. Alovis’ tenure, LensDirect has not advertised on channels outside the internet, such as television, radio, billboards, magazines, or newspapers because, in Mr. Alovis’ business judgment, these advertising channels are inefficient compared to internet advertising. (Alovis, Tr. 1029; CX9023 (Alovis, Dep. at 45-48)).

iv. Lens Discounters

527. “Online paid search advertising is the main form of advertising that Lens Discounters purchases.” (CX8003 (Mitha, Decl. at 002 ¶ 6); *see also id.* ¶ 7 (Lens Discounters’ “spend on online paid search advertising has gone up dramatically in the last several years. Today, we spend five times more on online paid search advertising than we did in 2010.”)).
528. In the view of Lens Discounters, online paid search advertising is “essential” to Lens Discounters’ ability to attract new customers because it allows the company to reach customers who are seeking to purchase contact lenses online. (CX8003 (Mitha, Decl. at 002 ¶ 6)).
529. Online paid search advertising is Lens Discounters’ preferred method of acquiring new customers because it allows Lens Discounters to reach a large number of consumers who are seeking to learn about or purchase contact lenses online. (CX8003 (Mitha, Decl. at 002 ¶ 6)).
530. Online paid search advertising provided Lens Discounters with various metrics that are helpful for evaluating and controlling advertising costs. (CX8003 (Mitha, Decl. at 002 ¶ 6)).

v. Lenses for Less

531. Lenses for Less engages in no forms of internet advertising other than search advertising. (CX8000 (Studebaker, Decl. at 001 ¶ 8)).
532. To Lenses for Less, search advertising is the most important form of advertising for selling contact lenses over the internet. (CX8000 (Studebaker, Decl. at 001 ¶ 8)).
533. To Lenses for Less, search advertising is valuable because it displays Lenses for Less advertisements to potential customers at the time that they have expressed interest in the products that Lenses for Less sells. (CX8000 (Studebaker, Decl. at 001 ¶ 8)).

vi. Memorial Eye

534. Memorial Eye primarily used online search advertising for its online contact lens business. (Holbrook, Tr. 1903; *see also* CX9024 (Holbrook, Dep. at 27) (“online advertising, search advertising” was the “vast, vast, vast majority” of its spending on advertising)).
535. Memorial Eye has primarily relied on online search advertising for its online business because, in its view, such advertising was the most efficient and practical way to attract new customers. Online search advertising increased Memorial Eye’s volume and Mr. Holbrook of Memorial Eye believes this was critical to Memorial Eye’s growth. (Holbrook, Tr. 1903-04).
536. Memorial Eye ran direct mail advertisements for its online business “[f]or a very brief period of time,” approximately “less than two months.” Memorial Eye concluded that this direct mail campaign was not effective and did not run another direct mail campaign. (CX9024 (Holbrook, Dep. at 27-28)).
537. In the view of Mr. Holbrook of Memorial Eye, search advertising was “vital” for building its online contact lens retail business. (CX9024 (Holbrook, Dep. at 30-31); Holbrook, Tr. 1903 (search advertising was critical for Memorial Eye’s growth); CX9024 (Holbrook, Dep. at 39-40) (Memorial Eye built the brands of its online contact lens retail websites ShipMyContacts and IWantContacts “primarily through . . . online search advertising.”)).
538. Memorial Eye saw value in having a consumer see an ad for a Memorial Eye website, even if the consumer did not click on the ad, because the ad helped build the brand and put the brand in the consumer’s mind for the future. (Holbrook, Tr. 1904-05).

vii. Vision Direct

539. As Walgreens’ senior manager for online marketing, Glen Hamilton was responsible for managing paid online search advertising for Vision Direct, which Walgreens acquired in 2011. (Hamilton, Tr. 389; CX8002 (Hamilton, Decl. at 002 ¶ 4)).
540. During Mr. Hamilton’s tenure at Vision Direct since 2011, Vision Direct advertised “almost exclusively online.” (CX9038 (Hamilton, Dep. at 23; *see also* Hamilton, Tr. 402-03 (most of Vision Direct’s advertising budget was spent on search advertising)).
541. During Mr. Hamilton’s tenure at Vision Direct, Vision Direct spent more on paid search advertising than on any other type of advertising. (Hamilton, Tr. 431-32; *see also* CX8002 (Hamilton, Decl. at 002 ¶ 6)).
542. Paid search advertising “was a major driver” of traffic to Vision Direct’s online contact lens retail website and of sales to new and repeat customers. (Hamilton, Tr. 399).

543. Mr. Hamilton of Vision Direct believes that “online paid search advertising has been a major driver in building Vision Direct’s business over the years” and is “an essential tool to a company that wants to become a significant online seller of contact lenses.” (CX8002 (Hamilton, Decl. at 003 ¶¶ 8-9)).
544. During Mr. Hamilton’s tenure, search advertising allowed Vision Direct to adjust its search advertising spending with respect to specific keywords. (Hamilton, Tr. 432).

viii. Walgreens

545. Paid search advertising “was a major driver” of traffic to Walgreens’ online contact lens retail website and of sales to new and repeat customers. (Hamilton, Tr. 399).
546. Most of Walgreens’ contact lens advertising budget was spent on paid search advertising, since Walgreens’ contact lenses were only sold online. (Hamilton, Tr. 402-03; *see also* Hamilton, Tr. 400 (search advertising “was how Walgreens advertised the fact that it sold contact lenses. . . . [S]ince we only sold them online, no one would know about it unless we advertised it. And we advertised it online.”)).
547. Paid search advertising helped Walgreens increase consumer awareness of its contact lens business. (Hamilton, Tr. 400).
548. It was important to Walgreens to reach consumers who are searching for the products it sells, who can then reach Walgreens’ website and make a purchase with just “a few more clicks.” (Hamilton, Tr. 400-01).
549. Search advertising was “[e]specially” important for Walgreens at the time that it began selling contact lenses online because it helped Walgreens let people know that Walgreens was a retailer that offered contacts and allowed Walgreens to “leverage” its existing brand and good will. (Hamilton, Tr. 401; *see also* CX8001 (Hamilton, Decl. at 003 ¶ 9)).
550. Mr. Hamilton of Walgreens believes that online paid search advertising “is an essential form of advertising for Walgreens in order to remain competitive with other online resellers of contact lenses, and grow its online contact lens retail market share.” (CX8001 (Hamilton, Decl. at 003 ¶ 8)).
551. During Mr. Hamilton’s tenure at Walgreens since 2011, the mechanics of online paid search advertising allowed Walgreens to adjust its spending with respect to specific keywords. (Hamilton, Tr. 432).

ix. Walmart

552. Search advertising is the only type of online advertising for contact lenses that Walmart has used. (CX9033 (Mohan, Dep. at 17-18)).

553. Walmart views search advertising as helpful in acquiring new contact lens customers because it targets people who have already decided to make a purchase, and are searching to buy. (CX9033 (Mohan, Dep. at 18-20)).
554. Walmart considered it useful to show its contact lens advertisements in search advertising results even when users did not click on the ads because showing ad impressions builds brand awareness and awareness that Walmart sells contact lenses. (CX9033 (Mohan, Dep. at 71-72)).

x. Web Eye Care

555. Web Eye Care does not engage in any advertising other than online advertising. (CX9014 (Batushansky, Dep. at 109)).
556. Web Eye Care devotes about █████% of its online advertising expenditures to search advertising. Web Eye Care used search advertising from the company's beginning, and then expanded its use, having determined that it "worked," meaning that it "was within our cost-per-acquisition metrics." (CX9014 (Batushansky, Dep. at 110, 116, *in camera*)).
557. Web Eye Care believes that search advertising helps Web Eye Care get customers, including new customers, by making Web Eye Care visible when consumers are searching for products that Web Eye Care sells, and that such advertising has helped Web Eye Care grow. (CX9014 (Batushansky, Dep. at 111-12, 115-16)).
558. Web Eye Care believes that search advertising is the advertising method that "drives the most traffic and then that traffic converts to orders, so also by default drives orders." (CX9014 (Batushansky, Dep. at 110-11)).
559. Web Eye Care has never attempted television, radio, or print advertising, because it has limited resources and prefers the ease and instantaneous feedback provided by search advertising. (CX9014 (Batushansky, Dep. at 117-18)).
560. One reason that Web Eye Care has not tried forms of advertising other than search advertising is that search advertising is "relatively easy to administer." (CX9014 (Batushansky, Dep. at 117-18)).
561. Web Eye Care also has not tried forms of advertising other than search advertising because search advertising provides "more instantaneous feedback," meaning that the advertiser "can get feedback regarding the viability of it relatively quickly," such that "you don't have to spend money over a long period of time before you know the success of it. . . . So if it's not working, you can turn it off," leading to "less risk of failure." (CX9014 (Batushansky, Dep. at 117-18)).

b. Expert opinion

562. Consumers “using search to look for products to buy online . . . are often ready to buy.” If the company does not make a sale during that search session, it may not make the sale later. The company cannot readily substitute another type of advertising to reach that user at that time, such as bidding on a different search keyword, buying a Facebook Newsfeed ad, or buying a banner ad on the Yahoo! homepage, “because it is unlikely that the user will see that ad right before she buys.” (CX8006 (Evans Expert Report at 033-34 ¶ 76)).
563. Search advertising is a particularly efficient method of marketing for small firms, because search engines provide all the necessary software for using paid search advertising for free, do not impose any entry or minimum fees for using the service, and charge advertisers only when internet users click on an ad. (CX8006 (Evans Expert Report at 028 ¶ 64)).
564. Online search is one of the key methods by which consumers discover and reach vendors, and compare products and services. (CX8006 (Evans Expert Report at 083)).

c. Importance of trademark paid search advertising in marketing contacts online

565. Displaying an ad in response to a search for 1-800 Contacts’ brand name terms is an important method by which lower priced online contact lens retailers compete with 1-800 Contacts for customers. (F. 583-680).

i. 1-800 Contacts

566. Trademark paid search (that is, paid search advertising displayed in response to search queries for 1-800 Contacts’ trademark terms and variations thereof) is a significant source of business for 1-800 Contacts. (F. 567-582).
567. 1-800 Contacts’ trademark keywords, together with the three most common generic keywords, “contacts,” “contact lens,” and “contact lenses” are the “biggest contributors to orders” for 1-800 Contacts. (CX0732 at 004; Bethers, Tr. 3654-55; F. 658).
568. 1-800 Contacts monitored and reported its contribution margin, net revenue, gross profit, and marketing expenses separately for trademark and non-trademark terms. (CX0296 at 024 (2015 presentation titled, “1-800 Contacts Affiliate and Paid Search Overview”); CX0558; CX0616 at 001; CX0014 at 001-02).
569. 1-800 Contacts often refers to trademark paid search advertising as “TM paid search.” (See, e.g., CX0646; CX9030 (Powell, Dep. at 63-64)).
570. The trademark paid search channel accounts for the substantial majority of 1-800 Contacts’ new customer orders attributable to paid search advertising. (CX0051 at 007)

(“About 75% of all paid search orders come through our trademark terms”); CX0646 at 005 (in 1-800 Contacts’ fiscal year 2011, 74.6% of 1-800 Contacts’ NI (“new internet”)¹² customer orders attributable to search advertising were generated by TM Paid Search; as reported in “FY 2011 Totals” row of “NI” (new internet) tab of Excel spreadsheet, 125,220 NI orders compared to 42,729 NI orders attributable to “Other Paid Search”); CX0646 at 005 (in 1-800 Contacts’ fiscal year 2012, 72.5% of 1-800 Contacts’ NI customer orders attributable to paid search attributable to TM Paid Search (138,951) compared to 52,771 NI orders attributable to “Other Paid Search”); CX0646 at 005 (in 1-800 Contacts’ fiscal year 2013 through the end of the third quarter, 69.2% of 1-800 Contacts NI customer orders attributable to paid search attributable to TM Paid Search (85,648) compared to 38,129 NI orders attributable to “Other Paid Search”); CX0094 at 001, *in camera* (for the week ending May 31, 2014, trademark paid search orders represented ██████ out of ██████ total paid search orders for 1-800 Contacts)).

571. In 2015, between 20 and 31% of 1-800 Contacts’ initial web orders came from users searching for 1-800 Contacts’ trademark terms. (█████ at 030, *in camera* (showing that 20% of initial orders came from “Paid Search on 1-800 CONTACTS Trademark” and 11% of initial orders came from “Natural Search”); Bethers, Tr. 3802 (stating that orders from “Natural Search” could be orders resulting from a search for a 1-800 Contacts trademark); CX8006 (Evans Expert Report at 088-89 ¶ 193 and Figure 1)).
572. Each year for 2008, 2007, and 2006, 1-800 Contacts attributed far more orders to “TM Orders” than to “Non-TM Orders.” (CX0423 (in 2008, annual totals through Google were 140,923 TM Orders and 47,933 Non-TM Orders; in 2007, annual totals through Google were 112,696 TM Orders and 44,138 Non-TM Orders; in 2006, annual totals through Google were 90,748 TM Orders and 40,035 Non-TM Orders)).
573. 1-800 Contacts’ trademark terms have higher conversion rates for 1-800 Contacts than non-branded search terms. (CX9017 (Blackwood, Dep. at 34-35); CX0014 at 001-02).
574. In 2010, 1-800 Contacts’ cost-per-click for clicks on advertisements appearing in response to 1-800 Contacts trademark queries was under \$0.30. (CX0051 at 006 (Presentation titled, “Search Overview November 2010” (“Big Orders, Little Cost . . . TM CPCs are under \$0.30.”))).
575. 1-800 Contacts’ strategy in search advertising was to spend as much as necessary when bidding on its trademark keywords to meet its goal of ensuring that 1-800 Contacts’ advertisement was the first advertisement displayed in response to searches for its trademark. (CX9028 (Roundy Dep. at 86-88); CX9031 (C. Schmidt Dep. at 125-27); CX9020 (Craven at 123-25); Bethers, Tr. 3787-88; CX0296 at 035 (1-800 Contacts February 2015 Affiliate and Paid Search Overview Presentation); CX9032 (L. Schmidt, Dep. at 92)).

¹² In 1-800 Contacts’ internal reports, “NI” refers to “new internet” customers, that is, customers who order via 1-800 Contacts’ website who have not ordered from 1-800 Contacts in the past. (CX9015 (Galan, Dep. at 83); CX9017 (Blackwood, Dep. at 57-58)).

576. Laura Schmidt, 1-800 Contacts' marketing director, could not recall an instance in which a 1-800 Contacts' advertisement was not the first advertisement that appeared in response to a 1-800 Contacts trademark search query. (CX9032 (L. Schmidt, Dep. at 91-92)).
577. 1-800 Contacts considers direct traffic to its website to be "much less susceptible to competitive advertising or offers" than non-direct traffic. Sources of direct traffic identified by 1-800 Contacts include email, typed URL/Bookmark,¹³ paid search on 1-800 Contacts trademark, and mobile applications. Direct traffic sources account for approximately 70 to 75% of orders. (CX0429 at 013 ("Management Presentation" dated November 2013); [REDACTED], *in camera* [REDACTED]).
578. On October 1, 2012, in reporting to 1-800 Contacts' marketing department on a prior week's results for various search advertising methods, 1-800 Contacts' employee Rick Galan noted that "trademark accounts for . . . a large percentage of our orders" and that "small decreases in TM can have large effects overall." (CX0863 at 001).
579. In an email dated August 13, 2012, 1-800 Contacts' then-marketing director Laura Schmidt referred to a decline in trademark paid search as "scary" and attributed it to "our broadcast message being tired and old" (CX0864 at 001; CX9032 (L. Schmidt, Dep. at 224-25); CX9029 (Bethers, Dep. at 98) (noting correlation between increasing or changing broad scale advertising and increase in customers coming to 1-800 Contacts through trademark search)).
580. 1-800 Contacts earns approximately [REDACTED] % of its sales from paid search advertising. (RX0739 (Murphy Expert Report at 0049), *in camera*; [REDACTED] at 0030, *in camera*).
581. [REDACTED], 1-800 Contacts stated that it had twenty times the unaided brand awareness of the next largest pure-play online competitor. [REDACTED], *in camera*).
582. In a 2013 management presentation, 1-800 Contacts stated that 1-800 Contacts' "\$413 million cumulative advertising investment (as of 9/2013) has built the leading brand in contact lens retailing" with the result that 1-800 Contacts "has 30% unaided brand awareness," eight times that of the nearest online competitor. The stated result was based on a third-party survey where participants were asked on an unaided basis: "When you think about places to buy contact lenses, what places come to mind?" (CX0429 at 010).

ii. AC Lens

583. In 2002, AC Lens decided not to use 1-800 Contacts' trademarks as keywords for paid search advertising because of legal concerns. (Clarkson, Tr. 324-26; CX9039 (Clarkson, Dep. at 196-97); CX9003 (Clarkson, IHT at 90-91)).

¹³ A customer who wants to go directly to the 1-800 Contacts website can type the URL 1-800 Contacts.com into the browser. (Bethers, Tr. 3572-73).

584. AC Lens decided to implement negative keywords related to 1-800 Contacts' trademarks in paid search advertising after communications from 1-800 Contacts. (CX9039 (Clarkson, Dep. at 135-36)).
585. AC Lens bids on trademarks of Lens.com, Vision Direct, and ShipMyContacts. (CX9039 (Clarkson, Dep. at 197)).
586. AC Lens believes it could benefit from showing its advertisements to a person who entered a search query for "1-800 Contacts," "[b]ecause we sell the same products and we sell them at a lower price." (Clarkson, Tr. 378; CX9018 (Drumm, Dep. at 152) ("Bidding on their terms would provide us an opportunity to show those people that there's an alternative."); *id.* at 197 ("There are a lot of people that search for '1-800 Contacts' from what we can tell via the keyword tool and other sources. Those are people who are most likely looking for contact lenses to purchase, and it would be definitely relevant and helpful to advertise our sites in that location.")).
587. To AC Lens, it would be more valuable to show advertisements in response to search queries for 1-800 Contacts' brand name terms than in response to search queries for the brand names of other online contact lens retailers because of "the price advantage that [AC Lens] enjoy[s]" relative to 1-800 Contacts. (CX9039 (Clarkson, Dep. at 156); *see also* Clarkson, Tr. 253 ("Also, there's less value in advertising on, say a Vision Direct term because they're in roughly the same price point, so there isn't quite the same incentive for consumers to switch.")).
588. AC Lens believes its settlement agreement with 1-800 Contacts has kept it from getting sales that it "likely could have gotten by offering a lower price on the same product to consumers." (CX9039 (Clarkson, Dep. at 163-64); *see also* Clarkson, Tr. 260 (stating belief that "given the size of [1-800 Contacts] and the volume of monthly searches," the amount of such sales would have been "significant.")).
589. AC Lens believes that having its ad appear in response to a search for 1-800 Contacts helps to increase brand awareness without any cost for the view, even where a consumer does not click on the AC Lens ad. (CX9039 (Clarkson, Dep. at 158)).
590. Absent its settlement agreement with 1-800 Contacts, AC Lens would want to test using 1-800 Contacts' trademarks as keywords in paid search advertising, if it was "considered to be a legal practice." (Clarkson, Tr. 343; *see also* Clarkson, Tr. 253-54 (stating that if AC Lens were not subject to its agreement with 1-800 Contacts and "[s]ubject to blessing from my corporate counsel," AC Lens would bid on 1-800 Contacts related terms and remove the 1-800 Contacts related negative keywords that AC Lens uses)).
591. AC Lens believes that some portion of people who search for 1-800 Contacts "would be interested in an offer [from AC Lens] that said, '[w]e're 20 percent cheaper'" and that such message "would be a compelling proposition to consumers." (CX9039 (Clarkson, Dep. at 104)).

592. AC Lens believes it has a business interest in showing its advertisements to consumers who entered the search query “1-800 Contacts” even if the consumer’s purpose was to navigate to 1-800 Contacts website, because AC Lens’ “pricing is sufficiently attractive that we would have a decent shot at converting that customer to shop with us.” (CX9039 (Clarkson, Dep. at 158)).

iii. Coastal Contacts

593. After achieving a share of the online contact sales market of over 12% in 2005, Coastal Contacts ceased trademark advertising as a result of its settlement agreement with 1-800 Contacts. At year-end 2007, Coastal Contact’s share of the online contact sales market had fallen in half to just 6%. (CX0621 at 122 (agenda and attached documents for consideration at October 30, 2008 1-800 Contacts Board of Directors Meeting)).

iv. Empire Vision

594. Empire Vision is a subsidiary of Visionworks. (CX0943 (Duley, Decl. at 001 ¶ 5)).

595. In the opinion of Visionworks’ Director of Marketing Mr. Duley, if the Settlement Agreement were terminated or otherwise invalidated, Visionworks would test to see if any of the keywords prohibited under the Settlement Agreement would be desirable for use, and would also cease using the negative keywords listed in the Settlement Agreement. (CX0943 (Duley, Decl. at 003 ¶¶ 17-18)).

v. LensDirect

596. Based on analysis of data from Google, Dr. Evans concluded that LensDirect advertisements have appeared in response to searches for 1-800 Contacts’ brand name terms as a result of LensDirect directly bidding on 1-800 Contacts trademark keywords. (CX8006 (Evans Expert Report at 061 ¶ 132)).

597. Based on his analysis of data from Google, Dr. Evans determined that LensDirect advertisements have appeared in response to searches for 1-800 Contacts’ brand name terms as a result of LensDirect bidding on non-trademark keywords and matching of the advertisements by Google. (CX8006 (Evans Expert Report at 061 ¶ 132)).

598. Based on his analysis of data from Google, Dr. Evans determined that in the 12 month time period ending September 2016, LensDirect’s advertisements appearing in response to searches for 1-800 Contacts’ brand name terms averaged over 90,000 per month. (CX8006 (Evans Expert Report at 061 ¶ 132)).

599. Based on his analysis of data from Google, Dr. Evans concluded that the volume of LensDirect ad impressions appearing in response to searches for 1-800 Contacts brand name terms in the year ending September 2016 was equal to more than one-fifth of the ad

- impressions of 1-800 Contacts' own advertisements shown in response to the same set of searches during the same time period. (CX8006 (Evans Expert Report at 061 ¶ 132)).
600. One reason LensDirect bids on 1-800 Contacts' trademark terms is LensDirect's belief that a large volume of searches are for these terms and that LensDirect offers a better solution for those customers. (CX9023 (Alovis, Dep. at 121-22); *see also* Alovis, Tr. 1006, 1014).
 601. LensDirect has found "great value in bidding on '1-800 Contacts.'" (Alovis, Tr. 1014).
 602. LensDirect believes there is value in showing an ad in response to a search for 1-800 Contacts, even if the ad is not clicked on, because it gives LensDirect brand visibility next to the larger players without any cost. (Alovis, Tr. 1006).
 603. LensDirect believes its message "Same Contacts, Better Prices" is an appealing message to a consumer who searched for 1-800 Contacts. (Alovis, Tr. 993-94).
 604. LensDirect has no plans to stop using 1-800 Contacts terms as search advertising keywords. (Alovis, Tr. 1015-16).
 605. In 2016, according to LensDirect marketing reports, terms related to 1-800 Contacts performed well, which means that the terms generated revenue for LensDirect and had "high conversion rates." The term "1-800contacts coupon" has doubled LensDirect's average conversion rate and has a "very attractive" cost per conversion for LensDirect. (CX9023 (Alovis Dep. at 128)).
 606. During Mr. Alovis' time as CEO of LensDirect, LensDirect's bidding on 1-800 Contacts terms "absolutely" drove a significant amount of business for LensDirect. (Alovis, Tr. 1014).
 607. LensDirect believes that it makes business sense for LensDirect to show advertisements in response to a search for "1800contacts" because "[a] lot of people search for '1800contacts' and we want to be there when they do. . . . We hope to get those interested people to become customers of LensDirect because we believe we're offering . . . a better price for the same product." (Alovis, Tr. 1006).
 608. In terms of overall conversions, bidding on 1-800 Contacts terms has been a successful strategy for LensDirect. (Alovis, Tr. 1014).
 609. For LensDirect, having advertisements appear in responses to a search for 1-800 Contacts, even if the consumer does not click on the LensDirect ad, can improve LensDirect's brand visibility. This helps LensDirect because "the more times people see LensDirect, the better chance there is of them becoming a customer one day." (Alovis, Tr. 1006-07).

vi. Lens Discounters

610. Prior to receiving a cease and desist letter and other communications from 1-800 Contacts in 2005, Lens Discounters was bidding on the term “1-800 Contacts” and variations thereof as keywords for search advertising. Beginning in 2005, after receiving a cease and desist letter and other communications from 1-800 Contacts, in order to avoid litigation expense, Lens Discounters “unilaterally decided to stop” such bidding. Lens Discounters also implemented negative keywords requested by 1-800 Contacts in a series of demand letters. (CX8003 (Mitha, Decl. at 002-03 ¶¶ 9, 11-14, 18-29 and exhibits thereto)).
611. During the time that Lens Discounters was bidding on 1-800 Contacts terms, “the cost per conversion for those terms was low, and [Lens Discounters’] conversion rates were good. [Lens Discounters] received a good amount of traffic, as well as resulting orders, from bidding on those keywords.” Shaneef Mitha, chief operating officer of Lens Discounters, believes that Lens Discounters attracted customers who used 1-800 Contacts terms in their searches because Lens Discounters’ prices were better than 1-800 Contacts’ prices. (CX8003 (Mitha, Decl. at 002 ¶ 10)).
612. Bidding on 1-800 Contacts’ terms enabled Lens Discounters to generate ad impressions, so that even if consumers did not purchase from Lens Discounters, Lens Discounters was “able to get the Lens Discounters’ name in front of a large audience of potential customers.” (CX8003 (Mitha, Decl. at 002 ¶ 9)).
613. In or around December 2016, Lens Discounters decided to remove negative keywords relating to 1-800 Contacts and to begin bidding on 1-800 Contacts related terms because it had been previously successful for Lens Discounters and it hoped that such terms would be successful again. (CX8003 (Mitha, Decl. at 005 ¶ 30)).
614. Lens Discounters has found that having its ads appear in response to searches for other online sellers of contact lenses is beneficial because such keywords are cost effective and have resulted in a strong enough return on investment to continue bidding on them. (CX8003 (Mitha, Decl. at 005-06 ¶ 31)).

vii. Lenses for Less

615. Lenses for Less has not entered into any agreement with any other company, including any other online contact lens retailer, similar to its agreement with 1-800 Contacts. (CX8000 (Studebaker, Decl. at 003 ¶ 19)).
616. If its settlement agreement with 1-800 Contacts were terminated and there was no threat of a lawsuit, Lenses for Less would “periodically test to see if it would be profitable to bid on the term ‘1-800 Contacts’ or similar terms, and/or remove the negative keywords we have implemented as a result of our agreement with 1-800 Contacts.” (CX8000 (Studebaker at 002 ¶¶ 16-17)).

viii. Memorial Eye

617. Memorial Eye did not bid on the keyword “1-800 Contacts” in search advertising auctions, but Memorial Eye ads were displayed in response to search queries for 1-800 Contacts’ trademark terms as a result of Memorial Eye bidding on generic terms (such as “contacts”) in broad match or phrase match (i.e., “matched ads” (*see* F. 655)). (Holbrook, Tr. 1905-07; *see also* CX8006 (Evans Expert Report at 093 ¶ 201, n.218) (Based on Google data analyzed by Dr. Evans, the only Memorial Eye ads that appeared in response to 1-800 Contacts branded queries were matched ads)).
618. Based on Google data analyzed by Dr. Evans, between January 2010 and December 2011, Google showed Memorial Eye text ads on approximately 6 million search results pages generated by queries related to 1-800 Contacts brand name keywords and that Memorial Eye’s ads appeared on almost half of the search results pages generated by queries that included 1-800 Contacts’ brand name between January 2010 and December 2011. The average position of a Memorial Eye ad was second, directly below the ad for 1-800 Contacts. (CX8006 (Evans Expert Report at 012, 095 ¶ 26, n.229)).
619. Memorial Eye found that its online businesses were getting a significant amount of conversions and new customers as a result of its ads appearing in response to generic keywords being broad-matched and phrase-matched to searches for 1-800 Contacts’ trademark terms. (Holbrook, Tr. 1877 (referring to “vast amount” of conversions, yielding a “vast amount” of sales); 1907-08 (matched ads generated “a lot of conversions” for Memorial Eye); CX9024 (Holbrook, Dep. at 70-71) (ads appearing in response to a consumer search for 1-800 Contacts’ trademark terms drove a “large amount of traffic” to Memorial Eye’s website); CX8006 (Evans Expert Report at 012 ¶ 26) (between January 2010 and December 2011, clicks on Memorial Eye ads appearing on search results pages following queries that included 1-800 Contacts’ branded queries accounted for 46% of Memorial Eye’s search-advertising related sales)).
620. Based on Google data analyzed by Dr. Evans, Memorial Eye had a higher click-through rate on ads displayed for 1-800 Contacts brand queries than for other queries. People who clicked also were more likely to buy from Memorial Eye than people who reached its website by entering other queries. Memorial Eye converted, or made an initial sale on, 11.25% of the clicks on matched ads, which was “almost twice as high a rate of conversions on 1-800 queries than on non-1-800 queries.” (Evans, Tr. 1605-06; CX8009 (Evans Rebuttal Expert Report at 084 n.193)).
621. Memorial Eye believes the ability to show advertisements in response to searches for 1-800 Contacts “was extremely important” and “critical” to Memorial Eye’s online contact lens retail business. (CX9024 (Holbrook, Dep. at 74)).
622. Memorial Eye believes it benefitted from having ads appear in response to searches for 1-800 Contacts, even if the consumer intended to navigate to 1-800 Contacts’ website, because doing so improved Memorial Eye’s brand recognition. (Holbrook, Tr. 1910-11).

623. Memorial Eye believes that implementing the negative keywords for 1-800 Contacts terms that 1-800 Contacts was asking Memorial Eye to implement “would destroy” its business because Memorial Eye obtained a large amount of sales from searches that included 1-800 Contacts related terms. (Holbrook, Tr. 1876-77).

ix. Vision Direct

624. Vision Direct has not implemented negative keywords with respect to any online contact lens retailer other than 1-800 Contacts. (Hamilton, Tr. 417; CX8002 (Hamilton, Decl. at 005 ¶ 17)).

625. Absent the settlement agreement with 1-800 Contacts, it is highly unlikely Vision Direct would have implemented any negative keywords related to 1-800 Contacts. (CX8002 (Hamilton, Decl. at 005 ¶ 16)).

626. Vision Direct believes that “the practice of bidding on, and having Vision Direct ads appear against, competing online sellers of contact lenses” has been “beneficial” to the company. (CX8002 (Hamilton, Decl. at 006 ¶ 20)).

627. Vision Direct has found that the keywords associated with competing online sellers of contact lenses have been “generally cost-effective and have resulted in a strong enough return on investment that [Vision Direct] continue[d] to bid on [those] keywords.” (CX8002 (Hamilton, Decl. at 006 ¶ 20)).

628. Vision Direct uses Google’s AdWords Keyword Planner (F. 229-230) to research new keywords to add to its account. Using Google’s AdWords Keyword Planner, Vision Direct can input keywords and receive estimates of the number of ad impressions and clicks (as well as other information such as cost-per-click and at times, expected number of orders or conversions) that would result from bidding on those keywords. (Hamilton, Tr. 418; CX9038 (Hamilton, Dep. at 82-83); *see also* CX8002 (Hamilton, Decl. at 005-06 ¶ 18)).

629. Mr. Hamilton of Vision Direct input the keywords that were prohibited by Vision Direct’s settlement agreement with 1-800 Contacts into the Google AdWords Keyword Planner. (Hamilton, Tr. 418; CX9038 (Hamilton, Dep. at 81-82); *see also* CX8002 (Hamilton, Decl. at 005-06 ¶ 18)).

630. The results of Mr. Hamilton inputting the keywords prohibited by the Vision Direct 1-800 Contacts settlement agreement into the keyword planner tool “suggested that there would be a significant volume of clicks and that the cost-per-click and the conversion rate would be such that the cost per order would be lower than [Vision Direct’s] average cost per order on the account.” These results suggested to Mr. Hamilton that Vision Direct “should test these keywords and see if that in fact would be the case” (Hamilton, Tr. 427).

631. Even though, according to the Google AdWords Keyword Planner tool, bidding on 1-800 Contacts' trademark keywords would cost Vision Direct approximately [REDACTED] extra per month, Mr. Hamilton of Vision Direct concluded that the return on investment would justify that cost because "the cost per order . . . on those terms was lower than the average cost per order in our account." (Hamilton, Tr. 431, *in camera*; see also CX8002 (Hamilton, Decl. at 005-06 ¶¶ 18-19), *in camera*).

x. Walgreens

632. During Mr. Hamilton's tenure at Walgreens, Walgreens bid on trademark keywords of contact lens retailers other than 1-800 Contacts. (Hamilton, Tr. 429).
633. Walgreens has not implemented negative keywords with respect to any online contact lens retailer other than 1-800 Contacts. (Hamilton, Tr. 417; CX8001 (Hamilton, Decl. at 005 ¶ 17) ("I am not aware of Walgreens implementing negative keywords with respect to any online contact lens retailer other than 1-800 Contacts.")).
634. Mr. Hamilton of Walgreens input the 1-800 Contacts keyword terms that are prohibited by Walgreens' settlement agreement with 1-800 Contacts into the Google AdWords Keyword Planner tool. (Hamilton, Tr. 418, CX8001 (Hamilton, Decl. at 006 ¶ 19)).
635. Based on the results from the Google AdWords Keyword Planner, Mr. Hamilton believes it would be beneficial to Walgreens to test the prohibited keywords in online paid search advertising in Google, Bing, and Yahoo! Gemini. (Hamilton, Tr. 418, 427; CX8001 (Hamilton, Decl. at 006 ¶ 19)).
636. Even though, according to the Google AdWords Keyword Planner tool, bidding on 1-800 Contacts' trademark keywords would cost Walgreens approximately [REDACTED] extra per month, Mr. Hamilton of Walgreens concluded that the return on investment would justify that cost. (Hamilton, Tr. 430, *in camera*; see also CX8001 (Hamilton, Decl. at 006-07 ¶¶ 19-20), *in camera*).
637. Walgreens believes it is beneficial for Walgreens to bid on a keyword even if other keywords have a lower cost per order, because, in Mr. Hamilton's view, a company needs to be able to bid on a range of search terms that cover a significant percentage of the consumer ad impressions that are generated through consumer search queries. "[I]f you only bid on the least expensive search terms, you would only be bidding on a small fraction of the available consumer search queries." (Hamilton, Tr. 430-31).

xi. Walmart

638. Based on data provided by Google, Dr. Evans concluded that advertisements for Walmart have appeared in response to searches for 1-800 Contacts brand name terms, as a result of both direct bidding on 1-800 Contacts trademark keywords and being matched to such searches when bidding on other keywords. (CX8006 (Evans Expert Report at 060 ¶ 130)).

639. Based on data provided by Google, between September 2015 and March 2016, Walmart showed approximately 174,000 advertisements each month in response to searches for 1-800 Contacts brand name terms. (CX8006 (Evans Expert Report at 060 ¶ 130)).
640. Walmart considers bidding on the brand name terms of its contact lens retailer competitors as keywords to be “a general best practice” for several reasons, including because adding competitor terms helps to attract new traffic. (CX9033 (Mohan, Dep. at 54)).
641. Walmart has a search advertising campaign focused on bidding on the names of competing contact lens retailers as keywords, including 1-800 Contacts, Vision Direct, and AC Lens. Six percent of Walmart’s contact lens orders currently come from its “Competitors” ad campaign. (CX9033 (Mohan, Dep. at 53-56)).
642. Walmart believes that using 1-800 Contacts keywords is valuable because “they bring us a lot of clicks” and “bring a lot of people who are looking in the market for contact lenses to our website.” (CX9033 (Mohan, Dep. at 60-61)).
643. In May 2016, Walmart significantly lowered its bids in its “Competitors” ad campaign, reducing the average payment per click from around \$4 to \$0.31, because the cost per conversion using the trademark keywords was too high. (CX9033 (Mohan, Dep. at 152-56)).

xii. Web Eye Care

644. Prior to entering into the Settlement Agreement with 1-800 Contacts (F. 348), Web Eye Care bid on 1-800 Contacts’ trademark terms for a “small window of time,” which led to some traffic to Web Eye Care’s website and to conversions. (CX9014 (Batushansky, Dep. at 161-63)).
645. During the time when Web Eye Care was bidding on 1-800 Contacts’ trademark terms, Web Eye Care considered those terms to be “performing successfully.” (CX9014 (Batushansky, Dep. at 162); CX9000 (Batushansky, IHT at 64)).
646. During the time when Web Eye Care was bidding on 1-800 Contacts’ trademark terms, Web Eye Care’s click-through rates and conversion rates were higher on searches for 1-800 Contacts than its usual rates. Peter Batushansky, CEO of Web Eye Care explained: “1-800 Contacts is the biggest company out there [i]n the on-line space. They’re also the most expensive company in the on-line space. . . . We offer the same great products and we feel that our service is on par with theirs. . . . [W]e feel that we can offer . . . a much better value to the customer from a pricing perspective.” (CX9000 (Batushansky, IHT at 65-66)).
647. In the view of Mr. Batushansky, Web Eye Care lost sales as a result of the Settlement Agreement with 1-800 Contacts (F. 348). (CX9014 (Batushansky, Dep. at 46)).

648. Web Eye Care did not increase advertising spending elsewhere in response to ending its advertising on 1-800 Contacts' trademark terms. (CX9014 (Batushansky, Dep. at 167)).
649. Web Eye Care has seen that ads of other contact lens retailers, Vision Direct and Lens.com, are displayed in response to a search request for Web Eye Care. (CX9014 (Batushansky, Dep. at 67)).
650. If there were no legal "cloud" surrounding use of a competitor's trademark terms, Web Eye Care would test bidding on "everybody's" terms, including 1-800 Contacts' trademark terms. (CX9000 (Batushansky, IHT at 110-11) (stating that test would involve "giv[ing] up all the negative keywords first, . . . so that our ads can run, and then [Web Eye Care] would specifically create new [keywords] that are specifically targeting all [Web Eye Care's] competitors, set up a test budget, run the ads, run different variations, different ad copy, see what performs, and whichever ones perform, I would scale up and do as much as I can as long as it performs.")).

d. Expert opinion

651. Based on data provided by Google and analyzed by Dr. Evans, it is common for companies to pay search engines to enable people who search for one brand to see ads for their own brands, as a result of direct keyword bidding or by matched ads (F. 655), and this "suggests that it's an efficient practice." (Evans, Tr. 1475-79; CX8009 (Evans Rebuttal Expert Report at 028-30, 032 ¶¶ 44-45, Table 1 and ¶ 49)).
652. Based on data provided by Google and analyzed by Dr. Evans, significant online competitors of 1-800 Contacts have chosen to pay to place text ads in front of consumers who have searched on terms that include 1-800 Contacts brand name keywords, when not restricted from doing so. (CX8006 (Evans Expert Report at 007 ¶ 10)).
653. During the time period from 2002 through 2016, Google served advertisements for nine of the fourteen contact lens retailers based on those firms directly bidding on 1-800 Contacts' trademark terms before they entered into the Challenged Agreements. This suggests that these nine firms believed such keyword bidding to be worth the cost and that Google determined the advertisements were sufficiently relevant. (CX8006 (Evans Expert Report at 056-57 ¶ 122 and Table 3)).
654. Dr. Evans used the term "Brand Name Keywords" ("BKWs") to refer to keywords that include trademarks, or variants on those trademarks for which the search engine would treat the query as if it corresponded to the trademark. (CX8006 (Evans Expert Report at 030 ¶ 77)).
655. Dr. Evans defined the terms "direct bid ads" as ads that are served by a search engine as a result of a rival advertiser bidding directly on a keyword that is a 1-800 Contacts BKW; and the term "matched ads" as ads that result from the search engine making a decision to serve an ad, in response to a user typing in a search query that includes a 1-800 Contacts BKW, through phrase match (e.g., if the keyword is "contacts") or broad match (e.g., if

the keyword is “contact lens”), even though the rival advertiser did not bid on a keyword that is a 1-800 Contacts BKW. (CX8006 (Evans Expert Report at 051 ¶ 111)).

656. During the time period for which data on matched ads is available (January 2010 through November 2016), Google served matched ads for five of the fourteen firms that entered into formal agreements with 1-800 Contacts regarding keyword bidding. This suggests that Google determined the advertisements were sufficiently relevant. (CX8006 (Evans Expert Report at 058 ¶¶ 123-24)).
657. Based on the comScore dataset of searches by users for the time period July 2013 through July 2016, (the “comScore dataset” (F. 699-701)) analyzed by Complaint Counsel’s expert witness, Dr. Susan Athey, although generic search terms are the most common search terms for contacts, searches for 1-800 Contacts’ trademark terms comprised approximately 17% of the search queries. (CX8007 (Athey Expert Report at 027, 028 ¶¶ 75, 81 and Table 1); RX0733 (Ghose Expert Report at 065 n.278)).
658. The top three generic search terms in the comScore dataset are “contact,” “contact lenses,” and “contacts.” (CX8010 (Athey Rebuttal Expert Report at 033 ¶ 84); *see also* Bethers, Tr. 3654-55).
659. The volume of searches for the top three generic terms in the comScore dataset was collectively similar in size to the volume of searches for 1-800 Contacts terms in the comScore dataset. (Athey, Tr. 2107; CX8010 (Athey Rebuttal Expert Report at 056-57 Exhibit C and D)).
660. Search queries containing 1-800 Contacts brand name terms are “an extremely attractive place to bid” because, based on data analyzed by Dr. Athey, the 1-800 Contacts search term is the largest, single branded search term and it is a good opportunity for a lower-priced firm to make consumers aware of alternatives. (Athey, Tr. 764-65).
661. Based on data analyzed by Dr. Athey, firms that are currently bidding on “1-800 Contacts,” have a higher conversion rate for those terms than for other search terms. This makes sense because any online retailer of contact lenses other than 1-800 Contacts is generally going to have lower prices and be a tougher competitor for the online consumer searching for 1-800 Contacts. (Athey, Tr. 765).

e. AdWords data

i. Memorial Eye

662. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, the three search queries that generated the most clicks and conversions for Memorial Eye (other than search terms that contained a variation of Memorial Eye’s or 1-800 Contacts’ brand names) were “contact lenses,” “contacts,” and “contact lens.” (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).

663. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, Memorial Eye’s average cost per conversion for conversions associated with the search query “1800contacts” (based on broad match for the keyword “contacts”) was \$14.88, which is less than the average cost per conversion for conversions associated with the generic searches “contact lenses” (\$18.98), “contacts” (\$17.04), or “contact lens” (\$20.60) during the same time period. (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).
664. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, Memorial Eye’s average conversion rate in Google AdWords for the search query “1800contacts” (based on broad match for the keyword “contacts”) was 10.11%, which is greater than the average conversion rates for the generic search queries “contact lenses” (8.55%), “contacts” (8.9%), or “contact lens” (7.68%) during the same time period. Memorial Eye’s average conversion rate for “1800contacts” (based on broad match for the keyword “contacts”) during the time period from January 1, 2005 through December 31, 2013 was also higher than Memorial Eye’s overall average conversion rate for all search queries (7.9%) for the same time period. (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).
665. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, Memorial Eye’s click-through rate for the search query “1800contacts” (based on broad match for the keyword “contacts”) was 0.98%, which is greater than the click-through rate for the generic search query “contacts” (0.77%) during the same time period. (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).
666. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, the search query “1800 contacts” generated the second highest number of clicks and the third highest number of conversions for Memorial Eye. (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).
667. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, Memorial Eye’s average cost per conversion for conversions associated with the search query “1800 contacts” (in phrase match) was \$18.36, which is less than the average costs per conversion for conversions associated with the generic searches “contact lenses” (\$18.98) or “contact lens” (\$20.60) during the same time period. (CX1626; CX1625; CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).
668. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, Memorial Eye’s average conversion rate for the search query “1800 contacts” (in phrase match) was 10.74%, which is greater than the average conversion rates for the generic search queries “contact lenses” (8.55%), “contacts” (8.9%), or “contact lens” (7.68%) during the same time period. Memorial Eye’s average conversion rate for “1800 contacts” during the time period from January 1,

2005, through December 31, 2013 was also higher than Memorial Eye’s overall average conversion rate for all search queries (7.9%) for the same time period. (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).

669. Based on data from Memorial Eye’s AdWords account for the time period from January 1, 2005 through December 31, 2013, Memorial Eye’s click-through rate for the search query “1800 contacts” (in phrase match) was 1.39%, which is greater than the click-through rates for the generic search queries “contact lenses” (1.17%) or “contacts” (0.77%) during the same time period. (CX1626; CX1625; *see also* CX8012 (Nguon, Decl. at 001-04 ¶¶ 1-10)).

ii. LensDirect

670. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, the two search queries that generated the second highest number of conversions (other than search terms that contained a variation of LensDirect’s or 1-800 Contacts’ brand names) were “contacts” and “order contacts online.” LensDirect’s click-through rate for the search query “contacts” was 0.75% during the same time period. (Alovis, Tr. 1052-53; CX1641; CX1640; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).
671. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average cost per conversion for conversions associated with the search query “1800contacts” (as part of the LensDirect AdWords advertising campaign titled “Competitors – 1-800-Contacts”) was \$43.13, which is less than its average cost per conversion for conversions associated with the generic queries “contacts” (\$46.06) or “order contacts online” (\$48.62) during the same time period. A cost per conversion of \$43.13 is “in line with what [LensDirect was] spending in 2016” per conversion. (Alovis, Tr. 1010; CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).
672. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average conversion rate for the search query “1800contacts” (as part of the LensDirect AdWords advertising campaign titled “Competitors – 1-800-Contacts”) was 7.88%, which is greater than its average conversion rate for the generic search query “contacts” (5.96%) during the same time period. The average conversion rate for “1800contacts” (as part of the LensDirect AdWords advertising campaign titled “Competitors – 1-800-Contacts”) is also greater than LensDirect’s overall average conversion rate for all search queries (5.89%) for the same time period. (Alovis, Tr. 1004, 1013; CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).
673. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average click-through rate for the search query “1800contacts” (as part of the LensDirect AdWords advertising campaign titled “Competitors – 1-800-Contacts”) was 1.43%, which is higher than its average click-

through rate for the generic search query “contacts” (0.75%) during the same time period. (Alovis, Tr. 1052-53; CX1640; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).

674. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average cost per conversion for conversions associated with the search query “1800contacts” (as part of the LensDirect AdWords advertising campaign titled “Competitors”) was \$39.97, which is less than its average cost per conversion for conversions associated with the generic queries “contacts” (\$46.06) or “order contacts online” (\$48.62) during the same time period. (CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).
675. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average conversion rate for the search query “1800contacts” (as part of the LensDirect AdWords advertising campaign titled “Competitors”) was 5.6%, which is similar to LensDirect’s overall average conversion rate for all search queries (5.89%) for the same time period. (Alovis, Tr. 1004; CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).
676. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average cost per conversion for conversions associated with the search query “1800contacts coupon” in broad match was \$18.73, which is less than its average cost per conversion for conversions associated with the generic queries “contacts” (\$46.06) or “order contacts online” (\$48.62) during the same time period. A cost per conversion of \$18.73 “is a very attractive price for a new customer” and is below LensDirect’s 2017 target customer acquisition cost. (CX1641; CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26); Alovis, Tr. 1009).
677. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average cost per conversion for conversions associated with the search query “1800contacts coupon” in exact match was \$9.92, which is less than its average cost per conversion for conversions associated with the generic queries “contacts” (\$46.06) or “order contacts online” (\$48.62) during the same time period. (CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).
678. Based on data from LensDirect’s AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect’s average conversion rate for the search query “1800contacts coupon” in broad match was 13.2%, which is greater than its average conversion rates for the generic search queries “contacts” (5.96%) or “order contacts online” (11.2%) during the same time period. A conversion rate of 13.2% is “more than double” LensDirect’s average conversion rate for all search terms for the period from January 1, 2010 through December 31, 2016. (Alovis, Tr. 1012; CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).

679. Based on data from LensDirect's AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect's average conversion rate for the search query "1800contacts coupon" in exact match was 13.63%, which is greater than its average conversion rates for the generic search queries "contacts" (5.96%) or "order contacts online" (11.2%) during the same time period. The average conversion rate for the search query "1800contacts coupon" in exact match is also greater than LensDirect's average conversion rate for all search terms (5.89%) for the same time period. (CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)); Alovis, Tr. 1004).
680. Based on data from LensDirect's AdWords account for the time period from January 1, 2010 through December 31, 2016, LensDirect's average click-through rate for the search query "1800contacts coupon" in both broad match (8.32%) and exact match (7.67%) was higher than its average click-through rate for common generic search queries such as "contacts" (0.75%) and "order contacts online" (4.3%). (CX1640; CX1641; *see also* CX8012 (Nguon, Decl. at 001-02, 010 ¶¶ 1-6, 25-26)).

2. Economic Theory as to Anticompetitive Effects of Advertising Restraints

681. The flow of information between buyers and sellers is an essential part of the market system. Buyers have to find out who they can buy from and on what terms. Sellers have to let consumers know how to find them and what they have to offer and on what terms. (CX8006 (Evans Expert Report at 080 ¶ 178)).
682. There is a consensus in economic literature that restrictions on advertising among rivals impair competition and result in harm to consumers. Nearly all the studies reviewed by Dr. Evans find that advertising restrictions result in higher prices. (Evans, Tr. 1422-23; 1651; CX8006 (Evans Expert Report at 081-82 and Appendix E)).
683. Restrictions on advertising are believed to impair competition and harm consumers by interfering with the flow of information from sellers to buyers and raising the costs to consumers of finding the most suitable offering, which, in turn, leads to higher transaction prices. (CX8006 (Evans Expert Report at 080-84)).

3. Restricted Advertising

684. The design of the Settlement Agreements was to prevent each party's advertisements from appearing in response to a search for the other party's trademark terms. (F. 307, 315, 361, 363-368).
685. 1-800 Contacts enforced the Settlement Agreements to prevent competitor advertisements from appearing in response to a search for 1-800 Contacts' trademark terms. (F. 371).
686. In order to assess the extent to which the Challenged Agreements restrict ads that result from either direct bidding on 1-800 Contacts BKWs or that result from the advertiser

opting out of showing ads based on 1-800 Contacts BKWs by using negative keywords, Dr. Evans conducted an analysis of search advertising used by the parties to the Challenged Agreements (the “counterparties”), using Google AdWords data provided by Google (the “Google data”) (F. 687-688). (CX8006 (Evans Expert Report at 050-53)).

687. The Google data includes a dataset, referred to as the 1-800 Contacts BKW dataset, consisting of data on each counterparty’s ad impressions and related metrics generated by the most common 1-800 Contacts BKWs, for the time period January 1, 2002 to September 30, 2016. (CX8006 (Evans Expert Report at 054)).
688. The Google data includes a dataset, referred to as the Google Matched Ad dataset, consisting of data on ad impressions and related metrics, by advertiser account, keyword, and query, for the time period January 1, 2010 to November 2016. (CX8006 (Evans Expert Report at 054-55)).
689. Based on an analysis of the Google data, the counterparties who had been bidding directly on 1-800 Contacts BKWs before the agreements ceased bidding almost entirely following the agreements. (Evans, Tr. 1413-15 (“the settlement agreements were effective”); CX8006 (Evans Expert Report at 061-62)).
690. Based on an analysis of Google data, matched ads (F. 655) for counterparties to the agreements declined substantially following the agreements. (Evans, Tr. 1410-11; CX8006 (Evans Expert Report at 056-57 Table 3)).

4. Price Information

691. 1-800 Contacts’ prices are, on average, higher than the prices of its online competitors. (F. 692-693).
692. 1-800 Contacts’ prices are approximately [REDACTED] % higher than other online retailers’ prices. (CX8007 (Athey Expert Report at 013-14, 045-51 ¶¶ 31-32, Exhibit D-1 to D-7), *in camera* (calculating that 1-800 Contacts’ prices were [REDACTED] % higher than online competitors’ prices, on average, for its top ten selling products between 2010 and 2016). *E.g.*, CX0295 at 063, *in camera* (showing in January 2014, 1-800 Contacts’ prices were higher than other online contact lens retailers by [REDACTED] % per box, [REDACTED] % for a six month supply, and [REDACTED] % for a twelve month supply); RX1228 at 036, *in camera* (2015 analysis showing that 1-800 Contacts’ prices were higher than those of other online retailers: the net prices of Coastal Contacts, LensDirect, AC Lens, Vision Direct, and Lens.com were [REDACTED] % lower than 1-800 Contacts’ net prices); CX0547 at 032, *in camera* (1-800 document showing “[o]ver the last five years, the gap between our price and our web competitors has grown further apart”; prices from 1-800 Contacts’ three major online rivals were [REDACTED] % lower than 1-800 Contacts’ prices in 2006 and [REDACTED] % lower in 1-800 Contacts’ prices in 2011)).
693. Online retailers generally offer lower prices than 1-800 Contacts. (Bethers, Tr. 3544-45; Murphy, Tr. 4119 (“There was a brand premium in this case; that is, typically we saw

1-800's prices higher than many of the pure-play online sellers."); CX0439 at 036 ("1-800 [Contacts] is the most expensive online retailer . . ."); Aloviz, Tr. 989 ("sometimes [1-800 Contacts is] selling something 20 percent over what [LensDirect is] selling, sometimes even more. It's usually a wow factor when people look at our price point versus 1-800 Contacts"); Holbrook, Tr. 1901 ("[Memorial Eye's] prices were typically quite a bit less" than 1-800 Contacts' prices); CX8003 (Mitha, Decl. at 001 ¶ 4) ("In general, 1-800 Contacts' prices are higher than Lens Discounters' by a significant amount. In the past, we have found that 1-800 Contacts' prices were almost double Lens Discounters' prices for some products.")).

694. Many consumers are not aware of the price discrepancy between 1-800 Contacts and its online competitors. [REDACTED], *in camera*; CX8007 (Athey Expert Report at 021 ¶ 56) ("Consumers are not aware in general of the price distribution among online contact lens sellers.")).
695. As part of the due diligence regarding its potential acquisition of 1-800 Contacts in 2012, Berkshire Partners retained a third party, Stax, Inc. ("Stax"), a global consulting firm, to perform some research, including a consumer survey, to inform Berkshire's decisions about the acquisition of 1-800 Contacts. (CX9039 (Clarkson, Dep. at 34-35)).
696. Stax concluded, based on its consumer survey results, that 1-800 Contacts' customers were less likely than customers of other online retailers to have comparison shopped before initially choosing their online retailer. (RX0041 at 0019 (reporting that 34.7% of 1-800 Contacts' customers comparison shopped across multiple websites and found 1-800 to be the most appealing, compared to 82.9% of Vision Direct's customers, and 63.1% of other online retailers' customers, who comparison shopped and found their retailer to be the most appealing; and reporting that "1-800 Customers Are Less Likely to Have Comparison Shopped Before Choosing 1-800 vs. Other Online Retailers"))).
697. In the Stax consumer survey referred to in F. 695, 34.7% of respondents, when asked why they decided to initially purchase from 1-800 Contacts, responded: "It Was the Only Online Contacts Site of Which I Was Aware." (RX0041 at 0019; CX9039 (Clarkson, Dep. at 41-42)).
698. In conducting its due diligence regarding its potential acquisition of 1-800 Contacts in 2012, Berkshire Partners' investment analysis team concluded that "a sizeable segment" of consumers were uninformed about lower-priced options for purchasing contact lenses online. (CX1109 at 011 ("Investment Concern Summary . . . The team believes that 1-800 likely benefits from a sizable segment of uninformed buyers who are simply unaware of the other (and growing) low-priced choices on the internet.")).
699. Dr. Athey constructed a dataset using data from comScore Web Behavior Panel (the "comScore dataset"). (CX8007 (Athey Expert Report at 026-27 ¶ 74)).

700. ComScore is a company that collects data from a panel of internet users. Specifically, comScore installs software on consumers' devices to track their behavior, including collecting information on the screens that users see when they perform searches. (Athey, Tr. 852-53; *see also* Athey, Tr. 767 (describing comScore as “a leading provider of data about . . . consumer behavior”)).
701. The data that Dr. Athey received from comScore consisted of detailed online search information from 377,002 internet users in the United States from July 11, 2013 through August 14, 2016, covering all the search queries those users performed on all major search engines and reported at a query-by-query level. The comScore data included the search queries that the users typed during the applicable time period, the paid search results that were displayed to the users (including the number of ads displayed, the text of the ads, and information about the ad position), and which paid or natural search results the users clicked on, if any. (CX8007 (Athey Expert Report at 026-29 ¶¶ 74-84); Athey Tr. 767-69, 2107).
702. Dr. Athey divided the search data into several categories of search queries: “branded” queries, which included the name of an online contact lens retailer (including 1-800 Contacts); “manufacturer” queries, which included the name of a contact lens manufacturer or brand; “generic” queries, which related to contact lenses but were not classified as branded or manufacturer queries; and “unrelated” queries, which did not relate to contact lenses and were removed from the dataset. (CX8007 (Athey Expert Report at 027 ¶ 77)).
703. Based on the comScore dataset, 55% of ads displayed in response to generic searches, 36% of ads displayed in response to searches for contact lens retailers' brand names, and 54% of ads displayed in response to searches for contact lens manufacturers, contained price information. (CX8010 (Athey Rebuttal Expert Report at 058)).
704. 1-800 Contacts recognized that consumers act on price information in advertisements. (CX1086 at 002-03 (August 7, 2012 email from Amber Powell to Laura Schmidt and Rick Galan stating “I think it’s very likely” that “all the prices that are much lower than ours” in the paid search channel were responsible for “paid search experiencing a drop in NI [new internet] CR [conversion rate] that is disproportionate to other channels” and noting that, by contrast, “[t]yped/bookmarked customers aren’t exposed to other websites’ pricing before coming to our site which likely makes them less sensitive to pricing.”)).
705. A 2015 report ██████████
██████████ concluded that: “[O]nline shoppers are primarily focused on price.”
██████████, *in camera*).
706. A 2015 report ██████████
██████████ concluded that: “‘Low prices’ is the top purchasing criterion, but is more
important to online shoppers” than to “B&M” (brick and mortar) shoppers. ██████████
██████████, *in camera*).

707. A 2015 report [REDACTED] concluded that: “A significantly greater share of online shoppers compare prices than B&M shoppers.” [REDACTED], *in camera*).
708. A 2015 report [REDACTED] concluded that customers who refilled a contact lens prescription somewhere different than where they made the initial purchase typically did so to get a better price. ([REDACTED], *in camera*) (showing more than 60% of contact lens consumers surveyed identified “Better prices by refilling elsewhere” as the rationale for not purchasing from where they made their initial purchase).
709. Visitors to 1-800 Contacts’ website are often interested in price information. (CX0852 at 103 (September 29, 2010 1-800 Contacts Board Meeting presentation, reporting results of an online survey showing that while most visitors to 1-800 Contacts’ website are “considering purchase,” about a quarter as many are “checking prices [with] no intent to buy”)).

5. Relationship Between Restricting Advertising in Response to Searches for 1-800 Contacts’ Trademark Terms and Sales

710. Reducing the appearance of competitor ads in response to a search for 1-800 Contacts’ trademark terms tends to increase sales for 1-800 Contacts, while an increase in competitor ads in response to a search for 1-800 Contacts’ trademark terms tends to decrease sales for 1-800 Contacts. (F. 712-731).
711. 1-800 Contacts recognized a clear relationship between its sales attributable to trademark search and the appearance of competitor advertising on those searches, with increased competitor advertising associated with decreased sales for 1-800 Contacts. (F. 712-731).
712. 1-800 Contacts believed that fewer competitors appearing on search engine results pages in response to searches for 1-800 Contacts’ trademarks “always helps improve performance” of 1-800 Contacts’ paid search. (CX0855 at 001).
713. In his instructions for preparing weekly paid search reports, Mr. Craven, 1-800 Contacts’ paid search manager, identified “more competitors showing up on searches for our best TM words” as the first factor to consider as an explanation for paid search performance. (CX0732 at 004; Craven, Tr. 515).
714. In the week ending July 28, 2007, 1-800 Contacts received fewer orders than the previous week on its most popular trademark keyword, 1800contacts, which it attributed to “probably . . . [losing] some traffic to Lens.com, LensWorld, Vision Direct and a few other advertisers” who were “consistently showing up on” the term 1800contacts. (CX0606 at 002 (“Search Dashboard 073007.xls”)).

715. An August 7, 2007 analysis by Mr. Craven estimated that 1-800 Contacts may have lost around \$426,000 in revenue to Lens.com, year to date, as a result of Lens.com ads appearing in response to searches for 1-800 Contacts' trademarks. (CX0613 at 001).
716. A September 19, 2007 email from Mr. Coon to the lead partner of the private equity firm that then owned 1-800 Contacts notes that Lens.com had grown to 5,000 orders per week from 1,000 orders per week three years earlier, which Mr. Coon suggested was connected to Lens.com's ability to display search advertising in response to searches for 1-800 Contacts' trademarks. (Coon, Tr. 2823-27; CX0300).
717. During the week ending September 22, 2007, 1-800 Contacts noted a 6% week over week drop in trademark paid search orders, relating this in part to competition from Vision Direct, which had been "advertising in the 2nd position on many of [1-800 Contacts'] branded terms in Google." (CX0616 at 001).
718. In a 1-800 Contacts internal report dated April 15, 2008, Mr. Craven of 1-800 Contacts reported that for the week ending April 11, 2008, 1-800 Contacts experienced a 9% week over week decline in new customer orders through Microsoft's search engine. Noting that this "could be a sign of increased affiliate and/or competitive trademark activity," Mr. Craven reported "[w]e'll step up our monitoring in this engine." (CX0931 at 001).
719. During the week of June 20, 2008, 1-800 Contacts attributed an increase in trademark orders as being helped in part by "LensWorld finally removing all their ads from all of [1-800 Contacts'] trademark keywords." (CX0558).
720. The Meeting Materials for the October 30, 2008 1-800 Contacts Board of Directors Meeting stated: "The fastest growing online seller, Lens.com is using 1-800 trademark triggered ads successfully to gain market share" and "Lens.com uses trademark advertising on 1-800 CONTACTS as their primary marketing tool for growth. Since 2004, their sales increased 475%, making them the third largest online seller." (CX0621 at 118, 121, (agenda and attached documents for consideration at October 30, 2008 1-800 Contacts Board of Directors Meeting)).
721. The Meeting Materials for the October 30, 2008 1-800 Contacts Board of Directors Meeting contrasted Lens.com's growth (F. 720) with Coastal Contacts: "After achieving a market share of over 12% in 2005, Coastal Contacts ceased trademark advertising as a result of a settlement with 1-800. At year-end 2007, their market share had fallen in half to just 6%." (CX0621 at 122 (agenda and attached documents for consideration at October 30, 2008 1-800 Contacts Board of Directors Meeting)).
722. The Meeting Materials for the October 30, 2008 1-800 Contacts Board of Directors Meeting reported Lens.com's "ability to divert customers using our trademarks increases as we increase 1-800 brand awareness, and their infringement is directly correlated with our [television] advertising spending." (CX0621 at 123; Coon, Tr. 2763).

723. In a 1-800 Contacts internal report dated March 10, 2009, Mr. Craven of 1-800 Contacts reported that for the week of March 6, 2009, “[t]here are substantially less competitors showing up on our list of monitored TM words . . . in Google which is likely helping improve our TM [conversion rate] and TM order volume.” (CX0914 at 001; Craven, Tr. 528-30).
724. In internal email correspondence dated December 15, 2009, referring to search activity on 1-800 Contacts’ trademark terms plus “coupons” terms, Mr. Craven of 1-800 Contacts was told: “I don’t know if we can kick competitors off of these terms, but it concerns me that customers may take the opportunity to order with our competitors, especially when their ad copy is so ‘savings’ driven.” (CX0279 at 002).
725. In a 1-800 Contacts internal report dated January 11, 2010, Mr. Craven reported that for the week ending January 8, 2010, 1-800 Contacts achieved “an all-time record high” for orders through its trademark keywords, due in part to the fact that fewer advertisers were appearing on searches for 1-800 Contacts’ trademark terms that week, “which always helps improve performance.” (CX0855 at 001).
726. In a 1-800 Contacts internal report dated March 15, 2010, Mr. Craven reported that for the week ending March 12, 2010, the click-through rate on trademark keywords was less strong than “the five weeks prior, which is likely a result of additional competitor’s ads (Vision Direct, Standard Optical, ShipMyContacts) showing up on our best terms such as *1800contacts* and *1800 contacts*.” (CX0510 at 001 (italics in original)).
727. In a 1-800 Contacts internal report dated June 14, 2010, Mr. Craven reported that for the week ending June 11, 2010, 1-800 Contacts’ trademark paid search orders through Google, and click-through rates for trademark ads, “were slightly softer than [the preceding week] because of increased competition on [1-800 Contacts’] best branded terms. Google searches for our most profitable term, 1800-contacts, currently yield ads for six other advertisers.” (CX0906 at 001).
728. In a 1-800 Contacts internal report dated June 21, 2010, Mr. Craven reported that for the week ending June 18, 2010, 1-800 Contacts’ orders through its trademark paid search ads improved significantly, which Mr. Craven concluded was due to “the removal of a few competitors who had been showing up on [1-800 Contacts’] best TM terms.” Among those competitors, “Walgreens was the most notable.” (CX0564 at 001).
729. In a 1-800 Contacts internal report dated June 28, 2010, Mr. Craven reported that for the week ending June 25, 2010, 1-800 Contacts experienced “another very solid week” for trademark paid search orders, and “the highest TM CTRs (27.2%)” that 1-800 Contacts had ever seen, which Mr. Craven attributed to, among other factors, “[t]he removal of ShipMyContacts from [1-800 Contacts’] trademarks [This] contributed to [1-800 Contacts’] excellent TM CTR.” (CX0927 at 001).
730. In late August 2010, orders from new customers coming through search ads on searches for 1-800 Contacts’ trademarks “jumped to the highest level of the year,” due in part to

the appearance of “fewer competitors on [1-800 Contacts’] best TM words such as *1800contacts* *1 800 contacts* and *1800 contacts*.” (CX0836 at 001 (emphasis in original) (further stating that the removal of ads by Standard Optical “from the paid listings . . . was likely a big help” to 1-800 Contacts’ paid search performance in late August 2010). *See also* CX0836 at 001; Craven, Tr. 534-35 (“I was trying to . . . connect the dots to provide an explanation behind not having [Standard Optical’s] ad there could have potentially helped our – could have potentially helped our metrics for those keywords. . . . We had our own search engine data, we have the trademark monitoring reports, so that was offering up one explanation behind why orders potentially look better.”).

731. In a 1-800 Contacts internal report dated August 8, 2011, Mr. Craven reported that for the week ending August 5, 2011, 1-800 Contacts’ trademark paid search orders improved, as it “saw fewer instances of ShipMyContacts on [its] TM searches which may have helped . . . [the] CTR” for trademark paid search. (CX0918 at 001).
732. If 1-800 Contacts were not shielded from competitive advertising, and other online retailers could have purchased both matched ads and direct bid ads (F. 655) from the search engines, the competitive dynamics would have been different. (CX8009 (Evans Rebuttal Expert Report at 084-85 ¶ 156)).

6. Expert Opinion

733. Contact lenses are a commodity product. F. 24-27. “A commoditized market is characterized by standardized and similar products or services, as well as low switching costs across firms.” (CX8007 (Athey Expert Report at 011); Athey, Tr. 746-48).
734. “[P]rice has more significance as a purchasing decision factor in commoditized markets than in non-commoditized markets as there are few other sources of product differentiation.” (CX8007 (Athey Expert Report at 011)).
735. The advertising restrictions contained in the Settlement Agreements significantly impair competition for selling online contact lenses by prohibiting a type of advertising that is especially important for price competition among online sellers of contact lenses and for potential new entrants. (CX8006 (Evans Expert Report at 078); *see also* F. 497-498; F. 565).
736. The fact that firms advertise price shows that sellers believe and have evidence that price information is important to consumers. (Athey, Tr. 761-62; CX8010 (Athey Rebuttal Expert Report at 026, 058 ¶ 63 and Exhibit E)).
737. Search advertising targeted towards consumers who have conducted queries on 1-800 Contacts BKWs is a cost-effective way of enabling competitors of 1-800 Contacts to provide information to a significant number of 1-800 Contacts’ potential customers. Other advertising, such as advertising on generic keywords, social media ads, or other non-search advertising, would be inefficient since those would be unlikely to reach

- potential customers of 1-800 Contacts at the point of purchase. (CX8006 (Evans Expert Report at 087)).
738. When competitors are prohibited from bidding on 1-800 Contacts BKWs, the percentage of 1-800 Contacts' orders coming from trademark paid search is not significantly subject to competition. (CX8006 (Evans Expert Report at 088-89 ¶ 193 and Figure 1)).
739. The Challenged Agreements suppressed price transparency and impaired price competition among online contact lens sellers, and ultimately harmed consumers by restricting the flow of information between online contact lens retailers and consumers. (CX8009 (Evans Rebuttal Expert Report at 084-85 ¶¶ 156-59)).
740. Absent the restrictions on advertising, there would be more purchases from lower-priced competitors and more price-matching by 1-800 Contacts. (Athey, Tr. 711, 797-98 (“[D]irect facts and market data support that there is a price premium and that that price premium is not fully accounted for by service differentials and that the product is identical. In those circumstances, economic theory is clear that an increase in information makes the market more competitive. It’s removing a friction. The exact way in which that plays out can depend on additional industry facts. We saw that information from 1-800 Contacts and investors of 1-800 Contacts agree that when – if consumers become more informed, it will be difficult to sustain a price premium and that they would thus face a choice, either lose market share in the online channel, and particularly in the search channel, or lower their price. What they would choose, I didn’t reach a conclusion on that. But more likely than not, prices – prices would fall. It’s also possible that they could keep their prices high and – but consumers would use more price match, which would lead to a reduction in the effective price by 1-800 even if the list price stayed high.”)).
741. The increased availability to consumers of price comparison and the rate of consumer switching from 1-800 Contacts to competitors would put downward pressure on prices. (CX8007 (Athey Expert Report at 036 ¶ 108)).
742. 1-800 Contacts' past practice of responding to competitive pressure by offering more generous discounts through its price matching program (F. 438) is consistent with the extensive economic literature which predicts that informative advertising leads to greater price competition. Competition for these additional sales would lead to greater competition generally, which benefits users who navigate directly to 1-800 Contacts' website. (Evans, Tr. 1615-16, 1719-20 (“[T]o the extent that there’s an intensification of competition for consumers, then that leads 1-800 Contacts to lower its price and for more price competition to take place in the business. And the result of that is that even if you have a consumer who is never using search but is going directly to the website, once you had that intensification of competition, they’re then an indirect beneficiary of the opening of the competitive advertising.”)).

7. Economic Modeling Facts

a. Dr. Athey's model

743. Dr. Athey constructed a model of a “counterfactual” world to assess what would happen in the absence of the Challenged Agreements. Dr. Athey first constructed counterfactual ad layouts, based on her prediction of what ads consumers would likely see in response to 1-800 Contacts brand queries, absent the Challenged Agreements. Second, Dr. Athey constructed a model of consumer click behavior which she applied to predict how many clicks the ads in each of the counterfactual ad layouts would receive. (Athey, Tr. 766-77, 774, 780-81; CX8007 (Athey Expert Report at 029 ¶ 85); CX8010 (Athey Rebuttal Expert Report at 032 ¶ 82)).
744. Dr. Athey's counterfactual ad layouts consisted of ad layouts observed in the comScore data (F. 699-701) as having been displayed in response to searches for generic terms related to contact lenses. Dr. Athey used searches for generic terms to estimate the likely counterfactual ad layouts because bidding on generic keywords is not restricted by the Challenged Agreements and because, based on the comScore data, the volume of generic searches (F. 658) is comparable to the volume of 1-800 Contacts brand searches. (Athey, Tr. 769-70; CX8007 (Athey Expert Report at 030 ¶ 90); CX8010 (Athey Rebuttal Expert Report at 032 ¶ 82)).
745. Dr. Athey modified the generic search ad layouts for the counterfactual world referred to in F. 744 by (1) discarding ad layouts that did not include an advertisement for 1-800 Contacts; and (2) moving the 1-800 Contacts advertisement to the top ad position in each of the remaining layouts. (Athey, Tr. 769-71; CX8007 (Athey Expert Report at 030-31 ¶ 91)).
746. Dr. Athey's model of consumer click behavior used a methodology referred to as “multinomial logistic regression” (“MNL”). (CX8007 (Athey Expert Report at 029-31 ¶¶ 85-88, 91)).
747. Dr. Athey's model first assessed the click-through statistics observed in the comScore data for searches for 1-800 Contacts' and other online contact lens retailers' brand name terms. Dr. Athey then estimated consumer click behavior by taking into account (i) the consumer appeal of the advertised brand, (ii) the position of the ad on the search results page, (iii) whether the ad was served by the firm searched for by the consumer, (iv) whether the ad is for 1-800 Contacts, and (v) the propensity of the consumer to click on any ad. (Athey, Tr. 775-80; CX8007 (Athey Expert Report at 030 ¶ 88)).
748. For her model, Dr. Athey applied the estimate of consumer click behavior referred to in F. 747 to the counterfactual ad layouts that she constructed (F. 744). (Athey, Tr. 780-82; CX8007 (Athey Expert Report at 030-31 ¶ 91)).
749. Dr. Athey's model predicted that, in the absence of the Challenged Agreements, the number of competitor ads appearing on searches for 1-800 Contacts trademarks would

increase, from 0.54 to 1.85 per search. (Athey, Tr. 783-84; CX8007 (Athey Expert Report at 032 ¶ 92 and Table 2); CX8010 (Athey Rebuttal Expert Report at 072)).

750. Dr. Athey's model predicted that consumer clicks on the 1-800 Contacts ads would decline, by 2 clicks per hundred searches, and that consumer clicks on ads for competitors of 1-800 Contacts would increase, by 3.5 clicks per hundred searches. (CX8007 (Athey Expert Report at 033 ¶ 94 and Table 3); Athey, Tr. 784-85).
751. Dr. Athey's model predicts clicks per searches and makes no predictions as to sales per searches (conversions). Athey, Tr. 799-800.

b. Dr. Evans' model

752. Dr. Evans modeled the extent of reduced advertising caused by the Challenged Agreements by extrapolating from matched ads (F. 655) generated for Memorial Eye during the time period 2010 through 2011. (Evans, Tr. 1601-08; CX8006 (Evans Expert Report at 090-93)).
753. Dr. Evans' model assumed that Google would display up to five ads in response to a query for a 1-800 Contacts brand name term; that 1-800 Contacts would obtain first ad position; that there would be a click-through rate for an ad in the second position of 1.8%, based on data showing Memorial Eye's click-through rate in the second position of 1.84%, and that click-through rates for the third through fifth positions would be 1.5% for position 3, 1.1% for position 4, and 0.7% for position 5. (CX8006 (Evans Expert Report at 100-01 ¶¶ 216, 218)).
754. Based on the Memorial Eye data (F. 618), and additional assumptions regarding ad position, click-through rates, and level of advertising activity for other competitors, Dr. Evans predicted the number of additional advertisements that would be displayed by the competing retailers that are currently restricted under the Challenged Agreements, if they were not bound by the Challenged Agreements; the number of clicks these ads would receive; and the increased clicks and sales these competing retailers would receive. (Evans, Tr. 1618-20, 1624-25; CX8006 (Evans Expert Report at 098-103); CX8009 (Evans Rebuttal Expert Report at 083-85 ¶¶ 152-59)).
755. Dr. Evans' model estimates that, absent the Challenged Agreements, between January 2010 and June 2015, 114 million additional ads for competitors would have been displayed in response to queries containing 1-800 Contacts brand terms. (Evans, Tr. 1381, 1619; CX8009 (Evans Rebuttal Expert Report at 067 ¶ 117 and n.158)).
756. Dr. Evans' model estimates that in the first half of 2015 alone, based on assumptions of increased advertising activity by competitors to obtain repeat business, increased clicks for competitors, and decreased clicks for 1-800 Contacts, clicks for competitor ads would increase by 145,000 clicks, and sales for competitors would increase by 12.3%. (CX8006 (Evans Expert Report at 101-03 and Table 6); CX8009 (Evans Rebuttal Expert Report at 084 ¶ 155); Evans, Tr. 1622).

L. Asserted Procompetitive Justifications

1. Dr. Van Liere's Survey

757. Respondent's expert witness, Dr. Kent Van Liere, conducted a survey for this case intended to measure the degree to which sponsored links that appear when consumers conduct an internet search for "1-800 Contacts" are likely to confuse consumers into believing that those links will take them to a 1-800 Contacts website or a website affiliated with 1-800 Contacts ("Dr. Van Liere's survey"). (RX0735 (Van Liere Expert Report at 0003); Van Liere, Tr. 2977).
758. Dr. Van Liere's survey defined the relevant population as adult consumers 18 years or older who reside in the United States "who either a) have purchased contact lenses online within the past 12 months; or b) would consider searching on the internet to purchase contact lenses in the next 12 months." (RX0735 (Van Liere Expert Report at 0009)).
759. Dr. Van Liere used a national online survey firm for Dr. Van Liere's survey, Critical Mix, which Dr. Van Liere has used before and described as well known. Critical Mix has demographic, occupational, and other information regarding the persons who agree to participate on its panels. Critical Mix provided Dr. Van Liere with an online panel of 689 consumers who met the qualifying criteria for the survey ("survey respondents"). (RX0735 (Van Liere Expert Report at 0006, 0009); Van Liere, Tr. 2980-81, 2986).
760. Of the 689 survey respondents in Dr. Van Liere's survey, half were assigned to perform a simulated internet search for "1-800 Contacts" as a keyword using the Yahoo! search engine ("Yahoo! group") and half were assigned to perform a simulated internet search for "1-800 Contacts" as a keyword using the Google search engine ("Google group"). (RX0735 (Van Liere Expert Report at 0006)).
761. Dr. Van Liere undermined the reliability of the results of Dr. Van Liere's survey by failing to assign survey respondents to use a search engine that they had actually used or would use in the future. (Jacoby, Tr. 2243-47; CX8011 (Jacoby Rebuttal Expert Report at 013-14 ¶¶ 25-26)).
762. There was a programming error with Dr. Van Liere's survey that resulted in assigning survey respondents to the Yahoo! group, when such respondents had never used the Yahoo! search engine. Approximately 10 percent (32 of 342 individuals) of the survey respondents who were assigned to the Yahoo! group of Dr. Van Liere's survey were subject to this programming error. (Van Liere, Tr. 3126-27).
763. Dr. Van Liere attributed the percentage of searches performed on the top three search engines to be: Google (65%); Bing (25%); and Yahoo! (14%). (Van Liere, Tr. 3106; RX0735 (Van Liere Expert Report at 024 ¶ 45)).

764. Although Dr. Van Liere acknowledged that weighting is a commonly accepted statistical technique to adjust for overrepresented or underrepresented samples in a survey, Dr. Van Liere did not do any weighting to account for the percentages of searches conducted on Google and on Yahoo! in Dr. Van Liere's survey, in which 50% of the survey respondents were assigned to Google and 50% of the survey respondents were assigned to Yahoo!. (Van Liere, Tr. 3114-16).
765. If Dr. Van Liere had weighted the results from his survey questions (F. 763-764) to account for the percentages of searches conducted on Google and on Yahoo!, "the net confusion measured . . . across all of the study would reduce down to some degree." (Van Liere, Tr. 3120-21).
766. Survey respondents in both the Google group and the Yahoo! group of Dr. Van Liere's survey were randomly assigned to view either a test or a control stimulus. In the test condition, survey respondents were told to search for "1-800 Contacts" and then were shown either a Google or Yahoo! search engine results page ("SERP") that included sponsored ads with links to contact lens retailers other than 1-800 Contacts as well as some links to organic results (the "test SERP"). In the control condition, survey respondents were told to search for "1-800 Contacts" and then were shown a Google or Yahoo! SERP identical to the test SERP, with the same organic links, but without any sponsored links (the "control SERP"). (RX0735 (Van Liere Expert Report at 0006, 0013-16); Van Liere, Tr. 3010; RX0730 (Van Liere Expert Report Exhibit C at 0010) (Google test SERP)).
767. Dr. Van Liere did not include a sponsored link for 1-800 Contacts on the test SERPs in Dr. Van Liere's survey. (RX0730 (Van Liere Expert Report Exhibit C at 0009); Van Liere Tr. 3037).
768. Dr. Van Liere was instructed not to include ads for 1-800 Contacts on the test SERPs in Dr. Van Liere's survey, after discussion with counsel. (Van Liere, Tr. 3214 ("After discussion with counsel of my prior work and my understanding, ultimately the way we agreed to do it and therefore the way I was instructed to do it was to leave it off.")).
769. Survey respondents in the test condition in Dr. Van Liere's survey were shown the test SERPs and asked to "point and click on the link or links, if any, that you think will take you to the website of the company that you searched for. Please select all that you think apply." For any link selected, survey respondents were asked, "What makes you say that?" If no links were selected, survey respondents were shown the test SERP a second time and asked to "click on the link or links, if any, that you think will take you to the website of the company that is affiliated with the company that you searched for." As to any links selected, the survey respondent was asked, "What makes you say that?" Survey respondents in the test condition were counted as confused as to source or affiliation if they identified any sponsored links, such as www.visiondirect.com or www.coastal.com, in response to the questions. (RX0735 (Van Liere Expert Report at 0012-13, 0017)).

770. Survey respondents in the control condition in Dr. Van Liere’s survey were shown the control SERPs and asked to “point and click on the link or links, if any, that you think will take you to the website of the company that you searched for” and “click on the link or links, if any, that you think will take you to the website of the company that is affiliated with the company you searched for.” Survey respondents in the control condition were counted as confused as to source or affiliation if they identified specified control links in organic search results, such as New York Times articles, or Wikipedia, in response to the survey questions. (RX0735 (Van Liere Expert Report at 0012-13, 0017-18)).
771. For a consumer confusion survey to be reliable, it is important that the test and control stimuli reasonably replicate what consumers would encounter in the marketplace. (Van Liere, Tr. 3004-05; Jacoby, Tr. 2263-64).
772. A consumer entering “1-800 Contacts” as a Google or a Yahoo! search query would at times see a SERP that has some sponsored advertisements, including a sponsored advertisement for 1-800 Contacts. (CX8008 (Jacoby Expert Report at 007-08); CX8011 (Jacoby Rebuttal Expert Report at 057, 059) (screen shots of actual Google and Yahoo! SERPs that appeared on March 7, 2017 in response to the search query “1-800 Contacts”); Van Liere, Tr. 3010 (acknowledging that when he entered searches for 1-800 Contacts, the 1-800 Contacts sponsored links were displayed sometimes). *See also* Ghose, Tr. 4033 (testifying that as a general proposition, a trademark owner’s ad is almost always at the top of a SERP)).
773. By removing links to 1-800 Contacts from his test stimuli and all sponsored links from his control stimuli (F. 766 and F. 767), Dr. Van Liere’s survey did not reasonably replicate what consumers would encounter in the marketplace. (Jacoby, Tr. 2230-31; CX8011 (Jacoby Rebuttal Expert Report at 0010-11 ¶¶ 20-21)).
774. Dr. Van Liere’s survey did not provide an “I don’t know” or an “I don’t have an opinion” option for survey respondents. (Van Liere, Tr. 3179-80; RX0730 (Van Liere Expert Report Exhibit C at 0018)).
775. The removal of links to 1-800 Contacts from Dr. Van Liere’s survey “stacked the deck” to find consumer confusion. As Dr. Jacoby explained, Dr. Van Liere’s survey:
- . . . is essentially equivalent to a multiple-choice question. What you’re doing is you’re saying which of the following is the answer to my question. If you take out the right answer and you only leave in wrong answers, and you ask people which of the following is the answer to my question, and all they have left is not the right answer but the wrong answer, many are going to give you the wrong answer.
- If I ask you in which year did Columbus discover America, 1418, 1412, 1467 or 1593, no or no opinion, . . . you’re going to get people a lot saying no

opinion, but you're going to get a lot of people saying, oh, one of these other wrong answers because they wouldn't ask me this question if there wasn't a right answer in here. And that's equivalent to what he did.

(Jacoby, Tr. 2232-34).

776. Survey respondents who viewed the test SERPs in Dr. Van Liere's survey were presented with more links than participants who viewed the control SERP (six more for those assigned to the Google group and eight more for those assigned to the Yahoo! group). (CX8011 (Jacoby Rebuttal Expert Report at 006-07, 009-10, 016 ¶¶ 9, 16-19, 30); Van Liere, Tr. at 3225-26).
777. Having a test group that contained between six and eight more links than the control group necessarily increases the opportunity for error in the test group. As Dr. Jacoby explained:

It's analogous to a basketball player going up to the line and shooting baskets, and if he shoots 20 baskets, you count the misses, and then he goes and shoots ten minutes later 14 baskets and you count the misses, and you're comparing these two. That's ridiculous. You've got to compare 20 to 20. You can't say, oh, he made fewer misses when he was only shooting 14 baskets. Yes . . . he was making fewer because he only shot 14 baskets. I mean, this is so fundamental.

(Jacoby, Tr. 2225-26; CX8011 (Jacoby Rebuttal Expert Report at 019-21 ¶ 33b)).

778. Dr. Van Liere's survey results were inflated because Dr. Van Liere failed to remove nonresponsive "verbatim" responses provided by survey participants, a standard practice in consumer surveys that show nontrivial levels of confusion. (Jacoby, Tr. 2234-38; CX8011 (Jacoby Rebuttal Expert Report at 019-20 ¶ 33a)).

2. Dr. Goodstein's Opinion

779. Dr. Goodstein based his opinion that "consumer confusion as to the source, affiliation, or sponsorship is reasonably expected from sponsored ads by other contact lens retailers that appear in response to an Internet search for '1-800 Contacts'" (RX0736 (Goodstein Expert Report at 004) on numerous subsidiary opinions and assertions, including:
- (a) many consumers do not recognize that sponsored ads are actually paid advertisements, and therefore confuse the sponsored ads for unbiased, impartial organic links (Goodstein, Tr. 2404-14; RX0736 (Goodstein Expert Report at 023-28));
 - (b) various changes that search engines made to SERPs between 2002 and 2013 have made it more difficult for internet users to distinguish paid ads from organic search results, including by eliminating color distinctions and moving more ads to the top of the page (RX0736

(Goodstein Expert Report at 026-28); Goodstein, Tr. 2413-14; *see, e.g.*, RX0597 at 0001; RX1697 at 0020);

- (c) when a search is “navigational” (which Dr. Goodstein defined as a search where the user’s immediate intent is to reach a particular website), consumers are more likely to rely on the first link and spend less time viewing the SERP before clicking a link (RX0736 (Goodstein Expert Report at 029-31); Goodstein, Tr. 2415-17);
- (d) consumer surveys conducted in 2008 and 2009, in connection with American Airlines’ trademark litigation with Google and Yahoo! (“American Airline surveys”), which, according to Dr. Goodstein, found that a significant number of users performing a navigational search could be confused as to the source, affiliation, or sponsorship of ads by other companies that appear in response to a trademark search (Goodstein, Tr. 2417-22; RX0736 (Goodstein Expert Report at 031-32)); and
- (e) the survey conducted by Dr. Van Liere for 1-800 Contacts in this matter (*see* Section II.L.1) (Goodstein, Tr. 2417-21; RX0736 (Goldstein Expert Report at 033)).

780. Dr. Goodstein did not base his opinion (F. 779) on any independent study and analysis conducted by him of consumer behavior relating to search queries using “1-800 Contacts,” but relied instead on data collected by third parties in studies that Dr. Goodstein summarized and reiterated in his expert report and on the witness stand. (Goodstein, Tr. 2404-05 (referring to reliance on “studies that have been done both in the science community and by the search engines looking at eye-tracking studies as to where people look”); Goodstein, Tr. 2406-07 (testifying that his opinion that many consumers do not recognize that sponsored ads are actually paid advertisements is based “on science done both within the science of my field as well as by the search engine companies themselves, their own research”); RX0736 (Goodstein Expert Report at 020-29 ¶¶ 43-64) (describing and relying on numerous third-party studies); CX9045 (Goodstein, Dep. at 15-17) (testifying that he “did an analysis of the secondary research that exists,” which “is relevant research that someone else conducted,” and reviewed “primary research that was made available in this case,” which is “data that’s collected particularly for this issue” and includes the study conducted by Dr. Van Liere (Section II.L.1)).

781. The American Airlines cases, referenced in F. 779, were settled. (Goodstein, Tr. 2439).

782. When a consumer’s search query is “1-800 Contacts cheaper,” one cannot determine if that is a navigational search with intent to go only to 1-800 Contacts’ website. (Goodstein, Tr. 2453-54).

783. There are studies finding that survey respondents have diverse preferences and expectations when they use brand names as search terms and finding that not everybody

who uses a brand name as a search term is looking only for information about that brand. (Goodstein, Tr. 2428, 2431).

3. Increased Search Costs

784. Dr. Ghose's opinion that "consumers who search for a specific retailer's trademark are typically attempting to reach the retailer's website," relies mainly on "A *Taxonomy of Web Search*," Broder, A. (2002), ACM Sigir Forum, 36(2). This work states that "there is no assumption" that intent can be inferred "with any certitude from the query" and further states that "inferring user intent from the query is at best an inexact science, but usually a wild guess." (RX0733 (Ghose Expert Report at 031-32 ¶ 75); CX8010 (Athey Rebuttal Expert Report at 006-07 ¶¶ 16-17)).
785. Advertising has the capacity to change the consumer's commercial intent. (Ghose, Tr. 3962; *see also* Ghose, Tr. 3964 (the consumer's intent to purchase one product can be changed by lower prices of an alternative product)).
786. If a consumer is engaged in comparative shopping, the consumer can benefit from seeing rival companies' ads. (Ghose, Tr. 3968-70 (noting that among the benefits of targeted advertising is that consumers can make better and more informed decisions)).
787. Dr. Ghose did not conclude that any consumers who entered a search query that included a 1-800 Contacts' trademark term suffered (or would suffer) harm as a result of seeing rival companies' ads. (Ghose, Tr. 3929 ("I haven't, you know, quantified the specific proportion of people who would be harmed. All I'm saying is, based on the analysis, that a large fraction of people would not find these competing ads relevant given the trademark search.")).
788. Dr. Ghose did not conclude that by eliminating competitors' ads, the Challenged Agreements create benefits for consumers. (Ghose, Tr. 3995-96 (testifying, "[A]ll I've said is that when consumers get to see these additional ads that may not be very relevant, their search costs can go up, and that's about it.")).
789. If consumers are looking for a product and they do not know which retailer they want to purchase from, then those consumers may be willing to trade higher search costs in return for receiving a deeper discount. (Ghose, Tr. 3964; *see also* Ghose, Tr. 3969 ("as a general proposition, is it possible that some consumers benefit from seeing a price-comparative rival ad? Yes. I don't think . . . I have argued . . . against that.")).

4. Increased Sales

790. Dr. Athey's model predicted that in a "counterfactual" world without the Challenged Agreements, consumer clicks on the 1-800 Contacts ads would decline, by 2 clicks per hundred searches; and consumer clicks on ads for competitors of 1-800 Contacts would increase, by 3.5 clicks per hundred searches. (Athey, Tr. 784-85; *see* F. 743-751).

791. Respondent's expert witness, Dr. Murphy, using the predictions about consumer clicks from Dr. Athey's model (F. 790), input data from Google regarding the rate at which consumers who click on an ad for a company convert into a sale, to predict that in the counterfactual world without the Challenged Agreements, 1-800 Contacts would have a loss of sales of 0.54 customers per 100 searches and the online competitors would have a gain in sales of 0.35 customers per 100 searches. (RX0739 (Murphy Expert Report at 0083-84 ¶ 231)).

792. Dr. Murphy explained that he performed the calculations in F. 791 to make the point that, although Dr. Athey's model showed that if the Challenged Agreements were not in place, there would be more clicks on ads for online competitors, Dr. Athey's model does not necessarily show that there would be more online sales of contact lenses in the counterfactual world:

[O]nce you tell me these things are going in opposite directions [(referring to Dr. Athey's model showing a decline by 2 clicks on 1-800 Contacts ads and an increase by 3.5 clicks on competitors of 1-800 Contacts ads)], ... then the net effect of that is ambiguous because it is going to tend to reduce the propensity to buy things on 1-800 [Contacts' website] and maybe increase the propensity to buy somewhere else, but the net effect could easily be to lower the overall propensity.

(CX9048 (Murphy, Dep. at 266-67)).

793. Dr. Murphy's analysis (F. 791-792) was not intended to show that the Challenged Agreements increased the sales of contact lenses. (CX9048 (Murphy, Dep. at 265-66) ("I am not saying this proves sales would go down in a but-for world"; "the effect on sales could go either way . . .")).

794. Dr. Murphy's analysis (F. 791-792) was not intended to show that without the Challenged Agreements, fewer people are going to buy contact lenses. As Dr. Murphy testified:

I don't think that's the way you would interpret this [analysis]. I think you would interpret this as saying these searches were less effective in helping these people purchase contacts. . . . [People are] going to have to go get their contacts somewhere else, maybe go back to the ECP, maybe do something else.

(Murphy, Tr. 4235).

795. Contact lenses are not typically a discretionary product and a consumer has significant incentive not to abandon his or her purchase. (CX8010 (Athey Rebuttal Expert Report at 055 ¶ 133); *see also* Coon, Tr. 2791-93).

III. ANALYSIS

A. Summary of Facts

The Complaint charges Respondent 1-800 Contacts, Inc. (“Respondent” or “1-800 Contacts”) with violating Section 5 of the Federal Trade Commission Act (“FTC Act”), 15 U.S.C. § 45. Section 5(a)(2) of the FTC Act gives the Commission jurisdiction “to prevent persons, partnerships, or corporations . . . from using unfair methods of competition in or affecting commerce” 15 U.S.C. § 45(a)(2); *Kaiser Aluminum & Chem. Corp. v. FTC*, 652 F.2d 1324, 1327 n.2 (7th Cir. 1981).

Respondent 1-800 Contacts sells contact lenses to consumers throughout the United States. F. 3. Respondent is a corporation, as “corporation” is defined in Section 4 of the FTC Act, 15 U.S.C. § 44. F. 2. Respondent’s challenged activities relating to the sale of contact lenses are in or affect commerce in the United States, as “commerce” is defined in Section 4 of the FTC Act, 15 U.S.C. § 44. F. 3. Thus, the Commission has jurisdiction over Respondent and the subject matter of this proceeding, pursuant to Section 5 of the FTC Act.

1. Contact Lenses Generally

Contact lenses are a billion dollar industry. F. 4. In 2015, sales of contact lenses in the United States were estimated to be approximately \$4.7 billion. F. 4. Nearly 40 million people in the United States use contact lenses to correct their vision. F. 6.

To purchase contact lenses, one must first go to an eye care practitioner (“ECP”) such as an optometrist or ophthalmologist who performs an eye examination to determine the correct power, base curve, and the specific brand of contact lens. F. 8-10, 23. After conducting the contact lens fitting, the ECP writes a prescription that enables the patient to purchase the specified contact lenses. F. 9, 10, 12.

When contact lenses were first introduced, they were made of rigid material that required an ECP to custom fit each pair. F. 13. Beginning in the late 1980s, contact lens manufacturers began to make disposable contact lenses that were designed to be replaced on a daily, weekly, or monthly basis. F. 14. Further technological improvements in the manufacture of contact lenses

eliminated the need for an ECP to fit each pair of contact lenses during the contact lens fitting process. F. 15.

On December 6, 2003, Congress passed the Fairness to Contact Lens Consumers Act, 15 U.S.C. § 7601, which requires ECPs to provide contact lens prescriptions to their patients upon completion of a contact lens fitting. F. 17. With the evolution in contact lens technology and the change in the regulatory landscape, consumers were no longer required to purchase their contact lenses only from their ECPs. F. 16.

2. The Start of the Company 1-800 Contacts

Jonathan Coon started the business that became 1-800 Contacts from his college dormitory room in February 1992. F. 30. Based on his own contact lens purchasing experience, Mr. Coon believed that the process of buying contact lenses was inconvenient, the service was not very good, and the prices were high. F. 31. Mr. Coon began a mail order contact lens business, and, along with his business partner, set up a call center and inventory and distribution center. F. 33. In 1995, Mr. Coon acquired the “1-800 Contacts” phone number and changed the name of the company to 1-800 Contacts. F. 36. Once the company began advertising the 1-800 Contacts name and phone number, it saw a 20% to 25% increase in customer acquisition and customer retention. F. 51.

In 1996, 1-800 Contacts launched the 1-800 Contacts website. F. 38. 1-800 Contacts designed its website to be a simple and efficient way for consumers to purchase contact lenses. F. 39. 1-800 Contacts began advertising on television in or about June 1998 and experienced 50% growth within a few months thereafter. F. 52-53. 1-800 Contacts’ advertising message, which it repeated in many of its television advertisements, was that the consumer could get the exact same contact lenses delivered to their door for less than they would pay to drive to their doctor’s office and pick them up. F. 58.

In 1999, 1-800 Contacts opened a distribution center that it believed had the largest inventory of contact lenses in terms of the number and variety of Stock Keeping Units (“SKUs”) in one location and began promoting itself as “The World’s Largest Contact Lens Store.” F. 54.

1-800 Contacts has more inventory in stock than any other contact lens retailer, allowing 1-800 Contacts to fill 98% of all orders with inventory on hand. F. 44.

In 2004, 1-800 Contacts' internet sales surpassed its phone sales. F. 67. By 2015, less than a quarter of 1-800 Contacts' total customer orders were by phone, with the remainder of its orders via the internet. F. 70. 1-800 Contacts' sales account for about 10% of total contact lens sales in the United States and for about 60% of online sales of contact lenses in the United States. F. 492, 494.

3. Sources for Purchasing Contact Lenses

Contact lenses are medical devices and a consumer must have a prescription in order to purchase them. F. 8-9. In most states, contact lens prescriptions expire within one year; thus a contact lens wearer must visit his or her ECP to get a new prescription on a yearly basis. F. 18-19. Once a consumer has obtained a prescription, he or she can either purchase directly from the ECP or purchase contact lenses through mail order, through telephone order or over the internet. F. 16.

a. Eye care practitioners

Eye care practitioners operate in doctors' offices as "independent ECPs," with optical retail chains, or in conjunction with mass merchants and club stores. F. 76. There are roughly 16,000 independent ECP practices in the United States. F. 79. Independent ECPs make 40% of the sales of contact lenses in the United States. F. 491. Most independent ECPs sell contact lenses from their physical locations and some independent ECPs sell contact lenses online through, or in conjunction with, services provided by contact lens manufacturers, contact lens wholesale distributors, or vision insurance providers. F. 75-78, 80.

National and regional optical retail chains provide eye care professionals on location and sell contact lenses. F. 82-83. Optical retail chains make 20% of the sales of contact lenses in the United States. F. 491. National optical retail chains include LensCrafters, Pearle Vision, Visionworks, America's Best Contacts and Glasses, and MyEyeDr. F. 84. Luxottica Retail North America ("Luxottica") sells and distributes optical products, including contact lenses, through the brands LensCrafters, Pearle Vision, Sears Optical, and Target Optical, among others,

and also operates internet websites for these stores. F. 86. For many optical retail chains, a consumer can purchase contact lenses in the store, by phone, or through the chain's website. F. 88.

Many mass merchant and club stores that sell contact lenses typically have an onsite optometrist and a separate optical department located within the store. F. 89. Mass merchant and club stores make 23% of the sales of contact lenses in the United States. F. 491. Mass merchants, such as Target, Sears, and JCPenny, sell contact lenses in their stores. F. 90. Walmart sells contact lenses in its stores, over the phone, and through its own website. F. 92. Club stores, such as Costco, Sam's Club, and BJ's Wholesale Club, sell contact lenses in their stores and online through their own websites. F. 93. Costco began selling contact lenses online to its members in October 2016. F. 96.

Regardless of whether they operate in independent doctors' offices, national or regional optical retail chains, or out of mass merchant or club stores, ECPs can be generally categorized as operating out of physical, i.e., "brick and mortar," stores. F. 77.

b. Online retailers of contact lenses

Contact lens retailers who sell online but do not have a physical store are often referred to as "pure-play" online retailers. F. 98. 1-800 Contacts is generally categorized as a pure-play online retailer. F. 99. Other online retailers of contact lenses include AC Lens, Coastal Contacts, Lens.com, LensDirect, Lens Discounters, Web Eye Care and Vision Direct. Section II.D.2. Online retailers, including 1-800 Contacts, make 17% of the sales of contact lenses in the United States. F. 495. 1-800 Contacts makes about 60% of the sales of contact lenses sold online. F. 494.

To purchase contact lenses from an online retailer, a consumer must first obtain a prescription from his or her ECP and then go on the internet to find a retailer that sells the particular contact lenses that the consumer needs. Online retailers try to reach consumers through many different channels, including television or radio advertising, social media advertising, comparison shopping engines, product listing advertisements, and paid search advertising. Section II.E.5. As discussed in greater detail in Section III.E.2.a, the most effective

method of reaching consumers who wish to purchase contact lenses over the internet is paid search advertising. The mechanics of paid search advertising are summarized next.

4. Paid Search Advertising on the Internet

Internet search engines, such as Google and Bing, organize information to allow their users to access the vast amount of information on the internet. F. 135. Search engines employ complex algorithms to match the user's request with parts of the web that may contain relevant responses. F. 136. Search engines are free for users. F. 140. The search engines derive the majority of their revenue through advertisements ("ads" or "sponsored links"). F. 140.

When a user enters a search query, the internet search engine generally displays two types of results on the search engine results page: (1) "organic" or "natural" search results; and (2) search results that are paid advertisements. F. 141. Organic or natural search results are links to websites that the search engine has determined are relevant to the user's search terms. F. 143. In general, organic results are ranked in order of relevance, with the most relevant result at the top of the list. F. 143.

Search results that are paid advertising are links to websites that the search engine has determined should be presented to the user based on a complex algorithm, discussed below. The format by which these advertisements are presented to consumers has varied over the years. F. 149. Currently, search engine advertisements consist of a blue headline, followed by the word "Ad" (for Google, in a green box; for Bing, in gray bold text) and the web address (Uniform Resource Locator ("URL")) of the site being advertised by the ad copy, which is text the advertiser provides to the search engine provider. F. 150.

Paid search advertising refers to a method of advertising where the advertiser pays the search engine to place its advertisement on the search engine results page, based on an advertiser's selected "keywords." F. 148. Paid search advertising is sometimes referred to as "pay-per-click" or "cost-per-click" advertising. F. 154. Advertisers do not pay the search engines any money for their ads to be displayed unless a user clicks on their ad. F. 140, 236. A cost-per-click is the price that an advertiser pays to the search engine each time its advertisement is clicked by an internet user. F. 155.

Google and Bing both have complex algorithms for determining how to display paid search advertisements in response to a user query, which take into account many factors, including (1) the amount of money bid by the advertiser, (2) the search engine's determination of the relevance of the advertisement to the user query, (3) the search engine's determination of the relevance of the advertiser's website to the user query, and (4) certain information about the user, such as the user's search history and geographic location. E.g., F. 136, 190, 195, 223, 238-240.

Google's program through which it presents paid search advertisements is called AdWords. F. 160. For each user query on which ads are shown, Google runs a real-time auction based on advertiser bids. F. 158-159. Advertisers indicate which auctions they would like to enter so that their ads will be presented by Google by using "keywords." F. 148, 161-162. Keywords are words or phrases the advertiser believes potential customers are likely to use when searching for products or services provided by the advertiser. F. 162.

An advertiser's ad may be shown when the advertiser has bid on keywords that are determined to "match" a user's search query. F. 163. Advertisers frequently bid on hundreds or thousands of keywords. F. 164. Keywords may consist of a single word (e.g., "contacts," "Accuvue," or "coupon"), a phrase (e.g., "contact lens"), or a combination of words and phrases. F. 165.

There are several "match types" in AdWords. F. 166. "Broad match" allows an ad to be matched to relevant variations of the advertiser's selected keywords (referred to as the "ad's keywords"), including synonyms, singular or plural forms, possible misspellings, stemmings (such as floor and flooring), related searches, and other relevant variations. F. 167-168. "Phrase match" allows an ad to be matched to searches that include the ad's exact keyword and close variants of the exact keyword, with additional words before or after. F. 171. "Exact match" allows an ad to be matched to searches that include the ad's exact keyword, or close variants of the exact keyword, exclusively. F. 173.

Advertisers can indicate which auctions they do not want to enter by using "negative keywords." F. 175. A negative keyword is a type of keyword that prevents an ad from being

triggered by a certain word or phrase. F. 175. For example, a retailer that sells eyeglasses may add the negative keyword “wine glasses” to prevent its ads from being shown in response to searches for that term. F. 175.

5. Summary of the Challenged Agreements

The Complaint alleges that Respondent’s 14 agreements with other online sellers of contact lenses violated Section 5 of the FTC Act (the “Challenged Agreements”).¹⁴ The Challenged Agreements consist of 13 settlement agreements, and certain provisions of one contact lens sourcing and services agreement between Respondent and Luxottica (the “Luxottica Sourcing and Services Agreement”). As summarized below and detailed in F. 359-370, the Challenged Agreements contain restraints designed to prevent each party’s advertisements from appearing in response to an internet search for the other party’s trademark terms.

a. The Settlement Agreements

During the time period 2004 through 2013, 1-800 Contacts entered into settlement agreements with 13 contact lens retailers to resolve the then-pending trademark litigation brought against them by 1-800 Contacts (the “Settlement Agreements”), as follows: Vision Direct (2004); Coastal Contacts (2004); EZ Contacts (2008); Vision Direct (2009);¹⁵ Lensfast (2009); AC Lens (2010); Empire Vision (2010); Lenses for Less (2010); Tram Data (d/b/a replacemycontacts.com) (2010); Walgreens (2010); Contact Lens King (2010); Web Eye Care (2010); Standard Optical (2011); and Memorial Eye (2013). F. 306, 314, 343-345, 348, 351, 359-360.

In general, the Settlement Agreements set forth a series of “prohibited acts” that prohibit each party from causing advertisements to appear in response to an internet search for the other party’s trademarks or URLs, or variations thereof, although some agreements more broadly

¹⁴ Although Complaint Counsel’s brief refers to additional “informal” or “unwritten” agreements, Complaint Counsel states that the existence of those additional agreements does not materially change the analysis of competitive harm and that “Complaint Counsel need not specifically prove their existence.” CCB at 71 n.269. Accordingly, this Initial Decision need not, and does not, determine whether or not such additional agreements were made.

¹⁵ In 2007, a dispute arose between the parties over the correct scope of the advertising prohibitions in the 2004 settlement agreement. F. 311. Respondent thereafter sued Vision Direct and the parties reached a second settlement agreement. F. 328-329.

encompass internet searches that “include” the other party’s trademarks or URLs, or variations thereof (for shorthand purposes, at times collectively referred to herein as “trademark terms”). F. 361, 363. Although the specific language may vary, the Settlement Agreements also require the parties to implement as negative keywords those trademark and URL terms and variations thereof listed on an attached exhibit, in order to prevent the display of advertisements in response to an internet search for, or as stated in some agreements, an internet search that “includes” or “contains,” the other party’s trademarks or URLs. F. 364.

The Settlement Agreements do not prohibit the purchase of generic keyword terms, such as “contacts,” or “contact lenses,” provided that the parties implement the required negative keywords to prevent advertisements from appearing in response to a search for the designated trademark terms. F. 366. Absent the implementation of negative keywords, a retailer that bids on the generic keyword “contacts” in broad match, for example, might cause its ads to appear in response to a search for 1-800 Contacts. F. 368. The Settlement Agreements do not state whether or not the required negative keywords are to be implemented in broad match, phrase match, or exact match. F. 365.

Ten of the thirteen Settlement Agreements exclude from the scope of “prohibited acts” “use of the other Party’s trademarks on the Internet in a manner that would not constitute an infringing use in a non-Internet context, e.g., the use on the Internet of comparative advertising, parodies, and similar non-Infringing, uses.” F. 369.

b. Luxottica Sourcing and Services Agreement

The Luxottica Sourcing and Services Agreement was entered into on December 23, 2013. F. 393. Pursuant to this agreement, 1-800 Contacts provides fulfillment services to Luxottica by shipping contact lenses to Luxottica’s retail chain stores, which include LensCrafters, Pearle Vision, Sears Optical, and Target Optical, among others. The agreement further provides for other services including assistance with sourcing contact lenses from the four major contact lens manufacturers.¹⁶ F. 394.

¹⁶ The four major manufacturers of contact lenses that account for about 95% of the United States market are Johnson & Johnson, Alcon, CooperVision, and Bausch & Lomb. F. 7.

Within the Luxottica Sourcing and Services Agreement is a section that contains provisions prohibiting the parties, and their affiliates (including retailers such as EyeMed, LensCrafters, Pearle Vision, Sears Optical, and Target Optical), from purchasing or using the other party's trademarks or confusingly similar variations thereof "as triggering keywords in any internet search engine advertising campaign" and requiring each party to enter the other party's trademarks, and variations thereof, as listed in the agreement, as "exact match" negative keywords in all advertising campaigns. F. 396.

B. Overview of Applicable Law

The FTC Act's prohibition of unfair methods of competition encompasses violations of Section 1 of the Sherman Act. *Cal. Dental Ass'n v. FTC*, 526 U.S. 756, 762 & n.3 (1999). "[T]he analysis under § 5 of the FTC Act is the same . . . as it would be under § 1 of the Sherman Act." *Polygram Holding, Inc. v. FTC*, 416 F.3d 29, 32 (D.C. Cir. 2005); *see also FTC v. Indiana Fed'n of Dentists*, 476 U.S. 447, 451-52 (1986). Accordingly, Sherman Act jurisprudence is appropriately relied upon in determining whether the challenged conduct violates Section 5 of the FTC Act. *Cal. Dental Ass'n*, 526 U.S. at 762 n.3; *Realcomp II, Ltd. v. FTC*, 635 F.3d 815, 824 (6th Cir. 2011) (noting that the same analysis applies to both violations of Section 1 of the Sherman Act and Section 5 of the FTC Act).

Section 1 of the Sherman Act prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States . . ." 15 U.S.C. § 1. Despite its broad language, the ban on contracts in restraint of trade extends only to unreasonable restraints of trade, i.e., restraints that impair competition. *State Oil Co. v. Khan*, 522 U.S. 3, 10 (1997). Thus, a Section 1 violation requires a determination of "(1) whether there was a contract, combination, or conspiracy – or, more simply, an agreement; and, if so, (2) whether the contract, combination, or conspiracy 'unreasonably restrained trade in the relevant market.'" *Realcomp*, 635 F.2d at 824 (citations omitted); *Law v. NCAA*, 134 F.3d 1010, 1016 (10th Cir. 1998).

There is no dispute in this case that there was a contract, combination, or conspiracy. RRB at 10-14. During the time period 2004 through 2013, 1-800 Contacts, an online seller of contact lenses, entered into 14 written agreements with other online sellers of contact lenses.

F. 343, 393. “[C]oncerted action may be amply demonstrated by an express agreement.” *United States v. Delta Dental*, 943 F. Supp. 172, 175 (D.R.I. 1996).

The evaluation of whether a particular horizontal agreement unreasonably restrains trade “takes place along an analytical continuum in which a challenged practice is examined in the detail necessary to understand its competitive effect.” *In re Polygram Holding, Inc.*, 136 F.T.C. 310, 336 (2003), *aff’d*, *Polygram*, 416 F.3d at 29.”¹⁷

Under a “quick look” rule of reason analysis, also referred to as “inherently suspect” analysis, certain types of restraints are presumed to have anticompetitive effects. *Polygram*, 416 F.3d at 36 (“If, based upon economic learning and the experience of the market, it is obvious that a restraint of trade likely impairs competition, then the restraint is presumed unlawful and, in order to avoid liability, the defendant must either identify some reason the restraint is unlikely to harm consumers or identify some competitive benefit that plausibly offsets the apparent or anticipated harm.”); *In re Realcomp II, Ltd.*, 2009 FTC LEXIS 250, at *55-56 (Oct. 30, 2009) (“[B]oth accepted economic theory and past judicial experience with analogous restrictions support our finding that ‘the experience of the market has been so clear about the principal tendency’ of [the challenged] restrictions so as to enable us to draw ‘a confident conclusion’ that – absent any legitimate justification . . . competition and consumers are harmed by [the] challenged Policies.”)). However, as the Supreme Court reiterated in *FTC v. Actavis*, 133 S. Ct. 2223, 2237 (2013), “abandonment of the ‘rule of reason’ in favor of presumptive rules (or a ‘quick-look’ approach) is appropriate only where ‘an observer with even a rudimentary understanding of economics could conclude that the arrangements in question would have an anticompetitive effect on customers and markets.’” *Id.* (citing *Cal. Dental Ass’n*, 526 U.S. at 770, 781). Because application of the “inherently suspect” presumption, in effect, shifts the burden to the defendant to provide empirical evidence of procompetitive effects, “[r]eviewing courts must be attentive . . . to the actual application of the burden-shifting.” *North Texas Specialty Physicians v. FTC*, 528 F.3d 346, 361 (5th Cir. 2008). See *Cal. Dental Ass’n*, 526 U.S. at 775 n.12 (Where “the circumstances of the restriction are somewhat complex, assumption alone will not do.”).

¹⁷ Complaint Counsel does not contend that the Challenged Agreements are “per se” unlawful.

A full rule of reason approach requires courts to engage in a thorough analysis of the relevant market and the effects of the restraint in that market. *Realcomp*, 635 F.3d at 825 (citing *Indiana Fed'n*, 476 U.S. at 461). As the court explained in *Realcomp*, this “may extend to a ‘plenary market examination,’” which may include an analysis of “‘the facts peculiar to the business, the history of the restraint, and the reasons why it was imposed.’” *Realcomp*, 635 F.3d at 825 (citations omitted).

Ultimately, however, “no categorical line” separates those “restraints that give rise to an intuitively obvious inference of anticompetitive effect and those that call for more detailed treatment.” *Cal. Dental Ass’n*, 526 U.S. at 780-81. Accordingly, the Supreme Court has moved “away from . . . reliance upon fixed categories and toward a continuum,” *Polygram*, 416 F.3d at 35, within which “the extent of the inquiry is tailored to the suspect conduct in each particular case.” *Id.* at 34. Thus, the proper analysis is “an enquiry meet for the case, looking to the circumstances, details, and logic of a restraint.” *Cal. Dental Ass’n*, 526 U.S. at 781. As the Supreme Court stated in *Actavis*: “As in other areas of law, trial courts can structure antitrust litigation so as to avoid, on the one hand, the use of antitrust theories too abbreviated to permit proper analysis, and, on the other, consideration of every possible fact or theory irrespective of the minimal light it may shed on the basic question – that of the presence of significant unjustified anticompetitive consequences.” *Actavis*, 133 S. Ct. at 2238. “[T]he Court’s decisions, particularly *California Dental*, also make clear that all of these forms of analysis are simply different means to pursue the same ‘essential inquiry . . . whether or not the challenged restraint enhances competition.’” *Realcomp*, 2009 FTC LEXIS 250, at *52 (citing *Cal. Dental Ass’n*, 526 U.S. at 780). *See also Am. Needle, Inc. v. NFL*, 560 U.S. 183, 203 n.10 (2010) (“The true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes competition or whether it is such as may suppress or even destroy competition.”) (quoting *Board of Trade of Chicago v. United States*, 246 U.S. 231, 238 (1918)).

If a restraint is demonstrated to be “inherently suspect” and has not been justified, it may be condemned “without proof of market power or actual effects.” *Realcomp*, 2009 FTC LEXIS 250, at *51. Otherwise, “a plaintiff must show that the challenged restraints have resulted in, or are likely to result in, anticompetitive effects, in the form of higher prices, reduced output, degraded quality of products or services, retarded innovation, or other manifestations of harm to

consumer welfare.” *Realcomp*, 2009 FTC LEXIS 250, at *90. This may be accomplished by demonstrating actual anticompetitive effects in the relevant market, or by “an indirect showing based on a demonstration of defendant’s market power, which when combined with the anticompetitive nature of the restraints, provides the necessary confidence to predict the likelihood of anticompetitive effects.” *Id.* (citing *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 96 (2d Cir. 1998) (plaintiff has “two independent means by which to satisfy the adverse-effect requirement” – direct proof of “actual adverse effect on competition” or “indirectly by establishing . . . sufficient market power to cause an adverse effect on competition”); *Law*, 134 F.3d at 1019 (“plaintiff may establish anticompetitive effect indirectly by proving that the defendant possessed the requisite market power within a defined market or directly by showing actual anticompetitive effects”); *United States v. Brown Univ.*, 5 F.3d 658, 668 (3d Cir. 1993) (same)). Affirming this approach, the Sixth Circuit held that if actual anticompetitive effects are shown, then proof of market power is unnecessary, because “an inquiry into market power . . . is . . . a surrogate for detrimental effects.” *Realcomp*, 635 F.3d at 827 (quoting *Indiana Fed’n*, 476 U.S. at 461).

If the plaintiff meets its burden of demonstrating actual effects, or likely effects based on proof of market power, the burden shifts to the defendant to prove procompetitive justifications for the challenged restraint. *Realcomp*, 635 F.3d at 825; *Polygram*, 416 F.3d at 36. “If the defendant is able to demonstrate procompetitive effects, the plaintiff then must prove that the challenged conduct is not reasonably necessary to achieve the legitimate objectives or that those objectives can be achieved in a substantially less restrictive manner.” *Law*, 134 F.3d at 1019.

C. Immunity Under *Actavis*

As an initial matter, Respondent argues that under *Actavis*, the Settlement Agreements are not subject to antitrust scrutiny because they are “commonplace” settlement agreements. Respondent further argues that even if the Settlement Agreements are not deemed commonplace, *Actavis* requires proof of additional factors in order to justify subjecting the Settlement Agreements to antitrust scrutiny. RB at 15-16.

In *Actavis*, a brand-name drug owner sued two generic drug manufacturers for patent infringement. In settlement of these claims, (i) the brand-name drug company agreed to pay the

generic drug companies millions of dollars, and (ii) the generic drug companies agreed to refrain from launching competing products for nine years, but were allowed entry five years before the expiration of the patent. 133 S. Ct. at 2227. The Court of Appeals for the Eleventh Circuit had affirmed a lower court's dismissal of the FTC's case, concluding that, "absent sham litigation or fraud in obtaining the patent, a reverse payment settlement is immune from antitrust attack so long as its anticompetitive effects fall within the scope of the exclusionary potential of the patent." *FTC v. Watson Pharms., Inc.*, 677 F.3d 1298, 1312 (11th Cir. 2012). The Supreme Court reversed, holding that reverse payment settlements of patent litigation are not immune from antitrust scrutiny and that the FTC may prove such agreements violate the antitrust laws, as in any other rule of reason case. 133 S. Ct. at 2230, 2234-37.

In its analysis, the Supreme Court contrasted a reverse payment patent settlement with a particular type of settlement agreement that is more common: "[a patentee] with a claim (or counterclaim) for damages receives [from the accused infringer] a sum equal to or less than the value of its claim." 133 S. Ct. at 2233. The Supreme Court referred to this "traditional example" as taking a "commonplace form" and stated "[i]nsofar as the dissent urges that settlements taking these commonplace forms have not been thought for that reason alone subject to antitrust liability, we agree, and do not intend to alter that understanding." *Id.*

Respondent interprets the foregoing statement to mean that *Actavis* immunizes "commonplace" forms of trademark settlements from antitrust scrutiny, noting that the Court referenced *Metro-Goldwyn Mayer, Inc. v. 007 Safety Products, Inc.*, 183 F.3d 10, 13 (1st Cir. 1999), which involved a trademark dispute and settlement where the plaintiff paid a defendant to settle the defendant's counterclaim. RB at 21. *See* 133 S. Ct. at 2233. Respondent also interprets the Court's reference to "five sets of considerations" that led the Court to conclude that the reverse payment patent settlements at issue were not immune, to require proof of these factors before settlement agreements may be subjected to antitrust scrutiny. RB 27-34. *See* 133 S. Ct. at 2234 ("We recognize the value of settlements and the patent litigation problem. But we nonetheless conclude that this patent-related factor should not determine the result here. Rather, five sets of considerations lead us to conclude that the FTC should have been given the opportunity to prove its antitrust claim.").

Respondent’s interpretation of *Actavis* as providing immunity for commonplace settlement agreements is overly broad and contrary to authorities cited with approval by the *Actavis* court. Indeed, the Court directly stated that “this Court’s precedents make clear that patent-related settlement agreements can sometimes violate the antitrust laws.” 133 S. Ct. at 2232. Among the authorities cited are *United States v. Singer Manufacturing Co.*, 374 U.S. 174 (1963) (emphasizing that the Sherman Act “imposes strict limitations on the concerted activities in which patent owners may lawfully engage,” and holding that although settling patent disputes, the agreements violated the antitrust laws); *United States v. New Wrinkle, Inc.*, 342 U.S. 371, 378 (1952) (applying antitrust scrutiny to patent settlement); and *Standard Oil Co. (Indiana) v. United States*, 283 U.S. 163 (1931) (same). 133 S. Ct. at 2232-33.

The lower court, post-*Actavis* cases cited by Respondent (RB at 20) likewise do not hold that commonplace settlements are immune from antitrust immunity. None of the cited cases analyze a “commonplace” form of settlement; they all analyzed reverse payment settlements of patent disputes, and, like *Actavis*, contrasted a reverse payment settlement with more traditional settlements of patent disputes. *In re Loestrin 24 Fe Antitrust Litig.*, 814 F.3d 538, 544 (1st Cir. 2016); *King Drug Co. of Florence, Inc. v. Smithkline Beecham Corp.*, 791 F.3d 388, 402 (3d Cir. 2015); *In re Lipitor Antitrust Litig.*, 46 F. Supp. 3d 523, 537 (D.N.J. 2014); *In re Lamictal Direct Purchaser Antitrust Litig.*, 18 F. Supp. 3d 560, 567 (D.N.J. 2014).

Because Respondent’s interpretation of *Actavis* is without merit, Respondent’s contention that the Settlement Agreements are immune from antitrust scrutiny is rejected.¹⁸

D. Relevant Market

“Without a well-defined relevant market, a court cannot determine the effect that an allegedly illegal act has on competition.” *Southeast Mo. Hosp. v. C.R. Bard, Inc.*, 642 F.3d 608, 613 (8th Cir. 2011); *see also Reifert v. S. Cent. Wis. MLS Corp.*, 450 F.3d 312, 320 (7th Cir. 2006). An antitrust market is comprised of a relevant geographic market and a relevant product market. *Brown Shoe Co. v. United States*, 370 U.S. 294, 324 (1962).

¹⁸ Accordingly, whether or not the Settlement Agreements are in fact “commonplace” settlements and whether or not the evidence proves the five factors that the Supreme Court cited as justifying antitrust scrutiny of reverse-payment patent settlements need not be determined.

Complaint Counsel contends that the relevant market is the online sale of contact lenses in the United States. CCB at 101.¹⁹ Respondent contends that the relevant market is all retail sales of contact lenses in the United States, which encompasses sales by online retailers and by physical, or “brick and mortar” retailers, including independent ECPs, optical chains, and mass merchants. RB at 76; RFF at 63.

1. Relevant Geographic Market

A relevant geographic market is the “area of effective competition . . . in which the seller operates, and to which the purchaser can practicably turn for supplies.” *United States v. Philadelphia Nat’l Bank*, 374 U.S. 321, 359 (1963) (citing *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 327 (1960)). See also U.S. Dep’t of Justice & FTC, Horizontal Merger Guidelines, § 4.2.2 (Market Definition) (Aug. 19, 2010) available at <https://www.justice.gov/atr/horizontal-merger-guidelines-08192010> (hereinafter “Merger Guidelines § __”) (example 15, describing that, where “[c]ustomers in the United States must use products approved by U.S. regulators . . . [t]he relevant product market consists of products approved by U.S. regulators [and] [t]he geographic market is defined around U.S. customers.”).²⁰

Contact lenses are regulated by the U.S. Food and Drug Administration, and no contact lens retailer may legally sell contact lenses in the United States without proof of a valid prescription, or compliance with the federal prescription verification program. F. 9, 20-22. This law applies to any entity wishing to sell contact lenses in the United States, including any non-U.S. seller that sells contact lenses within the United States. 16 C.F.R. § 315.5(a); 16 C.F.R. § 315.5(e). With a valid prescription, consumers can purchase contact lenses from any seller

¹⁹ The Complaint alleges as relevant markets in which to analyze the competitive effects of the Challenged Agreements: (1) a market no larger than the sale of search advertising by auction in response to user queries, or smaller relevant markets therein; and (2) a market no larger than the retail sale of contact lenses, or smaller relevant markets therein, including the online retail sale of contact lenses. Complaint ¶¶ 28, 29. Notwithstanding the foregoing relevant market allegations, in its Post-Trial Brief, Complaint Counsel argues that the relevant market is the online retail sale of contact lenses, and does not argue that there is a relevant market for the sale of search advertising by auction. Complaint Counsel’s proffered economic expert witnesses were not asked to assess, and did not opine on, the existence of the alleged market for the sale of search advertising by auction. CX8006 (Evans Expert Report); CX8007 (Athey Expert Report); Evans, Tr. 1818.

²⁰ Courts routinely rely on the Merger Guidelines to define the relevant market. See, e.g., *FTC v. H.J. Heinz, Co.*, 246 F.3d 708, 716 n.9 (D.C. Cir. 2001); *United States v. H&R Block, Inc.*, 833 F. Supp. 2d 36, 52 n.10 (D.D.C. 2011); *FTC v. Sysco Corp.*, 113 F. Supp. 3d 1, 38 (D.D.C. 2015).

operating anywhere in the United States. *See* F. 16, 72. Respondent does not dispute that the United States is the relevant geographic market. Hearing Tr. 103; RRCCFF 1623-1626. Accordingly, the relevant geographic market in this case is the United States.

2. Relevant Product Market

The “outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.” *Brown Shoe*, 370 U.S. at 325; *see also United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 395 (1956). While the outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it, “within [a] broad market, well-defined submarkets may exist which, in themselves, constitute product markets for antitrust purposes.” *Brown Shoe*, 370 U.S. at 325 (citing *E. I. du Pont de Nemours*, 353 U.S. 586, 593-95 (1957)).

“The boundaries of such a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product’s peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.” *Brown Shoe*, 370 U.S. at 325. Courts routinely rely on these *Brown Shoe* factors to define the relevant product market. *See, e.g., FTC v. Staples*, 970 F. Supp. 1066, 1075-80 (D.D.C. 1997); *FTC v. Cardinal Health*, 12 F. Supp. 2d 34, 46-48 (D.D.C. 1998); *FTC v. Swedish Match*, 131 F. Supp. 2d 151, 159-64 (D.D.C. 2000).

Market definition “must take into account the realities of competition.” *FTC v. Whole Foods Mkt.*, 548 F.3d 1028, 1039 (D.C. Cir. 2008). Ordinary course of business documents reveal the contours of competition from the perspective of the parties, who may be presumed to “have accurate perceptions of economic realities.” *Whole Foods*, 548 F.3d at 1045 (concurring op.) (quoting *Rothery Storage & Van Co. v. Atlas Van Lines, Inc.*, 792 F.2d 210, 218 n.4 (D.C. Cir. 1986)). Thus, in applying the *Brown Shoe* factors, courts pay “close attention to the defendants’ ordinary course of business documents.” *H&R Block*, 833 F. Supp. 2d at 52.

Finally, in addition to the practical indicia and ordinary course of business documents, courts rely on testimony from experts in the field of economics. *United States v. Aetna Inc.*, 2017 U.S. Dist. LEXIS 8490, at *42-43 (D.D.C. Jan. 23, 2017); *Sysco*, 113 F. Supp. 3d at 27. Expert testimony is used to analyze the approach set forth in the Merger Guidelines, which instruct that a relevant market may be defined by asking whether a hypothetical monopolist of the proposed market could impose a small but significant and nontransitory increase in price (“SSNIP”) without losing sufficient sales to render the price increase unprofitable. Merger Guidelines § 4.1.1; *see also Whole Foods*, 548 F.3d at 1038; *Swedish Match*, 131 F. Supp. 2d at 160-61 & n.8. “Under the [hypothetical monopolist test], [a] market is any grouping of sales whose sellers, if unified by a hypothetical cartel or merger, could profitably raise prices significantly above the competitive level.” *United States v. Am. Express Co.*, 838 F.3d 179, 198-99 (2d Cir. 2016) (internal quotations omitted). “If a small price increase would drive consumers to an alternative product, then that product must be reasonably substitutable for those in the proposed market and must therefore be part of the market, properly defined.” *Whole Foods*, 548 F.3d at 1038 (citing Merger Guidelines).

These approaches for defining the relevant market are addressed, in turn, below.

a. Interchangeability and cross-elasticity

A contact lens prescription specifies the power, base curve, and the specific brand of contact lens. F. 23. Contact lenses will be identical, regardless of whether the consumer purchases the contact lenses from his or her prescribing ECP or from another seller. F. 24. Contact lenses are a commodity product, F. 24-27, and thus are functionally interchangeable. *Staples*, 970 F. Supp. at 1074.

As Complaint Counsel acknowledges, all retailers of contact lenses are, to some degree, in competition for the same pool of customers. CCB at 101. “However, the mere fact that a firm may be termed a competitor in the overall marketplace does not necessarily require that it be included in the relevant product market for antitrust purposes.” *Staples*, 970 F. Supp. at 1075. This general rule applies even to functionally interchangeable products, i.e., those products that can be used for the same purpose as the product at issue. *H&R Block*, 833 F. Supp. 2d at 54-60 (excluding assisted tax preparation and pen-and-paper do-it-yourself tax preparation from the

market for digital do-it-yourself tax preparation software, even though all provide ways to complete a tax return); *Staples*, 970 F. Supp. at 1074-81 (excluding consumable office supplies sold outside office supply superstores from the market, even though those supplies were functionally interchangeable with office supplies sold inside the superstores).

Respondent's main argument for a relevant market including all physical retailers of contact lenses is that, because every contact lens customer must go to an ECP for a prescription, 1-800 Contacts has always considered ECPs to be its principal competitors and has always focused its marketing efforts on offering consumers a better alternative to buying from their ECPs. RB at 79-80. While the evidence does show that all retailers of contact lenses generally compete with each other for the same pool of potential customers, that does not necessarily mean that online retailers are not a distinct submarket. As Judge Tatel explained in *Whole Foods*:

[W]hen the automobile was first invented, competing auto manufacturers obviously took customers primarily from companies selling horses and buggies, not from other auto manufacturers, but that hardly shows that cars and horse-drawn carriages should be treated as the same product market. That Whole Foods and Wild Oats have attracted many customers away from conventional grocery stores by offering extensive selections of natural and organic products thus tells us nothing about whether Whole Foods and Wild Oats should be treated as operating in the same market as conventional grocery stores. Indeed, courts have often found that sufficiently innovative retailers can constitute a distinct product market even when they take customers from existing retailers.

Whole Foods, 548 F.3d at 1048; *see also Staples*, 970 F. Supp. at 1074-80 (finding a distinct market of office supply superstores despite competition from mail-order catalogues and stores carrying a broader range of merchandise). Thus, even though 1-800 Contacts' strategy has been to lure customers away from traditional physical retailers through offering a faster and more convenient way to buy contact lenses, this does not compel a finding that the relevant market is the broader market of all retail sales of contact lenses. Accordingly, to determine whether online retailers of contact lenses is a submarket within a broader market of all retailers of contact lenses, other evidence relevant to the *Brown Shoe* factors is analyzed next.

b. *Brown Shoe* factors

In addition to the cross-elasticity of demand and supply, *Brown Shoe* sets forth additional “practical indicia” as guides for defining the appropriate market. Since the Supreme Court “described [the *Brown Shoe*] factors as ‘practical indicia’ rather than requirements, subsequent cases have found that submarkets can exist even if only some of these factors are present.” *Staples*, 970 F. Supp. at 1075 (citations omitted).

i. Industry recognition

One factor for consideration in determining whether a submarket exists is industry or public recognition of the submarket as a separate economic entity. *Brown Shoe*, 370 U.S. at 325; *Rothery Storage*, 792 F.2d at 218-19 n.4 (“The industry or public recognition of the submarket as a separate economic unit matters because we assume that economic actors usually have accurate perceptions of economic realities.”).

Online retailers uniformly identify other online retailers as their closest competitors. For example, Vision Direct, Walgreens.com, and LensDirect each testified that they view online competitors as the “primary competitors for contact lens sales.” F. 416, 417. AC Lens, Memorial Eye, and other online retailers also testified that their “main competitors” and “closest competitors” consist exclusively of online retailers. F. 416.

1-800 Contacts has also acknowledged that it views online retailers as its major competitors. 1-800 Contacts’ CEO and president Mr. Bethers, in an October 2016 radio interview, referred to online retailers as 1-800 Contacts’ “major competitors.” F. 415. Documents from 1-800 Contacts, addressed in the following section, also show that 1-800 Contacts recognizes the online retail market as a separate economic entity. Thus, the evidence shows widespread industry recognition of a distinct market for the online sale of contact lenses.

ii. Peculiar characteristics and distinct customers

Other factors for consideration in determining whether a submarket exists are “the product’s peculiar characteristics” and “distinct customers.” *Brown Shoe*, 370 U.S. at 325. An important “peculiar characteristic” of the contact lens retail market is that customers must go to

an ECP's office to get an eye exam to obtain a prescription for contact lenses and often buy their initial purchase of contact lenses from their ECP during their annual eye examination. F. 10, 404.²¹ These customers are in a different situation from customers who are purchasing refill contact lenses and thus are no longer in the physical store. F. 404, 465. Online retailers typically compete only for that "refill" portion of the market. F. 403.

In contrast to customers who typically purchase at a brick and mortar site, customers who tend to shop online for contact lenses place a high premium on the convenience of online shopping, home delivery, low prices, and fast (and often free) shipping. F. 400. Online purchasing is more convenient than purchasing from brick and mortar sites because the customer does not need to return to the store to pick up his or her purchase.²² F. 401. However, even those customers who tend to shop online must return to an ECP for a new prescription, and often, while there, will purchase an initial set of contact lenses. F. 404. Customers' changing behavior (purchasing from an ECP, then purchasing online, and then purchasing from an ECP again) reflects that customers "are choosing the different types of stores under different circumstances." F. 404.

An additional "peculiar characteristic" of the contact lens retail market is the impact of vision insurance on consumers' purchasing decisions. Customers with vision insurance are typically able to get in-network benefits at ECPs, but not from online retailers. F. 409. Thus, online providers, including 1-800 Contacts, are not well-positioned to capture sales made to customers with vision insurance who prefer to purchase from in-network retailers, further demonstrating there are distinct customers within the broader market of all retailers of contact lenses. F. 408.

Finally, other than 1-800 Contacts, online retailers typically rely almost exclusively on search advertising to reach potential new customers. F. 428. By contrast, brick and mortar

²¹ In most states, a contact lens prescription expires in one year. In seven states, a contact lens prescription expires in two years. F. 18.

²² ECPs are generally not able to fill a patient's prescription with on-hand inventory. ECPs typically carry only a small assortment of retail products. Those ECPs that maintain an inventory are able to fill a patient's prescription about 25% of the time from the on-site inventory. F. 405, 425.

retailers, including club stores, tend not to engage in substantial online advertising, including search advertising. F. 429. The fact that online retailers promote themselves to potential customers in a different manner than brick and mortar stores further supports a conclusion that customers of each channel tend to be distinct.

iii. Distinct prices

Distinct pricing is also a consideration in determining whether a submarket exists. *Brown Shoe*, 370 U.S. at 325. See, e.g., *Swedish Match*, 131 F. Supp. 2d at 165 (product market for loose leaf tobacco did not include moist snuff where, among other factors, “loose leaf pricing is determined upon the basis of competition with other loose leaf products, not moist snuff.”); cf. *Beatrice Foods Co. v. FTC*, 540 F.2d 303, 309 (7th Cir. 1976) (excluding items from the product market when manufacturers did not consider them when setting their prices).

The online retail market for contact lenses exhibits distinct prices. Online retailers generally offer significantly lower prices – ranging roughly from 20 to 30% less – than physical retailers, other than membership warehouse club stores. F. 431-432, 435, 442. Although 1-800 Contacts’ business model has been to attract customers from ECPs and thus it sets its prices by looking primarily at independent ECPs’ and optical retail chains’ prices (F. 55-58, 433), other online retailers do not consider prices charged by physical retailers when setting their prices. F. 442-445. As Mr. Clarkson of AC Lens explained, AC Lens’ prices are not based on prices charged by ECPs because “[t]hose prices are typically so much higher that they’re not going to be relevant in the [pricing] decision.” F. 444. During the period that Memorial Eye sold contact lenses both online and in physical stores, it charged significantly lower prices online than it did in its physical stores. F. 446. In setting its online prices, Memorial Eye considered only the prices of other online retailers, while disregarding prices of ECPs and physical retailers because those prices were not “relevant” to its online business. F. 447.

When 1-800 Contacts implemented a price matching policy, it did so in response to competition from “aggressive price messaging” by other online retailers, and not in response to competition from ECPs. F. 436 (1-800 Contacts’ online advertising copy stating, “We Beat Any Online Price.”); F. 440 (1-800 Contacts’ decision to implement the price matching policy was not influenced by the prices charged by physical retailers.).

While club stores such as Costco or Sam’s Club typically offer lower prices than online retailers, online retailers do not consider club stores to be close competitors because the club stores require a membership, operate under a different pricing model, and appeal to an entirely “different category” of customers. F. 449. As Mr. Clarkson of AC Lens explained: “[E]ven though club stores have very competitive pricing, they’re not a big part of . . . [the] analysis to figure out where to put prices because, for one thing, it’s a very different category of customer. They’ve paid a membership fee and in some cases, especially Costco, they’re incredibly loyal to Costco.” F. 449. Consistent with this difference, 1-800 Contacts’ price matching policy explicitly excludes club stores. F. 450 (“[O]ur price matching has typically excluded clubs as a policy. And the reason for that is pretty simple, and that is that there’s a fee, a membership fee that’s associated with clubs, and so you have to pay that fee.”).

iv. Specialized vendors

The “specialized vendor” factor, *Brown Shoe*, 370 U.S. at 325, typically “looks to whether a product or service is sold or marketed by a unique class of vendor.” *Moore Corp. v. Wallace Computer Servs.*, 907 F. Supp. 1545, 1578 (D. Del. 1995). *E.g.*, *United States v. Healthco, Inc.*, 387 F. Supp. 258, 261, 265 (S.D.N.Y.), *aff’d*, 535 F.2d 1243 (2d Cir. 1975) (distinguishing between submarkets for dental equipment and dental sundries based in part on the two industries’ different methods for distributing and marketing those products). In this case, the relevant inquiry is whether the methods used for selling and marketing contact lenses online are sufficiently specialized to distinguish online retailers from physical retailers.

Online retailers must invest in unique assets that differ significantly from those of physical retailers. As an initial matter, online retailers must invest in, build out, and maintain sophisticated websites that allow customers to easily and efficiently navigate the websites, and order their products from home. F. 426. While ECPs and other physical retailers may maintain websites, this is not their primary means of attracting customers or selling contact lenses.

Further, larger online retailers invest significantly in a wide variety and large quantity of contact lenses, in contrast to physical retailers. For example, 1-800 Contacts has specialized facilities, including a 130,000 square foot distribution center, which reflect a “[s]ignificant

amount of dollars invested in technology and distribution infrastructure.” F. 419. 1-800 Contacts has an inventory of over 60,000 SKUs worth millions of dollars. F. 424. AC Lens has 37,000 SKUs in stock. F. 424. *See also* F. 424 (Memorial Eye made “a huge investment” in purchasing inventory, which was significantly larger than the inventory carried by its brick and mortar stores). By contrast, independent ECPs and brick and mortar retail stores do not carry nearly as extensive inventories of contact lenses as online retailers. F. 425 (Costco could fill at most 30% of its prescriptions from inventory, which was higher than most eye doctors); F. 425 (Walmart and Sam’s Club have a selection of maybe four different lenses, perhaps a total of 400 SKUs in the store. “A doctor usually would have even less [than Walmart and Sam’s Club], and many doctors don’t carry any inventory.”)).

In addition, online contact lens retailers must invest in increasingly sophisticated prescription verification systems. F. 427. By contrast, the ECP, as the prescribing optometrist, does not need to make this investment.

The fact that online contact lens retailers are specialized vendors distinct from physical retailers is supported by the fact that many well-known brick and mortar retailers have elected to outsource their online operations. For example, Walmart contracted with 1-800 Contacts for its online operations, including prescription verification, distribution, customer service, and marketing from January 2008 until December 31, 2012. F. 422. After that alliance ended, rather than developing in-house capabilities to perform these specialized services, Walmart contracted with AC Lens to provide “white label services” to Walmart.²³ F. 423. Additionally, 1-800 Contacts performs fulfillment services for multiple brick and mortar retailers, including LensCrafters, Pearle, Sears, and Target Optical. F. 420. These partnerships confirm the observations made in a 2015 report prepared for AEA Investors prior to its acquisition of 1-800 Contacts that while “[f]ulfillment and distribution capabilities [are] critical for online entrant[s],” “[l]arge scale B&M [brick and mortar] players even have issues managing this part of the business.” F. 420. Indeed, 1-800 Contacts has recognized that its specialized assets created a

²³ White label service allows rebranding and is an e-commerce service that entails building a website for a partner, providing customer service such as answering telephone calls on the partner’s behalf, fulfilling orders, providing prescription verification, and providing customer retention services such as sending emails to existing customers. Under the arrangement between AC Lens and Walmart, AC Lens fulfilled orders placed on Walmart’s websites and handled customer retention efforts for Walmart customers. F. 423.

“growth opportunity” to provide “e-commerce, fulfillment, distribution and sourcing services” to brick and mortar retailers. F. 421.

c. Ordinary course of business documents

“Analysis of the market is a matter of business reality – a matter of how the market is perceived by those who strive for profit in it.” *FTC v. Coca-Cola Co.*, 641 F. Supp. 1128, 1132 (D.D.C. 1986), *vacated as moot*, 829 F.2d 191 (D.C. Cir. 1987); *H&R Block*, 833 F. Supp. 2d at 52. 1-800 Contacts’ ordinary course of business documents recognize a distinction between the online retail market and the broader retail market for contact lenses.

Documents prepared and presented by 1-800 Contacts refer to the online market as a separate economic entity, including by stating that 1-800 Contacts has a “60%+ share of [the] online contact lens market.” F. 412. In addition, a September 2015 1-800 Contacts’ Management Presentation focused on 1-800 Contacts’ competitive position compared to its online rivals. F. 414 (noting “20x the unaided brand recognition of the next largest online competitor”; analyzing 1-800 Contacts’ share of the online contact lens market; stating, 1-800 Contacts is the “[o]nly online player with scale to conduct broad advertising such as TV.”). 1-800 Contacts’ September 2015 Management Presentation also recognized that 1-800 Contacts and its online rivals compete on the basis of convenience and price. F. 407 (“Online penetration within the contact lens industry continues to increase steadily due to superior convenience and price. Strong secular trends toward smartphones and ease of re-ordering via mobile enhance the value proposition of online’s convenience.”).

Respondent contends that its business documents support the conclusion that 1-800 Contacts focuses on its share of and competition in the overall contact lens market and on 1-800 Contacts’ objective of luring customers away from ECPs. *E.g.*, RX0428 at 0010 (“1-800 CONTACTS provides a value proposition driven by convenience and superior customer services at prices that are below independent doctors”); RX0428 at 0026 (“1-800 CONTACTS is built on a simple promise: customers can conveniently order the exact same contacts, delivered to their door, for less than buying them at their doctor’s office.”). However, the fact that 1-800 Contacts sees itself competing in two markets – the broader market of all retail sales of contact lenses and a narrower market of online retail sales of contact lenses – does not undermine the conclusion,

reached after a review of all the evidence, that there is a submarket for online retail sales of contact lenses.

d. Economic expert testimony

i. Critical loss analysis

To help determine the relevant market, Complaint Counsel’s expert witness, Dr. David Evans, analyzed whether the proposed market for the online sale of contact lenses would satisfy the hypothetical monopolist test. As set forth in the Merger Guidelines, that test asks:

[Whether] a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products (“hypothetical monopolist”) likely would impose at least a small but significant and non-transitory increase in price (“SSNIP”) on at least one product in the market, including at least one product sold by one of the merging firms.

Merger Guidelines § 4.1.1. If so, the candidate market may be the relevant product market. *Sysco*, 113 F. Supp. 3d at 33-34; *H&R Block*, 833 F. Supp. 2d at 51-52.

To implement the SSNIP test, Dr. Evans performed a “critical loss analysis.” F. 454, 456. “[T]he critical loss analysis is specifically endorsed by the Merger Guidelines as a method for implementing the SSNIP test, *see* Merger Guidelines § 4.1.3, and has been accepted by courts as a standard methodology.” *H&R Block*, 833 F. Supp. 2d at 64 n.19 (citing *FTC v. CCC Holdings Inc.*, 605 F. Supp. 2d 26, 40 n.16 (D.D.C. 2009) (“Critical loss analysis is a standard tool used by economists to study potentially relevant markets.”)). To perform a critical loss analysis requires a determination of profit margins and diversion ratios. F. 457.

Respondent’s expert witness, Dr. Kevin Murphy, did not criticize the model or profit margins used by Dr. Evans in Dr. Evans’ critical loss analysis. *See* F. 456-457. However, Dr. Murphy and Respondent have challenged Dr. Evans’ diversion ratio for (1) using data that reflects “switching,” rather than “diversion”; and for (2) arbitrarily using a diversion ratio of 40%. RB at 85-86; RX0739 (Murphy Expert Report at 0076-78 ¶¶ 211-15).

“Switching refers to the number of consumers who switch between different products for any reason. . . . As opposed to switching, diversion refers to a consumer’s response to a

measured increase in the price of a product. In other words, diversion measures to what extent consumers of a given product will switch (or be ‘diverted’) to other products in response to a price increase in the given product.” *H&R Block*, 833 F. Supp. 2d at 62. In *H&R Block*, the plaintiff’s expert witness relied upon IRS data showing the methods of tax preparation that tax payers used from year to year. The court found the data to be highly reliable because (1) the sample size was enormous and (2) the data reflected actual historical tax return filing patterns as opposed to predicted behavior. The court noted that although the switching data relied upon by the plaintiff’s expert witness did not directly measure diversion, it was “at least somewhat indicative of likely diversion ratios” and held that “it was reasonable to use switching data as a proxy for diversion, especially since no more refined historical data apparently exists.” *Id.* at 62, 65.

Based on survey evidence assembled in the ordinary course of 1-800 Contacts’ business, Dr. Evans determined that 40% of customers who would leave 1-800 Contacts in response to a price increase would go to other online retailers. F. 461, 464. The principal data relied upon by Dr. Evans to derive this number as his diversion ratio was from a January 2013 1-800 Contacts presentation titled, “Where’s the love? Deadfile Customer Survey.” This survey reported that, of those customers who are unlikely to buy from 1-800 Contacts for their next purchase, 40% reported they would purchase from an online retailer other than 1-800 Contacts. F. 462. Dr. Evans bolstered his selection of 40% as the most reasonable estimate of a diversion ratio from 1-800 Contacts to other online retailers after reviewing other evidence regarding lost sales and concluding that other data provided consistent estimates. F. 464 (citing data indicating 26% or 34% switched from 1-800 Contacts to other online retailers; presentation reporting “[p]rice-driven lapsed are more likely to move to another online player” and showing 50% of price-driven lapsed shifting to other online retailers; survey reporting that of former customers who have purchased elsewhere and self-report that they will not make their next purchase from 1-800 Contacts, 38% say they will make their next purchase from another online supplier).

Respondent correctly argues that consumers can switch between firms for reasons other than price, including service and convenience, and that the data relied upon by Dr. Evans did not convey what consumers would do in response to a price increase. RB at 85-86. Indeed, Dr. Evans did not know if the survey on which he relied asked consumers what they would do if

1-800 Contacts raised prices. F. 463. Thus, Dr. Evans relied upon switching data that did not directly measure diversion from 1-800 Contacts to other online retailers.

Based on evidence that suggested that a large share of customers at other online retailers previously shifted from 1-800 Contacts to those retailers to get better prices, and his assumption that those customers would presumably shift back to 1-800 Contacts if prices at all other online retailers rose, Dr. Evans assumed that 40% of customers who would leave other online retailers in response to a price increase would go to 1-800 Contacts. F. 466.

Using 40% as his diversion ratio, Dr. Evans calculated that a hypothetical monopolist would find it profitable to impose a SSNIP of 12.1% (F. 473), which is well in excess of the 5% threshold that the antitrust agencies typically use in identifying a relevant market. Merger Guidelines § 4.1.2. Dr. Evans further opined that because a hypothetical monopolist consisting of all online retailers of contact lenses could profitably increase prices by more than 5%, this indicates that physical retailers of contact lenses do not provide sufficiently strong substitutes to prevent a SSNIP. CX8006 (Evans Expert Report at 124 ¶ 269).

Respondent's expert, Dr. Murphy, acknowledged that documents provided by 1-800 Contacts show a wide range of lost sales diverted from 1-800 Contacts to other online retailers, with some documents reporting that as few as 17% of 1-800 Contacts' former customers have substituted to other online suppliers, but other documents reporting as many as 40% or 50% of 1-800 Contacts' former customers would purchase from an online retailer other than 1-800 Contacts. F. 469. Dr. Murphy contended that the appropriate diversion ratio is 17%, based on a different slide in the presentation titled, "Where's the love? Deadfile Customer Survey," which reported that for those customers whose last purchase was not from 1-800 Contacts, 49% reported their most recent contact lens purchase was from an eye doctor and 17% reported their most recent contact lens purchase was from another online supplier. F. 468, 470. Dr. Murphy's reliance on a high percentage of 1-800 Contacts' customers who made purchases from ECPs compared to those who switch to other online sellers is not an appropriate diversion ratio because it does not rely on customers who are actually lost – i.e., those customers who cycle between buying from ECPs when they require a new prescription and buying from 1-800 Contacts when they need a refill. F. 471-472. Furthermore, Dr. Murphy acknowledged that using some of the

other surveys discussed by Dr. Evans, which suggested a diversion ratio of either 26% or 34%, would support a finding that a SSNIP would be profitable. F. 460.

Respondent also tries to impeach Dr. Evans' critical loss analysis by asserting that a hypothetical monopolist consisting of 1-800 Contacts and all ECPs could also profitably raise prices by more than the 5% threshold set forth in the Merger Guidelines. RFF 572 (citing RX0739 (Murphy Expert Report at 0079, 0110); Murphy, Tr. 4164-65). The relevance of this conclusion is questionable, as such a candidate market does not include any of the parties to the Challenged Agreements other than 1-800 Contacts, and thus would not enable an assessment of whether 1-800 Contacts and the parties to the Challenged Agreements could profitably raise prices by suppressing advertising. See CX8009 (Evans Rebuttal Expert Report at 056-57 ¶¶ 94-96). As explained in *H&R Block*, "courts correctly search for a 'relevant market' – that is a market relevant to the particular legal issue being litigated." *H&R Block*, 833 F. Supp. 2d at 64 (citing 5c Phillip E. Areeda & Herbert Hovenkamp, *Antitrust Law* (hereinafter, "Areeda & Hovenkamp"), ¶ 533c, at 254 (3d ed. 2007)). Furthermore, even if a critical loss analysis confirms multiple relevant markets, this does not undermine an expert's reliance on a critical loss analysis to validate a narrower market. See *H&R Block*, 833 F. Supp. 2d at 64.

In light of the shortcomings of the switching data and the fact that the SSNIP test can confirm multiple relevant markets, Dr. Evans' critical loss analysis is not deemed to be conclusive. However, it is another data point that tends to confirm the evidence in this case that the proper relevant market is online retailers of contact lenses.

ii. Unilateral pricing policies

Dr. Evans supported his relevant market definition by analyzing data obtained from a real-world "natural experiment," in which online retailers were forced to raise their prices as a result of several manufacturers' implementation of unilateral pricing policies ("UPPs"). See F. 476-487. In 2014, major contact lens manufacturers prohibited retailers from reselling certain of their products at prices below specified levels. F. 476. Because UPPs set a price floor for covered products, discount sellers (online and club stores) had to increase their prices substantially, by roughly 20 to 25%, on many of the affected products. F. 479. With the exception of club stores, physical retailers were already largely pricing close to or above the

levels required by Johnson & Johnson's UPP, so their prices did not change substantially. F. 480.

Dr. Evans explained that because the discount sellers' (online and club stores) price increases above the 5% threshold of the SSNIP test following the UPP were profitable, "the physical retailers were not a sufficiently significant constraint to prevent the profits [of the discount sellers] from going up as a result of the price increase" and thus the physical retailers are not in the relevant market. F. 485. Dr. Evans concluded that the "natural experiment" of the UPP-mandated price increase is evidence that a hypothetical monopolist consisting of online sellers and club stores could profitably increase its prices above the 5% threshold of the SSNIP test and this implies that discount sellers represent a relevant market. F. 486.

Dr. Murphy criticized Dr. Evans' conclusions on the bases that (1) the UPP affected the prices charged by online retailers other than 1-800 Contacts more than it affected the prices charged by 1-800 Contacts; and (2) the UPP affected the prices charged by online retailers and also by club stores. Murphy, Tr. 4172-73. Dr. Murphy's first criticism, that the UPP mandated price increases are uninformative because they did not apply uniformly to all online contact lens sellers, ignores standard economic practice for defining a market. Merger Guidelines § 4.1.1 ("[The hypothetical monopolist] test requires that a hypothetical profit-maximizing firm, not subject to price regulation, that was the only present and future seller of those products ("hypothetical monopolist") likely would impose at least a small but significant and non-transitory increase in price ("SSNIP") on at least one product in the market, including at least one product sold by one of the merging firms.")). Dr. Murphy's second criticism, that the UPP mandated price increases are uninformative because they affected prices of not only online retailers, but also of club stores, ignores the evidence that there is little substitution between online sellers of contact lenses and club stores. CX8006 (Evans Expert Report at 127-28 ¶ 276); F. 449-450.

As Dr. Evans explained, the candidate market tested by the UPP natural experiment included club stores; thus the results of the experiment, viewed alone, did not allow the exclusion of club stores from the relevant market. F. 487. Nevertheless, the UPP does further demonstrate

that physical retailers, other than club stores,²⁴ are not close substitutes for online sellers of contact lenses.

e. Summary

Considering all the evidence collectively, Complaint Counsel has established that the relevant market in which to analyze the effects of the challenged conduct in this case is the online sale of contact lenses in the United States. The analysis next turns to anticompetitive effects in this market.

E. Anticompetitive Effects

1. Overview

Complaint Counsel contends it has established a *prima facie* case that the Challenged Agreements are anticompetitive in three alternative ways. First, Complaint Counsel argues that the Challenged Agreements are presumptively anticompetitive as “inherently suspect” advertising restraints and/or bid rigging agreements. Second, Complaint Counsel argues that it has demonstrated actual anticompetitive effects in the form of direct evidence of harm to consumers and harm to search engines. Third, Complaint Counsel argues that the parties to the Challenged Agreements collectively have market power in the relevant market and that the nature of the restraints makes it likely that the Challenged Agreements will result in anticompetitive effects.

As set forth below, the preponderance of the evidence in this case supports a finding of actual anticompetitive effects in the relevant market for the sale of contact lenses online. Accordingly, this Initial Decision need not, and does not, determine whether Complaint Counsel has established a *prima facie* case under its alternative theories of presumed anticompetitive effects or market power. *See Realcomp*, 635 F.3d at 827-28 (declining to rule on the Commission’s application of inherently suspect analysis, and affirming the Commission’s holding that where anticompetitive effects are proven, market power need not be shown).

²⁴ As described above, club stores such as Costco do not significantly constrain online contact lens retailers. F. 449 (online retailers do not price against club stores); F. 450 (1-800 Contacts excludes club stores from its price matching).

2. Context for the Challenged Agreements

A rule of reason analysis includes “looking to the circumstances, details, and logic of a restraint.” *Cal. Dental Ass’n*, 526 U.S. at 781. *See also Realcomp*, 635 F.3d at 825 (noting that a rule of reason analysis may include an analysis of “the facts peculiar to the business, the history of the restraint, and the reasons why it was imposed”) (citations omitted). The context and circumstances surrounding a restraint are examined, “not because a good intention will save an otherwise objectionable regulation or the reverse; but because knowledge of intent may help the court to interpret facts and to predict consequences.” *Am. Needle*, 560 U.S. at 203 n.10 (quoting *Board of Trade of Chicago*, 246 U.S. at 238). Moreover, there is a “well-established pattern of the Supreme Court to examine intent only in those close cases where the plaintiff falls short of proving that the defendant’s actions were anticompetitive. *See, e.g., Times Picayune Publ’g Co. v. United States*, 345 U.S. 594, 614, 97 L. Ed. 1277, 73 S. Ct. 872 (1953); *United States v. Griffith*, 334 U.S. 100, 105, 92 L. Ed. 1236, 68 S. Ct. 941 (1948).” *Cal. Dental Ass’n v. FTC*, 224 F.3d 942, 948 (9th Cir. 2000). Because the evidence in this case proves anticompetitive effects, as shown in Section III.E.3, this Initial Decision need not, and does not, decide whether or not Respondent’s motives for the Challenged Agreements were anticompetitive.

As set forth above in Section III.A.5, the Challenged Agreements prohibit each party from bidding on each other’s trademark terms as keywords and further require each party to implement negative keywords based on the other party’s trademark terms, in order to prevent ads from being matched to a bid on a generic keyword. Thus, the design of the agreements was to prevent the appearance of ads for competitors whenever an internet user entered a search query for a party’s company brand name. F. 684. The evidence further proves that 1-800 Contacts enforced the agreements in accordance with their design. F. 685. In addition, as the following section explains, these agreements arose within a competitive and legal context that exposes their anticompetitive nature.

a. Competitive significance

Paid search advertising in general, and paid search advertising generated by keywords

containing 1-800 Contacts' trademark terms in particular ("trademark paid search"), are competitively significant in the sale of contact lenses online, as explained below.

i. Paid search advertising generally

Paid search advertising is an important method for marketing contact lenses online, including for increasing brand awareness and obtaining new customers. F. 497. It is a particularly important method for marketing contact lenses online because the advertising is presented to a consumer at a time when the consumer is more likely to be looking to buy. F. 498.

A consumer using search to look for products to buy online is often ready to buy. F. 562. If a company is unable to reach that consumer during that search session, it may not make the sale later. The company cannot readily substitute another type of advertising to reach that user at that time, such as bidding on a different search keyword, buying a Facebook Newsfeed ad, or buying a banner ad on the Yahoo homepage, "because it is unlikely that the user will see that ad right before she buys." F. 562. Search advertising is a particularly efficient method of marketing for small firms because search engines provide all the necessary software for using paid search advertising for free, do not impose any entry or minimum fees for using the service, and charge advertisers only when consumers click on their ad. F. 563. Online search is one of the key methods by which consumers discover and reach vendors and compare products and services. F. 564.

Search advertising is important to 1-800 Contacts in seeking to sell contact lenses online. 1-800 Contacts earns approximately 20% of its sales from paid search advertising. F. 580. From 2004 to 2014, between [REDACTED] % of 1-800 Contacts' internet advertising budget was spent on paid search advertising each year. F. 66.

As detailed in Section II.K.1, search advertising is also important to 1-800 Contacts' competitors. The facts demonstrate that, although online contact lens retailers may use other forms of advertising, retailers deem search advertising to be much more effective in reaching potential buyers. For example, AC Lens has found that search advertising, as opposed to other marketing channels it has used, generates the most new customer orders and the most revenue, at

a cost that is consistent with AC Lens' financial goals. F. 500-501. AC Lens considers search advertising the most effective and important marketing channel that AC Lens uses to grow its business. F. 502. To AC Lens, search advertising is a particularly valuable type of advertising because it can be used to target customers who are specifically looking to purchase contact lenses. F. 503 (Mr. Clarkson of AC Lens testifying: "Search is beautiful in the sense that you get right in front of the customer who's looking to buy your product, and you don't pay unless they click on your ad. It's a wonderful thing.").

Similarly, Vision Direct advertised almost exclusively online. F. 540. Search advertising "was a major driver" in building Vision Direct's business over the years, including driving traffic to Vision Direct's website and driving new and repeat sales. F. 542-543. Web Eye Care has also used search advertising from its inception. F. 556. Web Eye Care does not engage in any advertising other than paid search advertising, including because it has determined that search advertising "drives the most traffic" and orders, and at an acceptable cost. F. 556-558. *See also* F. 523 (paid search advertising through Google and Bing constitutes the most important of LensDirect's marketing channels, and has been effective in generating growth for LensDirect); F. 528 (paid search advertising is "essential" to Lens Discounters' ability to attract new customers because it allows the company to reach customers who are seeking to purchase contact lenses online); F. 535, 537 (search advertising was the "most efficient," form of advertising for Memorial Eye, and was "critical" and "vital" to Memorial Eye's growth); F. 549-550 (search advertising was "[e]specially" important" for Walgreens at the time that it began selling contact lenses online because it helped Walgreens let people know that Walgreens sold contact lenses and was "an essential form" of advertising for Walgreens to remain competitive with other online resellers of contact lenses). Accordingly, the facts in this case support the conclusion that search advertising is a competitively significant activity.

ii. Trademark paid search

Trademark paid search has particular competitive significance in the marketing and sale of contact lenses online, as detailed in Section II.K.2, and further explained below.

Based on data provided by Google and analyzed by Complaint Counsel's expert witness, Dr. Evans, it is common for companies to pay search engines to present their ads in response to a

consumer's entering the name of another company's brand as a search request. Companies indicate to Google that they would like their ads to be presented by bidding directly on the keywords ("direct keyword bidding" or "direct bidding") or and/or bidding on generic keywords, in broad or phrase match, to allow their ads to be "matched" to a search for the other company's brand name, even though the advertiser did not bid on trademark keywords ("matched ads"). F. 651, 654-655.

During the time period from 2002 through 2016, Google served advertisements for 9 of the 14 contact lens retailers that are parties to the Challenged Agreements, as a result of those companies' direct bidding on 1-800 Contacts' trademark terms prior to entering into the agreements. F. 653. This suggests that these nine firms believed such keyword bidding to be worth the cost and that Google determined their advertisements were sufficiently relevant. F. 653. During the time period for which data on matched ads is available (January 2010 through November 2016), Google served matched ads for 5 of the 14 firms that entered into the Challenged Agreements, which suggests that Google determined the advertisements were sufficiently relevant. F. 656. Parties to the Challenged Agreements consistently testified that, absent the agreements, they would bid, or test bidding, on 1-800 Contacts' trademark terms and/or remove negative keywords from their advertising accounts, which would enable matched ads to appear in response to a search for 1-800 Contacts' trademark terms. F. 590, 595, 616, 630, 634, 635, 650.

Trademark paid search is a significant source of business for 1-800 Contacts, accounting for a large percentage of orders. F. 566. 1-800 Contacts' trademark keywords, together with the three most common generic keywords, "contacts," "contact lens," and "contact lenses," have been the largest contributors to orders for 1-800 Contacts. F. 567. Trademark paid search accounts for the substantial majority of 1-800 Contacts' new customer orders attributable to paid search advertising. F. 570. In 2015, for example, between 20 and 31% of 1-800 Contacts' initial web orders came from users searching for 1-800 Contacts' trademark terms. F. 571. 1-800 Contacts' trademark terms have higher conversion rates²⁵ than non-branded search terms. F. 573. In 2006, 2007, and 2008, trademark search generated far more orders than non-

²⁵ A "conversion" refers to a sale made over the internet. The conversion rate is the number of times a conversion occurs divided by the total number of ad clicks. F. 156.

trademark searches. F. 572. Moreover, trademark paid search generates direct traffic to the 1-800 Contacts website, which accounts for approximately 70 to 75% of 1-800 Contacts' orders. F. 577.²⁶ Furthermore, 1-800 Contacts sees direct traffic to 1-800 Contacts' website as much less susceptible to competing advertising or offers by other retailers. F. 577. Accordingly, 1-800 Contacts had an interest in preventing advertisements for competing retailers from appearing in response to a search for 1-800 Contacts' trademark terms.

Indeed, as explained further in Section III.E.3.b, 1-800 Contacts clearly recognized a pattern of decreased sales when competitor ads appeared in response to an internet search for 1-800 Contacts' trademark terms. F. 711. For example, an August 7, 2007 analysis by 1-800 Contacts' marketing manager Bryce Craven estimated that 1-800 Contacts may have lost around \$426,000 in revenue to Lens.com, year to date, as a result of Lens.com ads appearing in response to searches for 1-800 Contacts' trademarks. F. 715. Similarly, 1-800 Contacts noted that, for the week ending July 28, 2007, it received fewer orders than the previous week on its most popular trademark keyword, 1800contacts, which Mr. Craven attributed to "probably . . . [losing] some traffic to Lens.com, LensWorld, Vision Direct and a few other advertisers" who were "consistently showing up on" the term 1800contacts. F. 714.

Moreover, displaying an ad in response to a search for 1-800 Contacts' trademark terms is an important method by which lower-priced online contact lens retailers compete with 1-800 Contacts for customers. F. 565. Based on the comScore dataset of searches by users for the time period July 2013 through July 2016 (the "comScore dataset"²⁷) analyzed by Complaint Counsel's expert witness, Dr. Susan Athey, 17% of search queries were for 1-800 Contacts' trademark terms. F. 657. The volume of searches for 1-800 Contacts terms in the comScore dataset was similar in size to the collective volume of searches for the top three generic terms ("contact," "contact lenses," and "contacts"). F. 658-659. The 1-800 Contacts search term is the largest,

²⁶ Sources of direct traffic identified by 1-800 Contacts include email, typed URL/Bookmark, paid search on 1-800 Contacts trademark, and mobile applications. F. 577.

²⁷ ComScore is a company that collects data from a panel of internet users through installing software on consumers' devices to track their behavior, including collecting information on the screens that users see when they perform searches. F. 700. The data that Dr. Athey received from comScore consisted of detailed online search information from 377,002 internet users in the United States from July 11, 2013 through August 14, 2016, covering all the search queries those users performed on all major search engines and reported at a query-by-query level. F. 701.

single brand name search term, according to the comScore data analyzed by Dr. Athey. F. 660. This makes bidding on 1-800 Contacts' trademark terms extremely attractive to lower-priced competitors, as an opportunity to make consumers aware of lower-priced alternatives. F. 660. In addition, based on data analyzed by Dr. Athey, firms that are currently bidding on "1-800 Contacts," have a higher conversion rate than for other search terms. F. 661. As Dr. Athey opined: "This makes sense because any online retailer of contact lenses other than 1-800 Contacts is generally going to have lower prices and be a tougher competitor for the online consumer searching for 1-800 Contacts." F. 661.

Testimony and documents from online contact lens sellers, detailed in Section II.K.1.c, confirm Dr. Athey's opinions as to the value of advertising in response to search queries for 1-800 Contacts' trademark terms. For example, according to LensDirect's chief executive officer, Ryan Aloviz, bidding on 1-800 Contacts terms "absolutely" drove a significant amount of business, given the large volume of searches for 1-800 Contacts. F. 606. As Mr. Aloviz explained: "A lot of people search for '1800contacts' and we want to be there when they do. . . . We hope to get those interested people to become customers of LensDirect because we believe we're offering . . . a better price for the same product." F. 607; *see also* F. 603 (LensDirect believes that its message of "Same Contacts, Better Prices" will appeal to someone searching for 1-800 Contacts). In 2016, keyword terms related to 1-800 Contacts generated revenue for LensDirect and had "high conversion rates." F. 605. Bidding on 1-800 Contacts' trademark terms has value for LensDirect, even if the consumer does not click on the LensDirect ad, because appearing can improve LensDirect's brand visibility. F. 609. As LensDirect's chief executive officer stated: "[T]he more times people see LensDirect, the better chance there is of them becoming a customer one day." F. 609.

During the time when Web Eye Care was bidding on 1-800 Contacts' trademark terms, Web Eye Care's click-through rates and conversion rates were higher on searches for 1-800 Contacts than its usual rates. The chief executive officer of Web Eye Care explained: "1-800 Contacts is the biggest company out there [i]n the on-line space. They're also the most expensive company in the online space. . . . [W]e feel that we can offer . . . a much better value to the customer from a pricing perspective." F. 646. Similarly, Lens Discounters found that bidding on 1-800 Contacts' terms generated a good amount of traffic and orders, and that "the

cost per conversion for those terms was low, and [Lens Discounters'] conversion rates were good." F. 611. According to its chief operating officer, Lens Discounters attracted customers who used 1-800 Contacts terms in their searches because Lens Discounters' prices were better than 1-800 Contacts' prices. F. 611. *See also* F. 641-642 (bidding on 1-800 Contacts' trademark terms brings "a lot of people" to Walmart's contact lens website and, together with bidding on the terms of other competitors, generated 6% of Walmart's contact lens orders).

Furthermore, 1-800 Contacts recognized in its internal documents that the display of competitor ads in response to a search for 1-800 Contacts' trademark terms enabled its competitors to gain sales and market share. *E.g.*, F. 720 (Board of Directors Meeting materials noting that Lens.com was "using 1-800 trademark triggered ads successfully to gain market share, as their primary marketing tool for growth. Since 2004, their sales increased 475%, making Lens.com the third largest online seller."). *See also* F. 713-731.

It is valuable for a lower-priced competitor to display an advertisement in response to a search for 1-800 Contacts' trademark terms via matched ads, apart from whether a competitor directly bids on 1-800 Contacts' trademark terms. For example, Memorial Eye did not bid on the keyword "1-800 Contacts" in search advertising auctions. Nevertheless, ads for Memorial Eye were displayed in response to search queries for 1-800 Contacts' trademark terms as a result of Memorial Eye's bidding on generic terms (such as "contacts") in broad match or phrase match. F. 617. Based on Google data analyzed by Dr. Evans, between January 2010 and December 2011, Google showed Memorial Eye's text ads on approximately 6 million search results pages generated by search queries related to 1-800 Contacts brand name keywords and Memorial Eye's ads appeared on almost half of the search results pages generated by search queries that included 1-800 Contacts brand name. F. 618. Memorial Eye found that its online businesses received a significant number of conversions and new customers as a result of its ads appearing in response to generic keywords being broad-matched and phrase-matched to searches for 1-800 Contacts' trademark terms. F. 619. This is consistent with Google data analyzed by Dr. Evans, which showed that Memorial Eye had a higher click-through rate on ads displayed for 1-800 Contacts search queries than for other search queries and that Memorial Eye's conversion rate was almost twice as high for 1-800 Contacts' search queries than non-1-800 Contacts search queries. F. 620.

The conclusion that advertising in response to search queries for 1-800 Contacts' trademark terms is competitively significant is further reinforced by data from the Google AdWords, including the AdWords keyword planner tool ("Google AdWords Keyword Planner"). The Google AdWords Keyword Planner is a tool that Google provides, which companies engaged in search advertising can use to research new keywords to add to their account. F. 229. The Google AdWords Keyword Planner allows an advertiser to input keywords and then provides the advertiser with estimates of the upper limit of the number of ad impressions and clicks (as well as other information such as cost-per-click and, at times, expected number of orders or conversions) that would result from that advertiser bidding on those keywords. F. 230. When Glen Hamilton, senior manager of Walgreens, input the keywords that were prohibited by Walgreens' settlement agreement with 1-800 Contacts, he concluded from the results that the return on investment in bidding on those keywords would justify a cost of approximately [REDACTED] extra per month. F. 634-635. Similarly, when Mr. Hamilton input the keywords that were prohibited by Vision Direct's settlement agreement with 1-800 Contacts into the Google AdWords Keyword Planner, the results indicated that such keywords would generate a significant volume of clicks and that both the cost-per-click and the conversion rate would be lower than Vision Direct's average cost per order. F. 629-631.²⁸ *See also* F. 662-680 (data from Google AdWords accounts of Lens Direct for the time period from January 1, 2010 through December 31, 2016, and of Memorial Eye for the time period from January 1, 2005 through December 31, 2013, showing that search queries for 1-800 Contacts' trademark terms led to clicks and conversions for these companies).²⁹

b. Trademark litigation

Prior to 2004, Google permitted a trademark owner to prevent other companies from using their trademark as keywords in AdWords advertising auctions and in the text of

²⁸ As Walgreens' senior manager for online marketing, Mr. Hamilton was responsible for managing paid online search advertising for Walgreens and for Vision Direct, which Walgreens acquired in 2011. F. 539.

²⁹ Respondent contends that the court excluded Google AdsWords account data as inadmissible. *See, e.g.*, RRCCFF 643. This is incorrect. Eric Holbrook of Memorial Eye was not permitted to read statistics from a spreadsheet of data from Memorial Eye's Google AdWords account, which he did not himself generate, because Complaint Counsel could not provide a proper evidentiary foundation for his testifying from the spreadsheet. Tr. 1989-90. This ruling did not exclude the Google AdWords spreadsheets themselves, CX1625-1661, which are in evidence by stipulation of the Parties, for all purposes. JX0002 (Joint Stipulations on Admissibility of Exhibits, May 12, 2017).

advertisements. F. 287. In early 2004, Google determined that its trademark policy, by restricting the AdWords auction, had prevented users from seeing relevant ads. F. 288. Google concluded that users who conducted an internet search for the trademark terms of one trademark owner may be interested in information from competing firms. F. 289. Thus, in April 2004, Google changed its U.S. trademark policy to allow third parties to bid on trademarks, including on competitors' trademarks, as keywords in AdWords advertising auctions. F. 290.

At the time that Microsoft launched the Bing Network in 2009, Microsoft did not permit advertisers to bid on keywords consisting of a trademark owned by a third party. F. 296. In 2011, Bing changed its policy and began permitting advertisers to bid on competitors' trademarks as keywords. F. 298.

In 2006, 1-800 Contacts' internal marketing personnel began regularly monitoring competitors' advertisements appearing in response to searches for 1-800 Contacts' trademark terms. F. 319. 1-800 Contacts provided this information to 1-800 Contacts' legal personnel and outside counsel in trademark monitoring reports ("trademark monitoring reports"). F. 319. 1-800 Contacts' outside counsel for trademark matters, Bryan Pratt and Mark Miller, reviewed trademark monitoring reports to evaluate potential infringement, potential misappropriation of goodwill, and similar issues, for the purpose of providing legal guidance to 1-800 Contacts. F. 320-321. Mr. Pratt and/or Mr. Miller would conduct an analysis of pertinent factors to determine if there was a good faith basis for 1-800 Contacts to allege that its competitors were engaged in trademark infringement. F. 324.

Between 2005 and 2010, 1-800 Contacts sent cease and desist letters to multiple online contact lens retailers whose advertisements appeared in response to a search for 1-800 Contacts' trademarks. F. 325. In these letters, Respondent took the position that purchasing one of 1-800 Contacts' trademarks, or what it called a "confusingly similar variation thereof," or to otherwise trigger a link to a "directly competitive" website, when an internet user had entered a search query for 1-800 Contacts' trademark terms, "may constitute trademark infringement under state and federal law in that it is likely to cause initial interest confusion, or likely to cause the public to mistakenly assume that your business activities originate from, are sponsored by, or are in some way associated with [1-800 Contacts]." F. 326. Cease and desist letters went to, among

others, AC Lens, Contact Lens King, Lensfast, Lens.com, Lens Discounters, and Memorial Eye. F. 325.

Between 2007 and 2010, 1-800 Contacts filed complaints in federal court against AC Lens, Contact Lens King, Empire Vision, EZ Contacts USA, Lensfast, Lenses for Less, Lens.com, LensWorld, Memorial Eye, Standard Optical, Tram Data (d/b/a ReplaceMyContacts.com), Vision Direct,³⁰ Walgreens, and Web Eye Care, asserting claims for trademark infringement under 15 U.S.C. § 1114.³¹ F. 328-330. The Settlement Agreements at issue in this proceeding grew out of the foregoing litigation. F. 343. *See* Section III.A.5.³² In general, the complaints alleged that the defendant contact lens seller had purchased 1-800 Contacts' trademarks "and/or confusingly similar variations or misspellings thereof" as keywords to trigger the defendant's paid search advertising and/or failed to implement negative keywords to prevent the triggering of defendant's advertisements in response to an internet search query for 1-800 Contacts; and that the defendant's use of the trademarks "caused, and will continue to cause, confusion and mistake, including initial interest confusion, as to the source or origin" of the defendant's products, and "is likely to falsely suggest a sponsorship, connection,

³⁰ On October 9, 2002, 1-800 Contacts filed a complaint in federal court against Vision Direct and WhenU.com, Inc., alleging trademark infringement, among other causes of action, in connection with alleged "pop-up" advertisements for Vision Direct appearing when internet users visited the www.1800contacts.com website. F. 301. Pop-up ads are triggered by software in response to specific keywords or types of websites by which an ad will pop-up in front of another website when the consumer browses to that website. F. 301 n.7. That complaint did not contain any allegations regarding the use of 1-800 Contacts' trademarks as keywords to trigger search engine advertisements. F. 301. However, in June 2004, after negotiations, 1-800 Contacts and Vision Direct resolved their dispute by executing a settlement agreement that included provisions related to pop-up advertising and use of trademark keywords. F. 306. Between June 2004 and September 2007, 1-800 Contacts and Vision Direct had an "established practice" of using negative keywords to ensure no ads would show up on branded queries, as a result of matched ads for bids on generic keywords. F. 310. In October 2007, Vision Direct represented to 1-800 Contacts that Vision Direct did not believe that the 2004 Vision Direct settlement agreement required Vision Direct to use negative keywords to prevent its ads from appearing on searches for 1-800 Contacts' trademarks. F. 311. 1-800 Contacts sued Vision Direct shortly thereafter, and reached a settlement in 2009. F. 328-329, 345-346.

³¹ The complaints typically included additional causes of action, such as state and common law unfair competition (Utah Code Ann. § 13-5-1 *et seq.*), misappropriation, and unjust enrichment. F. 330.

³² The settlement agreement with Coastal Contacts arose in connection with a federal court complaint filed by 1-800 Contacts on March 18, 2004. F. 312-314. That complaint alleged trademark infringement, among other causes of action, in connection with alleged pop-up advertisements for Coastal Contacts appearing when internet users visited the www.1800contacts.com website. Like the 2002 complaint against Vision Direct, the complaint against Coastal Contacts did not contain any allegations regarding the use of 1-800 Contacts' trademarks as keywords to trigger search engine advertisements. F. 312. In October 2004, the parties settled the litigation. F. 314.

license, endorsement or association” by or with 1-800 Contacts. F. 331.³³ Thus, 1-800 Contacts took the position, consistent with that which it took in its cease and desist letters, that it was a violation of 1-800 Contacts’ trademark rights for a competitor to cause its ad to appear when a user entered a search query for 1-800 Contacts’ trademark terms, because such appearance, regardless of the text of the ad, is likely to confuse the public as to “sponsorship” or “affiliation.”

By way of background, the elements of a trademark infringement claim under § 43(a) of the Lanham Act, 15 U.S.C. § 1125(a), are:

(1) that the plaintiff has a protectable interest in the mark; (2) that the defendant has used ‘an identical or similar mark’ in commerce; and (3) that the defendant’s use is likely to confuse consumers. . . . An infringement claim under § 32 [15 U.S.C. § 1114(1)(a)], has nearly identical elements The central question in a typical infringement action under either § 32 or § 43(a) is whether the defendant’s use of the plaintiff’s mark is likely to cause consumer confusion.

1-800 Contacts, Inc. v. Lens.Com, Inc., 722 F.3d 1229, 1238 (10th Cir. 2013). *See also Scott Fetzer Co. v. House of Vacuums, Inc.*, 381 F.3d 477, 483 (5th Cir. 2004) (holding that to prove trademark infringement, plaintiff must show use is “likely to cause confusion among consumers as to the source, affiliation, or sponsorship” of products or services, citing 15 U.S.C.A. § 1114(1); *id.* § 1125(a)).

In the initial years of paid search advertising litigation, which began in 2004, the issue of whether the purchase of trademark keywords to generate paid search advertising constituted a “use in commerce” for trademark law purposes was unsettled. F. 333. Eventually, after the 2009 decision by the Second Circuit Court of Appeals in *Rescuecom Corp. v. Google, Inc.*, 562 F.3d 123, 127 (2d Cir. 2009), the circuit courts came to agree that keyword advertising programs constitute a “use in commerce” under trademark law, because search engines make trademarks available for purchase and display them in search results. The focus of infringement analysis shifted to the issue of the likelihood of consumer confusion from that use, including in particular,

³³ Some of the lawsuits contained additional allegations of other infringing conduct. F. 332 (allegations against EZ Contacts USA and LensWorld included “wholesale copying of portions of [1-800 Contacts’] website, including [1-800 Contacts’] Marks”; allegations against Lens.com included using 1-800 Contacts marks in Lens.com ads).

a type of confusion known as initial interest confusion. F. 333.³⁴ However, Respondent's expert witness on trademark law, Howard Hogan, is unaware of any United States court holding one way or the other as to whether the appearance of an ad in response to a trademark search due to broad matching to the advertiser's purchase of a generic keyword constitutes a use in commerce. F. 336. Moreover, determining whether a use creates a likelihood of confusion is a question of fact, requiring a determination of multiple factors. F. 335. These factors may include: "(1) similarity of the marks, (2) intent of the alleged infringer, (3) evidence of actual confusion, (4) similarity of the competing parties' services and manner of marketing, (5) degree of consumer care, and (6) strength of the marks." *Lens.com*, 722 F.3d at 1243.

Respondent had the opportunity to test its trademark litigation position in its lawsuit against *Lens.com*, filed on August 13, 2007. F. 330. However, on *Lens.com*'s motion for summary judgment in that case, the district court held that, as to the advertisements in evidence that did not use 1-800 Contacts' trademark terms in ad text, 1-800 Contacts failed to raise a triable issue as to likelihood of confusion. *1-800 Contacts, Inc. v. Lens.com*, 755 F. Supp. 2d 1151, 1181-82 (D. Utah Dec. 14, 2010). As to 1-800 Contacts' additional claim that *Lens.com* breached an oral argument not to use 1-800 Contacts' trademark terms as keywords and to implement negative keywords, it is noteworthy that the district court concluded that no enforceable agreement was entered into between the parties in this regard, as a matter of law. *Id.* at 1189. The court reasoned, in part:

Were this actually an agreement entered into by the parties, the court questions whether it would survive an antitrust challenge. [1-800 Contacts] does not seek merely to preclude usage of its trademark. Instead, it wants to obliterate any other competitor advertisement from appearing on a search-results page when a consumer types in '1800Contacts' as a search term or some variation of it. This is disturbing given that broad matching of the generic term 'contacts' could trigger an advertisement if a consumer enters the search term '1800Contacts.' A trademark right does not grant its owner the right to stamp out every competitor advertisement.

Lens.com, 755 F. Supp. 2d at 1188.

³⁴ Initial interest confusion "occurs when the defendant uses the plaintiff's trademark in a manner calculated to capture initial consumer attention, even though no actual sale is finally completed as a result of the confusion." *Network Automation, Inc. v. Advanced Sys. Concepts*, 638 F.3d 1137, 1144 (9th Cir. 2011) (quoting *Nissan Motor Co. v. Nissan Computer Co.*, 378 F.3d 1002, 1018 (9th Cir. 2004)).

On July 16, 2013, the Tenth Circuit Court of Appeals upheld the district court’s decision granting Lens.com’s summary judgment motion except with respect to issues regarding Lens.com’s potential secondary liability for its affiliates. The appellate court did not resolve whether or not initial interest confusion could arise, as a matter of law, from an ad triggered by a trademark keyword where the trademark was not used in the ad text. *Lens.com*, 722 F.3d 1229. However, the court was skeptical of the notion that displaying competing advertisements when a consumer has searched for 1-800 Contacts is likely to confuse consumers, within the meaning of trademark law. The court stated:

Perhaps in the abstract, one who searches for a particular business with a strong mark and sees an entry on the results page will naturally infer that the entry is for that business. But that inference is an unnatural one when the entry is clearly labeled as an advertisement and clearly identifies the source, which has a name quite different from the business being searched for.

Id. at 1245.

c. Summary of context

Trademark owners are often advised to obtain information as to how their marks are being used and to prepare appropriate steps to enforce their rights and that the failure to police third-party use of a trademark could lead to a finding by a court that the mark is no longer enforceable. F. 317. However, 1-800 Contacts engaged in its trademark enforcement efforts with full awareness of the competitive significance of advertising in response to a user’s search query for 1-800 Contacts’ brand name, and the negative effect that the appearance of competitors’ advertisements had on Respondent’s “bottom line.” F. 317-324, 710-732. *See also* Section III.E.3.b. The analysis turns next to anticompetitive effects in the relevant market.³⁵

3. Actual Anticompetitive Effects

a. Introduction

Advertising “serves to inform the public of the availability, nature, and prices of products and services.” *Bates v. State Bar of Arizona*, 433 U.S. 350, 364 (1977). As explained below, the

³⁵ Respondent’s argument that its trademark rights justify the Challenged Agreements is addressed in Section III.F.3.

Challenged Agreements restricted advertisements for the sale of contact lenses on the internet by prohibiting competitors from presenting paid advertisements on the search engine results page in response to searches for 1-800 Contacts' trademarks.

Restricting the availability of information in the marketplace is an anticompetitive harm. *Indiana Fed'n*, 476 U.S. at 461-62. As the Supreme Court explained in *Indiana Federation*:

A concerted and effective effort to withhold (or make more costly) information desired by consumers for the purpose of determining whether a particular purchase is cost justified is likely enough to disrupt the proper functioning of the price-setting mechanism of the market that it may be condemned even absent proof that it resulted in higher prices or . . . the purchase of higher priced services, than would occur in its absence.

Indiana Fed'n, 476 U.S. at 461-62; *see also id.* at 459 (noting that an agreement to withhold information from consumers impedes the ordinary "give and take" of the marketplace) (quoting *National Society of Professional Engineers v. United States*, 435 U.S. 679, 692 (1978)).

Thus, in *Indiana Federation*, proof that concerted action by dentists to deny requests from patients' insurers to submit patient x-rays resulted in insurers being unable to obtain compliance with their requests in two counties where the Federation dentists predominated was held to constitute sufficient proof of actual adverse effects. *Id.* at 461. In *Realcomp*, policies restricting the dissemination of discount broker listings to public websites were found to have actual anticompetitive effects where the evidence showed significantly fewer discount listings in the Realcomp Multiple Listing Service ("MLS") after the policies went into effect. *Realcomp*, 2009 FTC LEXIS 250, at *92-93. *See also Realcomp*, 635 F.3d at 831-32 (holding that reduction in discount listings constituted "substantial consumer harm"); *In re Massachusetts Board of Registration in Optometry*, 1988 FTC LEXIS 34, at *15 (1988) ("Restrictions on truthful advertising for professional services are inherently likely to produce anticompetitive effects. '[T]he nature or character of these restrictions is sufficient alone to establish their anticompetitive quality.'") (quoting *Am. Med. Ass'n*, 94 F.T.C. 701, 1030 (1979)).

It is clear from the foregoing authorities that, contrary to Respondent's arguments (RB at 98-105), restricting advertising can constitute a consumer harm and form the basis for a finding of anticompetitive effects, and it is not necessary to also prove that prices increased (*Indiana*

Fed'n, 476 U.S. at 461) and/or that output decreased.³⁶ As the Court of Appeals for the Ninth Circuit has held, a defendant's "contention that the plaintiffs' claim fails because they did not show a decrease in output in the [relevant] market is simply incorrect. . . . Although output reductions are one common kind of anticompetitive effect in antitrust cases, a 'reduction in output is not the only measure of anticompetitive effect.'" *O'Bannon v. NCAA*, 802 F.3d 1049, 1070 (9th Cir. 2015) (quoting *Areeda & Hovenkamp* ¶ 1503b(1)).

In any event, as further discussed below, the evidence in this case proves that the Challenged Agreements significantly restricted advertising and also that at least some consumers have paid, or will pay, prices that are higher than they would otherwise be, absent the Challenged Agreements. *See NCAA v. Bd. of Regents*, 468 U.S. 85, 107 (1984) (the appropriate question is whether prices are higher "than they would otherwise be" absent the restraint).

b. Harm to consumers and competition

The flow of information between buyers and sellers is an essential part of the market system. Buyers have to find out who they can buy from and on what terms. F. 681. Sellers have to let consumers know how to find them and what they have to offer and on what terms. F. 681. Restrictions on advertising among rivals impair competition and result in harm to consumers by interfering with the flow of information from sellers to buyers and raising the costs to consumers of finding the most suitable offering, which, in turn, leads to higher transaction prices. F. 682.

Contact lenses are a commodity product, and in commoditized markets, price takes on more significance in the purchasing decision. F. 24-27, 733-734. Data from comScore regarding the text of advertisements displayed in response to particular search queries between 2013 and 2016, analyzed by Dr. Athey, shows that 36% of ads displayed in response to searches for

³⁶ Respondent asserts that *California Dental* rejected the argument that anticompetitive effects can be based on a decline in advertising, when the Court stated, "[t]he question is not whether the universe of possible advertisements has been limited." The Supreme Court made this comment in the context of criticizing the Court of Appeals' assertion that the advertising restrictions at issue were a "form of output limitation." *Cal. Dental Ass'n*, 526 U.S. at 776 ("[T]he relevant output for antitrust purposes here is presumably not information or advertising, but dental services themselves. The question is not whether the universe of possible advertisements has been limited (as assuredly it has), but whether the limitation on advertisements obviously tends to limit the total delivery of dental services."). This language does not support the proposition that advertising reductions cannot constitute a consumer harm for purposes of determining anticompetitive effects. In addition, Complaint Counsel does not contend that the Challenged Agreements reduced the output of contact lenses.

contact lens retailers' brand names contained price information. F. 701-703. The fact that firms advertise price indicates that sellers believe and have evidence that price information is important to consumers. F. 736. Indeed, 1-800 Contacts was aware that contact lens purchasers act on price information contained in internet advertisements, including by purchasing from lower-priced competitors (F. 704-709), as discussed further below.

The Challenged Agreements disrupted the ordinary give and take of the marketplace by restricting competing advertisements from appearing in response to an internet search for the trademark terms of the parties to the Challenged Agreements. The Challenged Agreements interfere with the flow of material information between buyers and sellers, including price information, which “disrupt[s] the proper functioning of the price-setting mechanism.” *Indiana Fed’n*, 476 U.S. at 461-62. Furthermore, as further detailed in Section III.E.2, paid search advertising is an important method of competing for the sales of contact lenses online, including for increasing brand awareness and obtaining new customers. F. 497. Search advertising is an important method for marketing contact lenses online, because, among other reasons, the advertising is presented to a consumer at a time when the consumer is more likely to be looking to buy. F. 498. However, as noted above, the design of the advertising restrictions in the Challenged Agreements was to prevent competing advertisements from appearing in response to a search for a party’s trademark terms. F. 684. Furthermore, 1-800 Contacts enforced the restrictions in the Challenged Agreements to prevent such advertisements from appearing in response to consumers’ searches for 1-800 Contacts’ trademark terms. F. 685.

Moreover, the evidence shows that the Challenged Agreements were effective in restricting advertisements from competitors from appearing in response to a search for 1-800 Contacts’ trademark terms. Data provided by Google reflecting keyword bidding and ad impressions triggered thereby during the relevant time periods, analyzed by Complaint Counsel’s expert witness, Dr. Evans, shows that the competitors who had been bidding directly on 1-800 Contacts’ trademark terms before entering into the Challenged Agreements ceased bidding almost entirely after entering into the Challenged Agreements. F. 687, 689. Similarly, “matched ads” for parties to the Challenged Agreements (i.e., advertisements that are triggered in response to search that includes a 1-800 Contacts’ trademark term, through “phrase match” to a generic

term such as “contacts,” even though the advertiser did not bid on a 1-800 Contacts’ trademark term) declined substantially following the agreements. F. 688, 690.

It is more likely than not that the advertising restrictions in the Challenged Agreements have caused at least some consumers to pay more for contact lenses than they would have absent the restrictions. 1-800 Contacts’ prices are, on average, higher than its online competitors, by approximately ██████████%. F. 691-693. Yet, many consumers are not aware of the price discrepancy between 1-800 Contacts and its online competitors. F. 694. When competitors are prohibited from bidding on 1-800 Contacts’ trademark terms, the percentage of 1-800 Contacts’ orders coming from trademark paid search is not significantly subject to competition. F. 738.

Unsurprisingly, and as admissions in 1-800 Contacts’ internal documents make clear, reducing the appearance of competitor ads appearing in response to a search for 1-800 Contacts’ trademark terms tends to increase sales for 1-800 Contacts, the higher-priced competitor. F. 710. For example, in a report regarding the week of June 20, 2008, 1-800 Contacts attributed an increase in orders derived from trademark paid search as being helped in part by “LensWorld finally removing all their ads from all of [1-800 Contacts’] trademark keywords.” F. 719. *See also* F. 725 (In a 1-800 Contacts internal report, 1-800 Contacts’ senior marketing manager reported that for the week ending January 8, 2010, 1-800 Contacts achieved “an all-time record high” for orders obtained through searches for its trademark keywords, due in part to the fact that fewer advertisers were appearing on searches for 1-800 Contacts’ trademark terms that week, “which always helps improve performance.”); F. 730 (Reporting that in late August 2010, orders from new customers coming through search ads on searches for 1-800 Contacts’ trademarks “jumped to the highest level of the year,” due in part to the appearance of “fewer competitors on [1-800 Contacts’] best TM words such as *1800contacts* *1 800 contacts* and *1800 contacts*.”); F. 723 (1-800 Contacts internal report stating that for the week of March 6, 2009, “[t]here are substantially less competitors showing up on our list of monitored TM words . . . in Google[,] which is likely helping improve our TM [conversion rate] and TM order volume.”).

Similarly, as 1-800 Contacts also observed, an increase in competitor ads appearing in response to a search for 1-800 Contacts’ trademark terms tends to decrease sales for 1-800 Contacts. F. 711. For example, in a report concerning the week ending September 22, 2007,

1-800 Contacts noted a 6% week over week drop in trademark paid search orders, relating this in part to competition from Vision Direct, which had been “advertising in the 2nd position on many of [1-800 Contacts’] branded terms in Google.” F. 717. *See also* F. 718 (Reporting for the week ending April 11, 2008, that 1-800 Contacts experienced a 9% week over week decline in new customer orders through Microsoft’s search engine, and noting that this “could be a sign of increased affiliate and/or competitive trademark activity.”); F. 727 (Reporting for the week ending June 11, 2010, that 1-800 Contacts’ trademark paid search orders through Google, and click-through rates for trademark ads, “were slightly softer than [the preceding week] because of increased competition on [1-800 Contacts’] best branded terms.”).

The foregoing facts support the conclusion that the advertising restraints at issue significantly reduced informative advertising for lower-priced competitors of 1-800 Contacts and more likely than not resulted in consumers purchasing from 1-800 Contacts at higher prices than they would have paid to lower-priced competitors. This conclusion is bolstered by expert opinion of Complaint Counsel’s expert witness, Dr. Evans, that the Challenged Agreements suppressed price transparency and impaired price competition among online contact lens sellers, and ultimately harmed consumers. F. 739. *See also* F. 740 (Dr. Athey’s opinion that absent the restrictions on advertising in the Challenged Agreements, there would be more purchases from lower-priced competitors and more price-matching by 1-800 Contacts).³⁷ The greater weight of the evidence further supports Dr. Evans’ opinion that the advertising restrictions contained in the Challenged Agreements significantly impair competition for the sale of contact lenses online by prohibiting a type of advertising that is especially important for price competition among online sellers of contact lenses and for potential new entrants. F. 735. Moreover, economic modeling performed by Complaint Counsel’s expert witnesses bolsters the conclusion that the advertising restraints in the Challenged Agreements have actual anticompetitive effects, as discussed below.

c. Economic modeling

Complaint Counsel’s expert witnesses, Dr. Athey and Dr. Evans, each constructed a “but-for” world without the Challenged Agreements, to model the economic impact of the Challenged

³⁷ In response to competition from “aggressive price messaging” by other online retailers, 1-800 Contacts instituted a price matching policy, which in 2016 states: “We’ll beat any price on every product we carry by 2%.” F. 436-439.

Agreements in the relevant market. The expert reports and related testimony supporting and criticizing the economic modeling evidence have been fully reviewed and considered. A summary of the economic modeling evidence and Respondent's criticisms thereof follows.

i. Dr. Athey's model

Dr. Athey constructed a model of a "counterfactual" world to assess what would happen in the absence of the Challenged Agreements. Dr. Athey first constructed counterfactual ad layouts, based on her prediction of what ads consumers would likely see in response to conducting internet searches for 1-800 Contacts' trademark terms, absent the Challenged Agreements. F. 743. Second, Dr. Athey constructed a model of consumer click behavior, which she applied to predict how many clicks the ads in each of the counterfactual ad layouts would receive. F. 743.

Dr. Athey's counterfactual ad layouts consisted of ad layouts observed in the comScore data as having been displayed in response to internet searches for generic terms related to contact lenses, such as "contacts" or "contact lenses." F. 744. Dr. Athey explained that she used searches for generic terms to estimate the likely counterfactual ad layouts because bidding on generic keywords is not restricted by the Challenged Agreements and because, based on the comScore data, the volume of generic searches is comparable to the volume of 1-800 Contacts branded searches. F. 744. Dr. Athey then modified the generic search ad layouts by (1) discarding ad layouts that did not include an advertisement for 1-800 Contacts; and (2) moving the 1-800 Contacts advertisement to the top ad position in each of the remaining layouts. F. 745.

Dr. Athey's model of consumer click behavior used a methodology referred to as "multinomial logistic regression" ("MNL"). F. 746. Dr. Athey first assessed the click-through statistics observed in the comScore data for searches for 1-800 Contacts' and other online contact lens retailers' brand name terms. Dr. Athey then estimated consumer click behavior by taking into account (i) the consumer appeal of the advertised brand, (ii) the position of the ad on the search results page, (iii) whether the ad was served by the firm searched for by the consumer, (iv) whether the ad is for 1-800 Contacts, and (v) the propensity of the consumer to click on any ad. F. 747. Dr. Athey applied this estimate of consumer click behavior to the counterfactual ad layouts that she constructed. F. 748.

Dr. Athey's model predicted that, in the absence of the Challenged Agreements, the number of competitor ads appearing on searches for 1-800 Contacts' trademark terms would increase, from 0.54 to 1.85 per search. F. 749. Dr. Athey's model further predicted that consumer clicks on the 1-800 Contacts ads would decline, by 2 clicks per hundred searches, and that consumer clicks on ads for competitors of 1-800 Contacts would increase, by 3.5 clicks per hundred searches. F. 750.

Respondent's expert, Dr. Anindya Ghose, criticized the assumptions underlying Dr. Athey's model and opined that the model's results are therefore unreliable. Regarding Dr. Athey's basing her counterfactual ad layouts on results for generic search terms, Dr. Ghose asserts there is no justification for Dr. Athey's assumption that search engines would have displayed the same number of ads in response to queries containing 1-800 Contacts' trademark as they did in response to generic queries because, in the actual world, Google did not necessarily display multiple ads in response to a search for 1-800 Contacts. RX0733 (Ghose Expert Report at 0065-66). Dr. Ghose also criticizes Dr. Athey's inclusion of ads in her counterfactual ad layouts for retailers who were not bound by the Challenged Agreements, but whose ads had not previously been displayed in response to searches for 1-800 Contacts. As an example, Dr. Ghose notes that Dr. Athey concludes that ads for Eyemart Express and Sclera would have appeared in response to searches for 1-800 Contacts' trademark, even though they did not appear in response to such searches in the actual world. RX0733 (Ghose Expert Report at 0066-67).

Regarding Dr. Athey's estimate of consumers' click-through behavior in response to the constructed ad layouts, Dr. Ghose criticizes the model for failing to analyze whether the estimated clicks would result in sales. Moreover, according to Dr. Ghose, Dr. Athey's use of MNL improperly fails to account for different intentions of users performing an internet search, i.e., whether users intend to search for information generally or to navigate to companies' websites, but simply assumes that the display of additional advertisements will make consumers more likely to click on the competitors' ads. Dr. Ghose asserts that, while Dr. Athey opines that additional advertisements improve consumer welfare, Dr. Athey's model fails to account for increased search costs that may result from the display of additional advertisements to consumers

who searched for 1-800 Contacts with navigational intent. RX0733 (Ghose Expert Report at 0067-69).

ii. Dr. Evans' model

Dr. Evans modeled the extent of reduced advertising caused by the Challenged Agreements by extrapolating from matched ads generated for Memorial Eye during the time period 2010 through 2011. F. 752. Based on Google data analyzed by Dr. Evans, between January 2010 and December 2011, Google showed Memorial Eye text ads on approximately 6 million search results pages generated by queries related to 1-800 Contacts brand name keywords and Memorial Eye's ads appeared on almost half of the search results pages generated by queries that included 1-800 Contacts brand name. F. 618. The average position of Memorial Eye's ads was second, directly below the ad for 1-800 Contacts. F. 618.

Based on the data for Memorial Eye, and additional assumptions regarding ad position, click-through rates, and level of advertising activity for other competitors, Dr. Evans predicted the number of additional advertisements that would be displayed by the competing retailers that are currently restricted under the Challenged Agreements, if they were not bound by the Challenged Agreements; the number of clicks these ads would receive; and the increased clicks and sales these competing retailers would receive. F. 754.³⁸ Specifically, Dr. Evans' model estimates that, absent the Challenged Agreements, between January 2010 and June 2015, 114 million additional ads for competitors would have been displayed in response to queries containing 1-800 Contacts' trademark terms. F. 755. Dr. Evans' model further estimates that in the first half of 2015 alone, based on assumptions of increased advertising activity by competitors to obtain repeat business, increased clicks for competitors, and decreased clicks for 1-800 Contacts, clicks for competitor ads would increase by 145,000, and sales for competitors would increase by 12.3%. F. 755.

³⁸ Dr. Evans' model assumed that Google would display up to five ads in response to a query for a 1-800 Contacts brand name term; that 1-800 Contacts would obtain first ad position; that there would be a click-through rate for an ad in the second position of 1.8%, based on data showing Memorial Eye's click-through rate in the second position of 1.84%, and that click-through rates for the third through fifth position would be 1.5% for position 3, 1.1% for position 4, and 0.7% for position 5. F. 753.

Respondent argues that Dr. Evans offered no reason to believe that Memorial Eye was representative of other online sellers of contact lenses and offered no explanation as to why it was appropriate to extrapolate data observed for Memorial Eye to other online competitors. Dr. Ghose asserted that there are a number of flaws in Dr. Evans' model, including improper extrapolation of the estimates of ad impressions and clicks for all retailers entirely from data on one retailer, Memorial Eye. RX0733 (Ghose Expert Report at 0069-71 ¶¶ 161-64). Dr. Ghose further criticized Dr. Evans' model as improperly excluding the effects of ads for retailers that Dr. Evans states do not sell in the United States, which caused an overestimation of the number of incremental ad impressions by 24% and incremental clicks by 26.7%. RX0733 (Ghose Expert Report at 0071 ¶ 166). In addition, Dr. Ghose asserts that Dr. Evans does not explain why search engines would have displayed so many ads in the but-for world even though they did not fill all ad positions in the actual world despite the existence of other bidders. RX0733 (Ghose Expert Report at 0071-72 ¶ 167).

iii. Conclusion regarding economic modeling

As noted above, the expert reports and related testimony supporting and criticizing the modeling evidence have been fully reviewed and considered. Although Respondent has identified some valid concerns regarding the underlying assumptions of both the Athey model and the Evans model, Respondent's criticisms do not warrant the conclusion that the models are so faulty that they should be rejected entirely as unreliable. Given appropriate weight, the models tend to reinforce the findings above that the advertising restraints at issue significantly reduced informative advertising for lower-priced competitors of 1-800 Contacts and more likely than not resulted in consumers purchasing contact lenses from 1-800 Contacts at higher prices than they would have paid to lower-priced competitors.

4. Respondent's Arguments Opposing a Finding of Actual Anticompetitive Effects

Respondent contends that the evidence fails to prove actual anticompetitive effects. All of Respondent's arguments in this regard were reviewed and considered. Many of Respondent's evidentiary assertions have been rejected as immaterial or against the weight of the evidence, and

need not be discussed here. A number of Respondent’s arguments were addressed in Section III.E.3.a. Additional contentions of Respondent that merit discussion are addressed below.

a. Burden of proof

Respondent contends that the law imposes a particularly “high burden” of proof with respect to anticompetitive effects in this case because the Challenged Agreements (except for the Luxottica Sourcing Agreement) are settlements of trademark litigation. Respondent quotes the court in *Clorox Co. v. Sterling-Winthrop*, 117 F.3d 50, 57 (2d Cir. 1997) stating: “[B]ecause the antitrust laws protect competition, not competitors, and trademarks are non-exclusionary, it is difficult to show that an unfavorable trademark agreement raises antitrust concerns.”

Respondent misreads *Clorox*, as explained below.

Plaintiff Clorox Company, owner of the LYSOL trademark, sued the defendant Sterling-Winthrop, owner of the PINE-SOL mark, to invalidate a settlement of trademark litigation. 117 F.3d at 52. The two brands had a long history of disputes beginning when a patent examiner refused to register a trademark for PINE-SOL because it determined that the name PINE-SOL was confusingly similar to a previously registered brand name, LYSOL. 117 F.3d at 53. When PINE-SOL continued to market its cleaning products under the PINE-SOL name, the owner of the LYSOL trademark sued, and the parties eventually settled. 117 F.3d at 53-54. The settlement agreement restricted the type of disinfectant products that could be marketed under the PINE-SOL name and the geographic area where they could be sold; required that the original PINE-SOL product be marketed as primarily a cleaner, as opposed to a “disinfectant”; and prohibited PINE-SOL products from being sold as anything other than generic cleaners, as opposed to special purpose cleaners, such as bathroom cleaners. 117 F.3d at 54. Clorox claimed that by restricting the way Clorox could use the PINE-SOL mark to compete, the settlement agreement violated Section 1 of the Sherman Act, and alleged that the settlement agreement “serves no legitimate trademark purpose because there is no longer the likelihood of consumers confusing the LYSOL and PINE-SOL marks.” 117 F.3d at 54.

The court applied a “rule of reason analysis . . . [to] determine whether the restraints in the agreement [were] reasonable in light of their actual effects on the market and their pro-competitive justifications Ultimately, the goal is to determine whether restrictions in an

agreement among competitors potentially harm consumers. The focus of the inquiry on consumers ‘cannot be overemphasized and is especially essential when a successful competitor,’ as here, ‘alleges antitrust injury at the hands of a rival.’” 117 F.3d at 56. The court observed that the agreement only restricted Clorox’s marketing of products that carried the PINE-SOL name, and did not restrict Clorox from producing and selling other, non-PINE-SOL branded products that compete with the LYSOL brand. 117 F.3d at 57. The court further observed:

[B]ecause the antitrust laws protect competition, not competitors, and trademarks are non-exclusionary, it is difficult to show that an unfavorable trademark agreement raises antitrust concerns. Even if such an agreement only marginally advances trademark policies, the antitrust laws do not exist to protect competitors from agreements that in retrospect turn out to be unfavorable to the complaining party.

117 F.3d at 57 (citation omitted). Thus, “in order to fulfill the requirement of showing an actual adverse effect in the relevant market, ‘the plaintiff must show more than just that he was harmed by the defendant’s conduct,’” but rather must show adverse effects on competition as a whole. 117 F.3d at 56-57. The court concluded that Clorox failed to make this showing. 117 F.3d at 57.

Contrary to Respondent’s argument, *Clorox* does not hold that trademark settlements are subject to a higher burden of proof than other agreements between competitors. *Clorox* applied a standard rule of reason analysis and, relying on the well-established proposition that the antitrust laws protect competition, not competitors, concluded that Clorox had failed to show harm beyond the harm allegedly caused to its own business. Moreover, the Supreme Court in *Actavis*, in rejecting the application of a “quick look” analysis to an allegedly anticompetitive reverse-payment patent settlement agreement, stated the FTC “must prove its case as in other rule-of-reason cases.” 133 S. Ct. at 2237. This further indicates that there is no special burden of proof to be applied to trademark settlement agreements, which unlike patents, are non-exclusionary. Accordingly, Respondent’s contention is rejected.

b. *De minimis* harm

Respondent asserts that the Challenged Agreements had, at most, a *de minimis* effect on competition. RFF 1985 (citing RX0739 (Murphy Expert Report at 0047-52); CX9048 (Murphy, Dep. at 46-47, 50-51)). Respondent’s argument is invalid as a matter of law. “A court applying

the Rule of Reason asks whether a practice produces net benefits for consumers; it is no answer to say that a loss is ‘reasonably small.’” *Chicago Prof’l Sports Ltd. P’ship v. NBA*, 961 F.2d 667, 674 (7th Cir. 1992).³⁹ In *Realcomp*, the challenged policies prevented only some public websites from displaying discounted listings and such listings were permitted on one website, Realtor.com, which the record showed reached approximately 90% of home buyers. 635 F.3d at 829-30. The Commission rejected as irrelevant the argument that the challenged policies did not entirely exclude discount listings from the MLS service, and that there were measures brokers could take to obtain listings on other websites. 2009 FTC LEXIS 250, at *110 & n.42. The Sixth Circuit, which affirmed the Commission’s decision, held that “reducing by 10% the number of home buyers that are exposed to discount listings . . . may very well constitute an unreasonable restraint.” *Realcomp*, 635 F.3d at 830. Respondent cites no authority for the proposition that an advertising restraint must bar *all* advertising in order to have anticompetitive effects.

Respondent’s *de minimis* argument is also unsupported by the facts in this case. Respondent notes that the Challenged Agreements only restricted advertisements in response to searches for 1-800 Contacts’ trademark terms, which according to Respondent’s expert witness, Dr. Murphy, are responsible for not more than 2% of contact lens sales. RX0739 (Murphy Expert Report at 0049). However, Dr. Murphy’s calculations were derived from total sales in the overall contact lens market, and not the market for online sales of contact lenses, which is the relevant market in this case. Section III.D.2. In addition, Respondent asserts that the Challenged Agreements only restricted advertisements from 1-800 Contacts and from some, but not all, of 1-800 Contacts’ competitors. However, 1-800 Contacts and the 14 parties to the Challenged Agreements account for 79% of online sales of contact lenses in the United States. F. 496.

Respondent’s related argument, that the advertising restraints imposed by the Challenged Agreements, are not competitively significant, is also unsupported by the facts. Respondent points to evidence that only 2.1% of all Google paid search advertisements related to contact lenses were displayed as a result of competitors’ bidding on 1-800 Contacts’ trademark as

³⁹ Moreover, to the extent Respondent asserts that the anticompetitive effects of the Challenged Agreements are small, any resulting procompetitive effects asserted by Respondent would be “correspondingly small.” *Chicago Prof’l Sports*, 961 F.2d at 674.

keywords. RX0733 (Ghose Expert Report at 0055). Respondent also points to evidence that 3% of paid search advertisements on Google for contact lens retailers not bound by the Challenged Agreements were displayed based on bids for 1-800 Contacts' trademarks, and that these retailers earned only 1% from these advertisements. RX0739 (Murphy Expert Report at 0099). However, these statistics do not account for advertisements displayed as a result of an advertiser's bidding on generic keywords, such as "contacts," in broad match. In addition, data regarding the amount of keyword bidding does not measure the frequency of consumer searches for 1-800 Contacts' trademark terms. As set forth above, comScore data analyzed by Dr. Athey shows that searches for 1-800 Contacts' trademark terms comprised approximately 17% of search queries, and that the volume of searches for the top three generic terms ("contact," "contact lenses," and "contacts") was collectively similar in size to the volume of searches for 1-800 Contacts. F. 657, 659. This is not *de minimis* or insignificant.

Furthermore, as discussed previously, the display of ads in response to a search for 1-800 Contacts' trademark terms is competitively significant, both to Respondent and to the parties to the Challenged Agreements. *See* Section III.E.2.a.ii. *E.g.*, F. 571 (trademark paid search is among the largest contributors to orders for 1-800 Contacts generally, and accounts for between 20 and 31% of 1-800 Contacts' new orders); F. 586 (chief executive officer of LensDirect explaining: "[a] lot of people search for '1800contacts' and we want to be there when they do . . . We hope to get those interested people to become customers of LensDirect because we believe we're offering . . . a better price for the same product."). Moreover, the display of advertisements for lower-priced competitors in response to searches for 1-800 Contacts' trademark terms has competitive significance to consumers, who, as discussed in Section III.E.3.b, stand to benefit economically by purchasing from a lower-priced competitor or securing a price-match from 1-800 Contacts.

Respondent also asserts that, as to the 13 Challenged Agreements that are settlement agreements, the fact that the settling parties agreed to the restraints contained therein demonstrates their judgment that the "lifetime benefits" of advertising in response to searches for 1-800 Contacts' trademark terms was less than the cost of litigating, implying that this shows that the restraints were not competitively significant. RB at 97. However, the evidence fails to

show that at the time of the settlement, the settling parties did, or could, calculate or weigh the future, lifetime profits attributable to such advertising, or that the settling parties each had the financial ability to fund litigation in anticipation of future profits. Finally, Respondent relies on evidence indicating that Web Eye Care, AC Lens, and Vision Direct/Walgreens were able to grow, in spite of the advertising restraints. This is not persuasive evidence that the restraints had little or no competitive effect.

c. Availability of other information to consumers

Respondent contends that the evidence fails to show that, in restricting advertisements in response to a search for 1-800 Contacts' trademark terms, the Challenged Agreements reduced the information available to consumers. According to Respondent, there remain many ways for consumers to obtain information about competitors to 1-800 Contacts, other than through a search for 1-800 Contacts' trademark terms. Respondent further asserts that allowing more ads to appear in response to a search for 1-800 Contacts' trademark terms will serve to push organic listings further down the search engine results page, which Respondent argues are more relevant to consumers.

As noted above, it is not necessary to show that the Challenged Agreements repressed all competitor advertising. *Realcomp*, 2009 FTC LEXIS 250, at *110 & n.42. Moreover, the facts show that, by prohibiting advertisements from appearing in response to a search for 1-800 Contacts' trademark terms, the Challenged Agreements suppressed significant amounts of competitor advertisements, which interferes with an important marketing channel for competitors and with an important source of information for consumers. The facts further show that consumers respond to competitor advertisements with clicks through to the websites of, and/or purchases from, competitors with lower prices than those offered by 1-800 Contacts. Respondent's argument appears to be that consumers have enough relevant information available through other search tools, and that Respondent, through horizontal agreements, is entitled to determine what is "relevant" and/or "enough" advertising for consumers. Such an argument is comparable to a social welfare justification, which courts have rejected as legally non-cognizable. *See Professional Engineers*, 435 U.S. at 695; *In re North Carolina Board of Dental Examiners*, 2011 FTC LEXIS 290, at *67 (Dec. 7, 2011).

5. Conclusion Regarding Proof of Anticompetitive Effects

As shown above, Complaint Counsel has proven that the Challenged Agreements have anticompetitive effects in the form of harm to consumers and competition. This proof of harm is sufficient to establish Complaint Counsel's *prima facie* case that the agreements are anticompetitive. Therefore, this Initial Decision need not, and does not, further determine whether or not the Challenged Agreements have anticompetitive effects in the form of harm to search engines. Once Complaint Counsel has established its *prima facie* case of competitive harm, the burden shifts to Respondent to proffer "legitimate, procompetitive justifications," *Realcomp*, 2009 FTC LEXIS 250, at *127, to which the analysis turns next.

F. Asserted Procompetitive Justifications

1. Overview

Where, as here, a challenged agreement is demonstrated to have anticompetitive effects, the burden shifts to the respondent to prove legitimate, countervailing justifications. *Realcomp*, 635 F.3d at 825, 834; *Polygram*, 416 F.3d at 36. As the Supreme Court explained in *National Collegiate Athletic Association v. Board of Regents*, the proponent of the restraint bears a "heavy burden" of "establishing an affirmative defense which competitively justifies" the demonstrated competitive harm. 468 U.S. at 113.

A legitimate justification is one that creates or improves competition, and the evidence must show a specific link between the challenged restraint and the purported justification. *Polygram*, 136 F.T.C. at 346-47. "[A]n agreement limiting consumer choice by impeding the 'ordinary give and take of the market place,' cannot be sustained under the Rule of Reason" unless the defendant proves "countervailing procompetitive virtue – such as, for example, the creation of efficiencies in the operation of a market or the provision of goods and services." *Indiana Fed'n*, 476 U.S. at 459 (internal citation omitted). A proffered justification may be rejected as noncognizable where, as a matter of law, the justification is "incompatible with the goal of antitrust law to further competition." *Polygram*, 136 F.T.C. at 345. "Cognizable justifications ordinarily explain how specific restrictions enable the defendants to increase output or improve product quality, service, or innovation." *Id.* at 346-46. *See also Broadcast Music*

Inc. v. Columbia Broadcasting Sys. Inc., 441 U.S. 1, 19-20 (1979) (stating that courts should examine whether the practice will “increase economic efficiency and render markets more, rather than less, competitive”) (quotation and citation omitted); *Paladin Assocs. v. Montana Power Co.*, 328 F.3d 1145, 1157 (3d Cir. 2003) (holding that “[i]mproving customer choice” and reducing costs are procompetitive justifications).

In the instant case, Respondent contends that the Challenged Agreements⁴⁰ have the following procompetitive benefits: (1) the Settlement Agreements avoided litigation costs; (2) the Challenged Agreements protected Respondent’s trademarks and the incentives the trademarks created to invest in its brand and produce consistent products and services; (3) the Challenged Agreements prevented consumer confusion; (4) the Challenged Agreements reduced consumers’ search costs; and (5) the Challenged Agreements increased purchases of contact lenses by consumers who searched for 1-800 Contacts’ trademarks. RB at 34. These asserted justifications are analyzed below.

2. Avoidance of Litigation Costs

Respondent argues that public policy supports the private settlement of legal disputes because private settlements reduce litigation costs, and that settlements that reduce the costs of litigation are “generally economically efficient.” RB at 34-35. Respondent asserts that, in the instant case, the parties to the Settlement Agreements weighed the costs and uncertainties of litigation against the value of the potential benefits and made economically rational decisions that it was preferable to settle. Thus, Respondent concludes, the Settlement Agreements are procompetitive. RB at 16-18, 34-36.

“Few public policies are as well established as the principle that courts should favor voluntary settlements of litigation by the parties to a dispute.” *American Sec. Vanlines, Inc. v. Gallagher*, 782 F.2d 1056, 1060 (D.C. Cir. 1986); *see TBK Partners, Ltd. v. Western Union Corp.*, 675 F.2d 456, 461 (2d Cir. 1982) (noting “the paramount policy of encouraging settlements”). Indeed, settlements promote “judicial economy.” *American Sec. Vanlines*, 782

⁴⁰ Thirteen of the fourteen Challenged Agreements are Settlement Agreements. F. 343. Respondent’s justification arguments focus on the Settlement Agreements.

F.2d at 1060 n.5 (“[S]ettlements produce a substantial savings in judicial resources and thus aid in controlling backlog in the courts . . .”).

Many of the settling parties testified that they weighed the costs and uncertainties of litigation against the value of the likely benefits, and decided that the costs were not “worth it.” F. 349-352. For example, Lens.com estimated the cost of litigating its trademark dispute with 1-800 Contacts without trial and before appeal to be “approximately \$1.4 million.”⁴¹ Complaint Counsel’s and Respondent’s expert witnesses agreed that settlements that reduce the cost of litigation are generally economically efficient. F. 357-358.

Although “public policy wisely encourages settlements,” *McDermott, Inc. v. AmClyde*, 511 U.S. 202, 215 (1994), “there is nothing magical about a settlement that immunizes an agreement that may otherwise violate the antitrust laws.” *In re Terazosin Hydrochloride Antitrust Litig.*, 352 F. Supp. 2d 1279, 1309 (S.D. Fla. 2005). “[W]hile reducing risk and uncertainty is a legitimate benefit of settlements, antitrust tribunals reviewing settlements in patent disputes cannot simply rubber-stamp the parties’ accords because they are in line with the litigants’ own self-interest.” *Id.* Indeed, as analyzed in Section III.C, Supreme Court precedent makes clear that even patent-related settlement agreements can sometimes violate the antitrust laws. *Actavis*, 133 S. Ct. at 2232; *Singer Mfg.*, 374 U.S. at 197 (stating that the Sherman Act “imposes strict limitations on the concerted activities in which patent owners may lawfully engage”).

As noted previously, a cognizable justification is ordinarily one that stems from measures that increase output or improve product quality, service, or innovation. *Indiana Fed’n*, 476 U.S. at 459; *Broadcast Music*, 441 U.S. at 19-20. Furthermore, “[c]ognizable justifications ordinarily explain how specific restrictions enable the defendants to increase output or improve product quality, service, or innovation.” *Polygram*, 136 F.T.C. at 345-46. Even if the Settlement Agreements had the effect of reducing litigation costs for the settling parties, Respondent has

⁴¹ *1-800 Contacts, Inc. v. Lens.com, Inc.*, No. 2:07-cv-591 (D. Utah Mar. 7, 2011), Defendant Lens.Com, Inc.’s Memorandum In Support Of Motion For Award Of Attorneys’ Fees And Costs, Exhibit 2 (Declaration of Cary Samourkachian) at ¶ 4, Dkt. 271-2 (D. Utah Mar. 7, 2011).

failed to provide an “explanation connecting the practice to consumers’ benefits.” *Chicago Prof’l Sports*, 961 F.2d at 674.

Based on the foregoing, Respondent has failed to demonstrate that the avoidance of litigation costs constitutes a countervailing procompetitive benefit that outweighs or otherwise justifies the anticompetitive harm of the Settlement Agreements.

3. Trademark Protection

Respondent contends that the Settlement Agreements are procompetitive because they provide “trademark protection, which promotes economic efficiency.” RB at 36. Complaint Counsel contends that the restraints at issue are broader than necessary to protect Respondent’s trademark rights, including because the agreements bar advertisements that may not be confusing within the meaning of trademark law. Complaint Counsel argues that prohibiting non-infringing advertisements cannot represent a cognizable and plausible consumer benefit. CCB at 129-37.

Respondent asserts that trademark law prevents others “from copying a source-identifying mark,” which in turn “reduce[s] the customer’s costs of shopping and making purchasing decisions, for it quickly and easily assures a potential customer that this item – the item with this mark – is made by the same producer as other similarly marked items that he or she liked (or disliked) in the past.” RB at 36 (quoting *Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 163-64 (1995)). Respondent further asserts that protecting trademarks from infringement and dilution incentivizes investment in brand-building, by helping to “assure a producer that it (and not an imitating competitor) will reap the financial, reputation-related rewards associated with a desirable product.” RB at 37 (quoting *Qualitex Co.*, 514 U.S. at 164). Respondent stresses that it has invested heavily in building the 1-800 Contacts brand, including by investments in broad scale advertising and customer service. *See* F. 50-64. Respondent argues that the Settlement Agreements are therefore procompetitive because they protect Respondent’s trademark, and thus protect its incentives to continue investing in brand-building, and ultimately benefit consumers. RB at 36-40. Respondent further argues that the Settlement Agreements are reasonably limited because they “prohibit only one limited kind of infringing behavior,” namely “causing a Party’s brand name, or link to the Party’s Restricted Websites to

appear as a listing in the search results page of an internet search engine, when a user specifically searches for the other Party's brand name." RB at 41.

Even if protecting Respondent's trademarks and related incentives to invest is a procompetitive goal as a general matter, Respondent's justification fails because it *assumes* that displaying an ad in response to a search for 1-800 Contacts' brand name is, in fact, trademark infringement. Just as the counterparties to the Settlement Agreements assessed the cost and risk of litigation, and made an economically rational decision to settle, so did Respondent. *See* F. 356-358. As a consequence, none of the underlying lawsuits determined trademark infringement. Rather, the Settlement Agreements released all trademark infringement claims and required the dismissal of the underlying lawsuits. F. 360.

Moreover, Respondent's position that its trademark rights necessarily encompassed prohibiting the display of any ad in response to a user's search query for 1-800 Contacts' trademark terms, regardless of whether the advertiser bid on any 1-800 Contacts trademark as a keyword, and regardless of the text of the ad displayed, is unconvincing. Respondent does not cite to any case adopting Respondent's position that merely displaying an ad in response to a user's search query for a trademark term constitutes a "use" that is "likely to confuse" as to source or affiliation, regardless of the text of the ad. While bidding on a competitor's trademark term as a keyword is now generally considered to be a "use" under trademark law, Respondent's expert witness on trademark law, Mr. Hogan, admitted that he is unaware of any United States court holding that the appearance of an ad in response to a trademark search due to broad matching an advertiser's bids on generic keywords (i.e., the failure to implement trademark terms as negative keywords) is a trademark "use." F. 336.

Further, whether a use creates a likelihood of confusion, including initial interest confusion,⁴² involves a fact-intensive inquiry into multiple factors. F. 334. While not exhaustive, the list of relevant factors may include "(1) similarity of the marks, (2) intent of the alleged infringer, (3) evidence of actual confusion, (4) similarity of the competing parties'

⁴² As noted in Section III.E.2.b, in search engine advertising cases, courts have generally focused on the "species of confusion known as initial interest confusion." F. 335. Initial interest confusion "occurs when the defendant uses the plaintiff's trademark in a manner calculated to capture initial consumer attention, even though no actual sale is finally completed as a result of the confusion." *Network Automation*, 638 F.3d at 1144 (quoting *Nissan Motor Co.*, 378 F.3d at 1018).

services and manner of marketing, (5) degree of consumer care, and (6) strength of the marks.” *Lens.com*, 722 F.3d at 1243. See also *Rosetta Stone Ltd. v. Google, Inc.*, 676 F.3d 144, 153 (4th Cir. 2012) (factors include (1) the strength or distinctiveness of the plaintiff’s mark as actually used in the marketplace; (2) the similarity of the two marks to consumers; (3) the similarity of the goods or services that the marks identify; (4) the similarity of the facilities used by the markholders; (5) the similarity of advertising used by the markholders; (6) the defendant’s intent; (7) actual confusion; (8) the quality of the defendant’s product; and (9) the sophistication of the consuming public). In *Lens.com*, the only cited case in which Respondent litigated the issue of likelihood of confusion, Respondent lost on summary judgment. Applying the multi-factor test to the evidence in that case, the court in *Lens.com* concluded that “the factors other than evidence of actual confusion (even if we assume that 1-800’s mark is a strong one) firmly support the unlikelihood of confusion.” 722 F.3d at 1245.

It should also be noted that resolving the Parties’ opposing arguments as to whether the restraints in the Settlement Agreements exceed the scope of Respondent’s trademark rights would necessarily involve an inquiry into the merits of whether or not Respondent could have, or would have, proven infringement in the underlying lawsuits. However, delving into the merits of 13 trademark lawsuits, after the fact, to determine whether or not 1-800 Contacts could ultimately have proven infringement, if even possible, would require unacceptable speculation and would constitute an unnecessary waste of judicial resources. Cf. *In re Schering-Plough Corp.*, 136 F.T.C. 956, 997 (2003) (stating that “[a]n after-the-fact inquiry by the Commission into the merits of the underlying litigation is not only unlikely to be particularly helpful, but also likely to be unreliable”).

Furthermore, Respondent erroneously relies on *Clorox v. Sterling-Winthrop*, 117 F.3d 50 (2d Cir. 1997) for the proposition that the Settlement Agreements, by virtue of being settlements of trademark claims, are presumptively procompetitive. In *Clorox*, unlike the instant case, the plaintiff failed to prove anticompetitive effects in connection with the settlement agreement. Moreover, the court’s comments regarding the procompetitive nature of the settlement agreement at issue constituted dicta because, as the court recognized, “[o]nly if a plaintiff succeeds in establishing the actual adverse effects of an alleged restraint does the burden shift to the defendant to establish its pro-competitive redeeming virtues.” 117 F.3d at 59-60 (holding that

because the plaintiff failed to prove anticompetitive effects, whether or not the settlement agreement was “entirely necessary” to protect the plaintiff’s trademark was “immaterial”). In addition, in *Clorox*, unlike the instant case, there had been a determination – prior to the litigation and settlement at issue – that the defendant’s brand name, PINE-SOL, was confusingly similar to the plaintiff’s trademark, LYSOL. *Clorox*, 117 F.3d at 53.

Based on the foregoing, Respondent has failed to demonstrate that protecting its trademark rights constitutes a countervailing procompetitive benefit that outweighs or otherwise justifies the anticompetitive harm of the Challenged Agreements.

4. Consumer Confusion

Next, Respondent argues that the Challenged Agreements are procompetitive because they prevented paid search advertising that was likely to cause consumer confusion. RB at 45. Respondent contends that the factual conclusion that the paid search advertising prohibited by the Challenged Agreements is likely to cause consumer confusion is supported by four sources of evidence: (i) expert opinion from Dr. Ronald Goodstein; (ii) expert opinion from Dr. Kent Van Liere; (iii) customer service records from the litigation between 1-800 Contacts and Memorial Eye; and (iv) expert opinion from Dr. Anindya Ghose. RB at 45-50. As shown below, the evidence upon which Respondent relies fails to prove Respondent’s contention.

a. Opinion of Dr. Ronald Goodstein

Respondent’s expert witness, Dr. Ronald Goodstein, an associate professor of marketing, opined that “consumer confusion as to the source, affiliation, or sponsorship is reasonably expected from sponsored ads by other contact lens retailers that appear in response to an Internet search for ‘1-800 Contacts.’” RX0736 (Goodstein Expert Report at 004); RB at 45-46.

Dr. Goodstein based the foregoing opinion on numerous subsidiary opinions and assertions, including that: (1) many consumers do not recognize that sponsored ads are actually paid advertisements, and therefore confuse the sponsored ads for unbiased, impartial “organic”

links;⁴³ (2) various changes that search engines made to search engine results pages (“SERP”) between 2002 and 2013, such as eliminating color distinctions and moving more ads to the top of the page, have made it more difficult for internet users to distinguish paid ads from organic search results; (3) when a search is “navigational” (which Dr. Goodstein defined as a search where the user’s immediate intent is to reach a particular website), consumers are more likely to rely on the first link and spend less time viewing the SERP before clicking a link; (4) consumer surveys conducted in 2008 and 2009, in connection with American Airlines’ trademark litigation with Google and Yahoo! (“American Airline surveys”), which, according to Dr. Goodstein, found that a significant number of users performing a navigational search could be confused as to the source, affiliation, or sponsorship of ads by other companies that appear in response to a trademark search; and (5) Dr. Van Liere’s survey conducted for this case, discussed in Section III.F.4.b. F. 779.

Dr. Goodstein did not base his opinion on any independent study and analysis conducted by him of consumer behavior relating to search queries using “1-800 Contacts,” but relied instead on data collected by third parties in studies that Dr. Goodstein merely summarized and reiterated in his expert report and on the witness stand. F. 780 (referring to reliance on “studies that have been done both in the science community and by the search engines looking at eye-tracking studies as to where people look”; testifying that his opinion that many consumers do not recognize that sponsored ads are actually paid advertisements is based “on science done both within the science of my field as well as by the search engine companies themselves, their own research”; describing and relying on numerous third-party studies; testifying that he “did an analysis of the secondary research that exists,” which “is relevant research that someone else conducted,” and reviewed “primary research that was made available in this case,” which is “data that’s collected particularly for this issue” and includes the study conducted by Dr. Van Liere).

Moreover, the reliability and validity of the studies upon which Dr. Goodstein relied have not been established. For example, Dr. Goodstein relied in part on the American Airline surveys,

⁴³ “Organic,” or “natural” links on a search results page are links to websites that the search engine has determined are relevant to the user’s search terms. In general, organic results are ranked in order of relevance, with the most relevant result at the top of the list. F. 143.

which, as noted above, were consumer surveys conducted for trademark litigation with Google and Yahoo!. F. 779. Complaint Counsel points to numerous potential flaws in the American Airline surveys, including the test questions, control conditions, scoring of results, and failure of the test stimuli to reflect real world conditions. *See, e.g.*, CCRFF 1498, 1722. In addition, as Dr. Goodstein testified, the American Airlines cases were settled (F. 781), and it should not be assumed that the surveys would have been accepted in those cases as reliable or valid.

Dr. Goodstein's opinion is also based on Dr. Van Liere's survey prepared for the instant case. As set forth in Section III.F.4.b, Dr. Van Liere's survey is entitled to little or no weight, and, accordingly, provides no support for Dr. Goodstein's opinion.

Although he testified that when a search is navigational, consumers expect that the top results will be the most relevant, Dr. Goodstein acknowledged that when a search query is "1-800 Contacts cheaper," one cannot determine if that is a navigational search and the consumer intended to go only to 1-800 Contacts' website. F. 782. Dr. Goodstein also acknowledged that there are studies finding that survey respondents have diverse preferences and expectations when they use brand names as search terms and that not everybody who uses a brand name as a search term is looking only for information about that brand. F. 783.

Furthermore, Dr. Goodstein failed to draw a clear or well-supported connection between the asserted inability of some consumers to distinguish between paid search ads and organic search results and his opinion that consumers viewing sponsored ads in response to a search for 1-800 Contacts would be confused as to the source or affiliation of those ads. Nor is such a connection intuitively obvious. *See Lens.com*, 722 F.3d. at 1245 ("Perhaps in the abstract, one who searches for a particular business with a strong mark and sees an entry on the results page will naturally infer that the entry is for that business. But that inference is an unnatural one when the entry is clearly labeled as an advertisement and clearly identifies the source, which has a name quite different from the business being searched for."). Dr. Goodstein explained: "[I]f I don't know what's an ad and what's an organic link, there's a much higher probability that what comes – appears towards the top left northern area [of the SERP], I would be confused into thinking that that's related to my search, is affiliated, sponsored, whichever of those words you'd want to use." (Goodstein, Tr. 2410). However, this explanation relates to confusion about the

elements of the search results (ads v. organic results) and layout of the search results (the order in which the results are presented). It says nothing about confusion as to the source, sponsorship, or affiliation of the sponsored ads from other retailers that appeared in search results for the search “1-800 Contacts.” The basis for Dr. Goodstein’s leap of logic – from the proposition that consumers are confused between paid search advertisements and organic results to the conclusion that consumers must be confused as to the source or affiliation of ads by 1-800 Contacts’ online competitors – is unclear and unsupported, and it is therefore unconvincing.

Based on the foregoing, Dr. Goodstein’s opinion that consumer confusion as to the source, affiliation, or sponsorship is reasonably expected from sponsored ads by other contact lens retailers that appear in response to an internet search for “1-800 Contacts” is entitled to, and is given, little weight.

b. Opinion of Dr. Kent Van Liere

Respondent’s expert witness, Dr. Kent Van Liere, conducted a survey for this case intended to measure the degree to which sponsored links that appear when consumers search for “1-800 Contacts” are likely to confuse consumers into believing that those links will take them to a 1-800 Contacts website or a website affiliated with 1-800 Contacts. RX0735 (Van Liere Expert Report at 0003); Van Liere, Tr. 2977.

Dr. Van Liere defined the relevant population for his survey “as adult consumers 18 years or older who reside in the [United States] who either a) have purchased contact lenses online within the past 12 months; or b) would consider searching on the internet to purchase contact lenses in the next 12 months.” F. 758. Dr. Van Liere used a national online survey firm, Critical Mix, which Dr. Van Liere has used before and described as well known. F. 759. Critical Mix has demographic, occupational, and other information regarding the persons who agree to participate on its panels. F. 759. Critical Mix provided Dr. Van Liere with an online panel of 689 consumers who met the qualifying criteria for the survey (“survey respondents”). F. 759.

The 689 survey respondents were assigned to perform a simulated internet search for “1-800 Contacts” as a keyword using one of two search engines, either Google or Yahoo!. F. 760. Survey respondents in each of the Google or Yahoo! groups were then randomly

assigned to view either a test or control stimulus, which consisted of Google and Yahoo! SERP mock-ups constructed by Dr. Van Liere. F. 766.

In the test condition, survey respondents were told to search for “1-800 Contacts” and then they were shown either a Google or Yahoo! SERP that included sponsored ads with links (“sponsored links”) to contact lens retailers other than 1-800 Contacts, as well as some links to organic search results (“organic links”) (the “test SERP”). F. 766. Dr. Van Liere testified that he constructed the test SERPs based on his assessment of what could appear if the Challenged Agreements were not in place, and of what he believed were representative of advertisements that currently appear in response to a search related to contact lenses, such as a search for “contact lenses” or other generic terms, or for the brands or names of the individual companies that are parties to the Challenged Agreements. Van Liere, Tr. 3017-18; RX0735 (Van Liere Expert Report at 0006, 0013-15). Dr. Van Liere did not include a sponsored link for 1-800 Contacts on the test SERPs. F. 767.

Survey respondents in the test condition were shown the test SERPs and asked to “point and click on the link or links, if any, that you think will take you to the website of the company that you searched for. Please select all that you think apply.” For any link selected, survey respondents were asked, “What makes you say that?” F. 769. If no links were selected, survey respondents were shown the test SERP a second time and asked to “click on the link or links, if any, that you think will take you to the website of the company that is affiliated with the company that you searched for.” F. 769. As to any links selected, the survey respondent was asked, “What makes you say that?” F. 769. Survey respondents in the test condition were counted as confused as to source or affiliation if they selected any sponsored links, such as www.visiondirect.com, in response to the questions. F. 769. Using this method, Dr. Van Liere calculated that 28.7% of survey respondents were confused (39.2% with the Yahoo! SERP and 17.8% with the Google SERP). RX0735 (Van Liere Expert Report at 0021, Table 3).

Dr. Van Liere’s survey included a control condition, in which survey respondents were asked to search for “1-800 Contacts” and then were shown a Google or Yahoo! SERP identical to the test SERP, with the same organic links, but without any sponsored links (the “control SERP”). F. 770. According to Dr. Van Liere, removing sponsored ads is appropriate to control

for the potentially confusing (i.e., “allegedly infringing” effect) of those ads. RX0735 (Van Liere Expert Report at 0015).

Survey respondents in the control condition were asked the same questions as in the test condition, i.e., “point and click on the link or links, if any, that you think will take you to the website of the company that you searched for” and “click on the link or links, if any, that you think will take you to the website of the company that is affiliated with the company that you searched for.” F. 770. Survey respondents in the control condition were counted as confused as to source or affiliation if they identified specified control links in organic search results, such as New York Times articles or Wikipedia, in response to the questions. F. 770. Using this method, Dr. Van Liere calculated that 8.1% of survey respondents were confused (12.0% with the Yahoo! SERP and 4.5% with the Google SERP). RX0735 (Van Liere Expert Report at 0021 Table 3).

Based on his survey results, Dr. Van Liere opined that “there is potential for real world confusion among consumers in the relevant population regarding whether the sponsored advertisements of the type tested are the same as or are affiliated with 1-800 Contacts when searching for 1-800 Contacts.” RX0735 (Van Liere Expert Report at 0006); Van Liere, Tr. 2976.

Complaint Counsel contends that there are numerous flaws in Dr. Van Liere’s survey, as identified by Complaint Counsel’s expert witness, Dr. Jacob Jacoby, and that these flaws render Dr. Van Liere’s results, and his conclusions based thereon, unreliable. CCB at 154-57; CCRB at 31-35. Among other things, Complaint Counsel asserts that, according to Dr. Jacoby, Dr. Van Liere’s survey failed to replicate real-world conditions because the test and control SERPs removed advertisements for 1-800 Contacts. *See* CCRFF 1486 (citing Jacoby, Tr. 2222-23, 2230-34; CX8011 (Jacoby Rebuttal Expert Report at 0011-12)).

Dr. Van Liere responds that he did not include 1-800 Contacts ads in the stimuli in order to “measure the impact of [competitor] ads without the trademark owner having to essentially purchase its own ad to be in the sponsored link area” Van Liere, Tr. 3037-38; *see also* Van Liere, Tr. 3238 (test was designed to determine whether “the sponsored links in this case of the settlement parties [would] be confusing in a situation . . . in which the trademark holder is not required to purchase their own advertisement as a sponsored link”); CX9049 (Van Liere, Dep. at

187-88) (“confusion has to be measured whether 1-800 Contacts is forced to purchase its own name as the first sponsored links or it is not.”). As explained below, this argument is not convincing.

Both Parties’ experts acknowledged that for a consumer confusion survey to be reliable, it is important for the stimuli to reasonably replicate what consumers would encounter in the marketplace. F. 771. However, Dr. Van Liere removed sponsored links for 1-800 Contacts on the test SERP and all sponsored links, for any companies, on the control SERP, which does not reflect real world conditions. F. 773. By removing sponsored links for 1-800 Contacts from the test SERP, the test stimuli did not reflect what a consumer would “typically” see in response to a search query for “1-800 Contacts.” Google places a priority on showing relevant ads. F. 194. Among the factors Google considers are the relevance of the ad to a user’s search query and the amount of each advertiser’s bid on keywords. F. 183, 194, 202. Respondent’s strategy in search advertising was to spend as much as necessary when bidding on its trademark keywords to meet its goal of ensuring that 1-800 Contacts’ advertisement was the first advertisement displayed in response to searches for its trademark. F. 575. Laura Schmidt, 1-800 Contacts’ marketing director, could not recall an instance in which a 1-800 Contacts’ advertisement was not the first advertisement that appeared in response to a 1-800 Contacts trademark search query. F. 576. Based on the foregoing, it is implausible that a search engine results page returned on a search for “1-800 Contacts” would not have an advertisement for 1-800 Contacts. Similarly, by removing all sponsored links from the control SERP, the control stimuli also did not reflect what a consumer would “typically” see in response to a search query for “1-800 Contacts.” Google typically displays up to four sponsored links when a user’s search is of a commercial nature. F. 142, 212, 234.

In excluding an ad for 1-800 Contacts from his test SERP, Dr. Van Liere not only disregarded the “real world,” he also failed to remove an obvious alternative explanation for any resulting consumer “confusion” in his test condition. Respondent’s trademark expert witness, Mr. Hogan, testified regarding a Bing study that demonstrated that when a trademark owner’s ad appeared at the top of a SERP in response to a trademark search query, clicks on ads sponsored by non-trademark owners decreased from 40% to 9%. Hogan, Tr. 3342-44; RX0734 (Hogan Expert Report at 0089-90 ¶ 132). This study suggests that any purported confusion arising from

the appearance of other ads on the SERP dissipates when the trademark owner's ad appears at the top of the SERP.

It is readily apparent how the absence of a sponsored link for 1-800 Contacts on the test SERP could inflate the reports of source or affiliation confusion, given that the survey respondents were instructed to search for "1-800 Contacts" but were presented, in the test condition, only with sponsored links for companies other than 1-800 Contacts. Under these circumstances, a survey respondent viewing the test SERP could well be confused into thinking the returned links were for, or affiliated with, 1-800 Contacts. In this regard, it is noteworthy that Dr. Van Liere acknowledged that he was instructed not to include ads for 1-800 Contacts in his stimuli, after discussion with counsel. F. 768 ("After discussion with counsel of my prior work and my understanding, ultimately the way we agreed to do it and therefore the way I was instructed to do it was to leave it off.").

Moreover, when survey respondents were asked to select the links they believed were the same as, or were affiliated with, 1-800 Contacts, Dr. Van Liere's instructions did not allow the option of "I don't know" and directed survey respondents to "*select all that you think apply*" (emphasis added). F. 769. This suggests to the survey respondents that there was at least one correct answer, and were perhaps several correct answers, to the question. Dr. Jacoby explained the problem with asking users to "select all that might apply," while at the same time not including a link for 1-800 Contacts as an option:

[T]his is essentially equivalent to a multiple-choice question. What you're doing is you're saying which of the following is the answer to my question. If you take out the right answer and you only leave in wrong answers, and you ask people which of the following is the answer to my question, and all they have left is not the right answer but the wrong answer, many are going to give you the wrong answer.

If I ask you in which year did Columbus discover America, 1418, 1412, 1467 or 1593, . . . or no opinion, . . . you're going to get people a lot saying no opinion, but you're going to get a lot of people saying, oh, one of these other wrong answers because they wouldn't ask me this question if there wasn't a right answer in here. And that's equivalent to what he did.

F. 775. Further compounding this problem, after being shown the test SERP, if the survey respondents did not select any link, they were shown the test SERP a second time and asked again to select the link they thought would take them to the website of the company affiliated with the company they searched for. F. 769. By removing the option to select “1-800 Contacts” as an option, Dr. Van Liere’s survey “stacked the deck” to find consumer confusion. F. 775.

In addition, Dr. Van Liere’s conclusions based on the survey results do not address whether or not reported confusion may have been attributable to other factors, such as the specific ads selected by Dr. Van Liere; the quantity of ads or other links presented; the test conditions; or to other factors, alone or in combination. F. 761-762, 776-778; CX8011 (Jacoby Rebuttal Expert Report at 010-27 ¶¶ 20-34) (describing problems with Dr. Van Liere’s survey, controls, and data collection).

Further, the calculations that Dr. Van Liere made are suspect. Dr. Van Liere assigned approximately 50% of his survey respondents to the Yahoo! version of his survey, even though Dr. Van Liere’s report states that Google accounts for 65% of all consumer searches and Yahoo! accounts for 14%. F. 763. In his test group, Dr. Van Liere recorded that 39.2% were confused with the Yahoo! SERP and 17.8% with the Google SERP. RX0735 (Van Liere Expert Report at 0021 Table 3). He then averaged these two numbers to conclude that 28.7% of survey respondents were confused, even though Dr. Van Liere acknowledged that weighting is a statistical technique that can be used to adjust for over-represented or under-represented samples. F. 764. Dr. Van Liere acknowledged that if he had weighted the results from his survey questions to account for the percentages of searches conducted on Google and on Yahoo!, “the net confusion measured . . . across all of the study would reduce down to some degree.” F. 765.

Moreover, Dr. Van Liere’s opinion based on his survey, that there is “potential for confusion” if the Challenged Agreements are not in place, is not particularly definitive on the question he was tasked with answering, which was the degree to which sponsored links that appear when consumers search on “1-800 Contacts” are likely to confuse consumers. In this regard, Dr. Van Liere’s opinion carries little probative weight.

For all the foregoing reasons, Dr. Van Liere's opinion is given little or no weight on the question of whether the Challenged Agreements prevented paid search advertising that was likely to cause consumer confusion.⁴⁴

c. Customer service records

Respondent next argues that customer service records of Memorial Eye constitute evidence of actual consumer confusion. RB at 49-50. The evidence upon which Respondent relies consists of notations made in customer service records, produced in 1-800 Contacts' trademark litigation with Memorial Eye and introduced in this case, which Respondent asserts show that consumers believed that Memorial Eye was the same as or was affiliated with 1-800 Contacts. RFF 1137-1142. For example, Respondent points to a note dated July 23, 2008, in which a Memorial Eye customer service representative recorded that they received a call from a customer who "asked if we were 1-800 contacts," then asked "if we [are] affiliated with them." RX1774; Holbrook, Tr. 2007-08. In another note referenced by Respondent, dated July 25, 2009, a customer service representative recorded a customer saying she "thought she was ordering from 1-800Contacts" when she placed her order with Memorial Eye. RX1777; Holbrook, Tr. 2003-06. In addition, in a note dated January 22, 2009, a customer service representative recorded that a customer who had ordered from Memorial Eye "said that she meant to order with 1-800contacts . . . awesome." RX1775; Holbrook, Tr. 2010-11.

The records notations upon which Respondent relies are not persuasive evidence that consumers are confused by paid advertisements appearing in response to a search for 1-800 Contacts. The cited documents, at best, show inquiries about affiliation and/or that some customers were mistaken about from whom or where they had ordered their contact lenses.

⁴⁴ Dr. Van Liere testified that he ran searches on "1-800 Contacts" and that a sponsored link for 1-800 Contacts sometimes appeared and sometimes did not appear, Van Liere, Tr. 3009-10, and that he relied on these searches in constructing SERPs for his survey that did not include sponsored ads for 1-800 Contacts. Van Liere, Tr. 3002-03, 3010-11, 3013-14. However, Dr. Van Liere did not retain copies of those searches and they were not produced to Complaint Counsel in discovery. Tr. 3133. See Complaint Counsel's Motion to Disregard and Strike Certain Portions of the Report and Testimony of Dr. Kent Van Liere, May 16, 2017. Thus, Complaint Counsel was unable to fully test Dr. Van Liere's basis for excluding all 1-800 Contacts sponsored ads from his test condition, and his related opinion that the conditions in his survey replicated how a SERP would appear in response to a search for 1-800 Contacts, in a world without the Challenged Agreements. For these reasons as well, Dr. Van Liere's survey is entitled to little or no weight. See Bench Ruling, Tr. 3135 (stating that "any opinion by any expert wherein the party on the other side was not given appropriate documents relied upon by the expert . . . those expert opinions will not be considered").

Moreover, this anecdotal evidence of six alleged instances of confusion does not indicate that any purported confusion was attributable to having seen or responded to paid advertising in response to a search for 1-800 Contacts' trademark terms. Thus, the evidence is not probative of whether such advertising is confusing.

In Respondent's trademark litigation against Lens.com, the court found that a customer service record recording that the customer was canceling her order because she had "just realized" that Lens.com was not 1-800 Contacts, was not probative of confusion arising from Lens.com's search advertisements appearing in response to a search for 1-800 Contacts' trademark terms. 772 F.3d at 1245. The court stated:

We now turn to 1-800's arguments regarding actual confusion. First, it cites what it claims to be anecdotal evidence of actual confusion in the marketplace: a customer-service record disclosed by Lens.com reported that a customer called Lens.com in July 2006 to cancel her order, apparently because she had just realized that Lens.com was not 1-800. Lens.com counters that the customer-service record cannot be probative of the relevant confusion in this case because, among other reasons, it gives no indication how the customer found Lens.com to place her order initially. We agree. It would be speculation to assume that she had clicked on a Lens.com ad after specifically searching for 1-800.

Id. at 1245.

Furthermore, the discovery of 6 alleged instances of confusion, out of the roughly 100,000 documents produced in the litigation between 1-800 Contacts and Memorial Eye (F. 341), is arguably *de minimis* and therefore carries little probative weight. *See, e.g., Hornady Mfg. Co. v. Doubletap, Inc.*, 746 F.3d 995, 1005 (10th Cir. 2014) ("Even assuming that the three instances cited by [the plaintiff] constitute some evidence of actual confusion, we agree with the district court's assessment that a handful of instances over the ten years in which [the defendant] was in the market constitute *de minimis* evidence of a likelihood of confusion."); *King of the Mountain Sports, Inc. v. Chrysler Corp.*, 185 F.3d 1084, 1092 (10th Cir. 1999) ("[I]solated instances of actual confusion may be *de minimis*.").

Because this evidence does not show that consumers were confused by search results returned on an internet search for 1-800 Contacts' trademark terms, it fails to support Respondent's argument that the Challenged Agreements prevented paid search advertising that

was likely to cause consumer confusion.

d. Opinion of Dr. Anindya Ghose

Respondent introduced evidence from its expert witness, Dr. Anindya Ghose, that 25.6% of consumers buy from 1-800 Contacts after searching for 1-800 Contacts' trademark and clicking on its ad, whereas only 5.2% of consumers buy from other retailers after searching for 1-800 Contacts and clicking on the other retailers' ads. RX0733 (Ghose Expert Report at 0048-50 ¶¶ 107-13). Respondent asserts that this evidence supports the inference that consumers who searched for 1-800 Contacts' trademarks and clicked on an ad for another retailer found themselves "in the wrong place." RB at 50 (citing RX0733 (Ghose Expert Report at 0049 ¶ 109)).

As an initial matter, the assumption underlying Respondent's assertion, that all consumers who type "1-800 Contacts" into a search engine intend to go only to 1-800 Contacts' website, and nowhere else, is not supported by the evidence in this case. Section III.F.5. Even assuming that most consumers who search for a 1-800 Contacts trademark are interested in navigating to the 1-800 Contacts website, there is no basis for assuming that these consumers, or that other consumers who may enter a 1-800 Contacts trademark as a search term, are not interested in obtaining any other information, including information about other sellers of contact lenses. Academic literature confirms that not all consumers who type in one company's brand name, but find themselves on that company's rivals' website, find themselves in the wrong place. *See* David J. Franklin & David A. Hyman, *Trademarks as Search Engine Keywords: Much Ado About Something?* 26 HARV. J.L. & TECH. 481, 532 (2013) (when asked, in the abstract, what consumers wished to see in response to a brand search, almost *half* responded that they wanted to see information relating to other brands); Eric Goldman, *Brand Spillovers*, 22 HARV. J.L. & TECH. 381, 411-12 (2009) ("many consumers entering a trademarked search term may not be looking for the trademark owner's goods or services").

More importantly, Dr. Ghose did not opine that consumers who search for 1-800 Contacts trademark terms convert to sales at higher rates on 1-800 Contacts' website than on the websites of 1-800 Contacts' rivals because they were confused. Dr. Ghose opined that this difference in conversion rates "supports the inference that consumers who clicked on other

retailers' ads might have done so by mistake . . . *or* might have preferred the experience of shopping on 1-800 Contacts' website." RX0733 (Ghose Expert Report at 0049 ¶ 109) (emphasis added) (noting also "[t]here are other possible explanations why 1-800 Contacts' conversion rate might be higher; for example, 1-800 Contacts' website could have been more appealing to consumers than other retailers' websites, thus increasing the probability that consumers would purchase from 1-800 Contacts."). In other words, Dr. Ghose does not know why the conversion rates for consumers clicking on 1-800 Contacts' website in response to searches for 1-800 Contacts are higher than for consumers who click on other retailers' websites. He speculates that maybe consumers are confused, or maybe consumers are not confused at all; they simply like to comparison shop.

Based on the foregoing, Dr. Ghose's opinion does not support Respondent's argument that the Challenged Agreements prevented paid search advertising that was likely to cause consumer confusion.

e. Summary

Respondent has failed to prove its claim that the Challenged Agreements are justified to prevent consumer confusion. As explained above, Respondent's assertion that consumers entering a search query for 1-800 Contacts' trademark terms are likely to be confused by the appearance of advertisements for other contact lens retailers is based upon inadequately supported expert opinion and a few vague notations in customer service records. The weight of this evidence is not sufficient to prove Respondent's assertion as to the likelihood of consumer confusion.

5. Search Costs

Respondent asserts that consumers who type "1-800 Contacts" into the search bar generally intend to navigate to 1-800 Contacts' website and that, for this reason, the additional ads for retailers other than 1-800 Contacts in response to those searches are only "minimally relevant" to consumers. RB at 57-58. Building on these factual assertions, Respondent argues that providing consumers with additional ads that are only minimally relevant can harm consumers by increasing the costs of finding the 1-800 Contacts website. RB at 58. Respondent

concludes that, therefore, the Challenged Agreements, by eliminating only minimally relevant ads, reduced those increased search costs, and, thus, benefitted consumers. RB at 55. In essence, Respondent contends the Challenged Agreements are good for consumers because they address a “choice overload” problem, such as one presented to a shopper in the salad dressing aisle at one’s local supermarket who is confronted with too many choices. RB at 59 (citing RX1963).

When an internet user types words or phrases in the search box on a search engine, if the search engine determines that the search query is of a commercial nature (e.g., a search for “wine glasses” rather than a search for “history of wine”), the search engine will typically serve four paid advertisements above the hundreds, if not thousands, of natural search results it displays. F. 142, 212, 234. The factual predicate of Respondent’s argument – that the display of four ads, instead of just one ad for 1-800 Contacts, has caused harm to consumers – has not been proven. As an initial matter, the evidence in this case fails to show that users who type in 1-800 Contacts’ trademark terms into a search bar want to go only to 1-800 Contacts’ website. The academic literature relied upon by Respondent’s expert witness for this point, Dr. Ghose, makes clear that a user’s intent cannot be inferred with any certitude from the user’s search query. F. 784. Moreover, Dr. Ghose conceded that “advertising has the capacity to change the consumer’s commercial intent.” F. 785. Dr. Ghose acknowledged that if a consumer is engaged in comparative shopping, the consumer can benefit from seeing rival companies’ ads. F. 786 (noting that among the benefits of targeted advertising is that consumers can make better and more informed decisions). Thus, users who may have initially wanted to navigate to 1-800 Contacts’ website may be persuaded by ads from other retailers offering lower prices and change their intent and select an alternative website.

Dr. Athey, Complaint Counsel’s expert witness, explained that relevant academic literature has shown researchers’ observations that people used ““queries comprised of unambiguous company names or URLs and typically thought of as navigational”” “not only to navigate to the corresponding homepage, but also to navigate to related pages (e.g., 17% of all queries for weather.com end up at <http://weather.yahoo.com>).” CX8010 (Athey Rebuttal Expert Report at 008 ¶ 19). As Dr. Athey explained, “[i]n the weather.com example, . . . the logical conclusion is that subset of users who landed at weather.yahoo.com were ultimately seeking to

understand the weather. Their apparent expressed preference for obtaining that information from weather.com was not a reliable indicator of their underlying intent. They may understand that weather.com is one way to meet their needs, but are open to other, potentially superior ways to learn about the weather.” *Id.*

Furthermore, Respondent’s position that consumers who type 1-800 Contacts’ trademark terms into a search query intend to navigate only to 1-800 Contacts’ website is undermined by the proof in this case that when other online contact lens retailers’ ads are shown in response to searches for 1-800 Contacts, those retailers’ ads receive clicks and those retailers make sales. *See* Section III.E.2.a.ii.

For 1-800 Contacts’ customers who want to go only to 1-800 Contacts’ website without the distraction of advertisements for other online retailers of contact lenses, there are other ways of doing so, such as by typing “www.1800contacts.com” into the navigation bar of their computer’s browser, bookmarking the 1-800 Contacts website, or ordering through 1-800 Contacts’ mobile application. F. 577; *see also* F. 71, 704. Even for those consumers whose intent is to navigate only to 1-800 Contacts’ website, the mere exposure to three additional paid search results, among the thousands of organic search results that are served in response to an internet search, can scarcely be viewed as harm of any consequence. As noted by the court in *Toyota Motor Sales U.S.A., Inc. v. Tabari*:

When a domain name making nominative use of a mark does not actively suggest sponsorship or endorsement, the worst that can happen is that some consumers may arrive at the site uncertain as to what they will find. But in the age of FIOS, cable modems, DSL and T1 lines, reasonable, prudent, and experienced internet consumers are accustomed to such exploration by trial and error. They skip from site to site, ready to hit the back button whenever they’re not satisfied with a site’s contents. They fully expect to find some sites that aren’t what they imagine based on a glance at the domain name or search engine summary.

610 F.3d 1171, 1179 (9th Cir. 2010) (internal citation omitted).

Indeed, Dr. Ghose does not offer a conclusion that any consumers who entered a search query that included a 1-800 Contacts’ trademark term suffered (or would suffer) harm from being exposed to ads from 1-800 Contacts’ rivals. F. 787 (“I haven’t . . . quantified the specific proportion of people who would be harmed. All I’m saying is, based on the analysis, that a large

fraction of people would not find these competing ads relevant given the trademark search.”). Moreover, Dr. Ghose did not conclude that by eliminating competitors’ ads, the Challenged Agreements create benefits for consumers, as asserted by Respondent. *See* F. 788 (Dr. Ghose admitting “all I’ve said is that when consumers get to see these additional ads that may not be very relevant, their search costs can go up, and that’s about it.”). Furthermore, Dr. Ghose acknowledged that if consumers are looking for a product and they don’t know which retailer they want to purchase from, then those consumers are willing to trade higher search costs in return for receiving a deeper discount. F. 789 (testifying also that, “as a general proposition, is it possible that some consumers benefit from seeing a price-comparative rival ad? Yes. I don’t think . . . I have argued . . . against that”).

To the extent that consumers are harmed by “choice overload,” Respondent has not demonstrated that 1-800 Contacts is in a better position to make this decision for consumers than the search engines are. Google and Bing both have decided to serve up to four ads in response to commercial queries (F. 142, 212, 234); both have complex algorithms to determine which ads should be served up in response to users’ queries (e.g., F. 158-161, 181-185, 190, 195, 237-240); and both have implemented trademark policies to specifically allow bidding on competitors’ trademarks as keywords in advertising auctions. F. 290, 298. The search engines generate most of their money through search advertising and have an economic incentive to show relevant and useful information to users. F. 140, 185, 236; F. 199 (“[W]hen users encounter low-quality landing pages, their propensity for wanting to look at and click on ads in the future goes down,” which “can diminish future revenue opportunities for Google.”). *See also* Ghose, Tr. 3999 (“[A] search engine is a profit-maximizing corporation [T]hey are always trying to balance” making money from advertisers with satisfied consumers.).

Based on the foregoing, Respondent has not proven its assertion that the Challenged Agreements provided a procompetitive benefit of reducing search costs.⁴⁵

⁴⁵ In addition, Respondent’s purported justification, that consumers benefit from fewer choices, is comparable to social welfare justifications that courts have rejected as non-cognizable. *See In re North Carolina Board of Dental Examiners*, 2011 FTC LEXIS 290, at *67 (Dec. 7, 2011); *Professional Engineers*, 435 U.S. at 685, 695 (rejecting defense that trade association rule was intended to protect public health, safety, and welfare); *Indiana Fed’n*, 476 U.S. at 463 (stating “there is no particular reason to believe” that consumers cannot digest the information competition provides).

6. Increased Sales

Respondent argues that data from Complaint Counsel's expert witness, Dr. Athey, predicts that the Challenged Agreements increased sales of contact lenses by consumers who searched for 1-800 Contacts' trademark terms. RB at 8, 59-61.

Dr. Athey's model of a "counterfactual" world, discussed in Section III.E.3.c.1, predicts that, in the absence of the Challenged Agreements, consumer clicks on the 1-800 Contacts ads would decline, by 2 clicks per hundred searches; and consumer clicks on ads for competitors of 1-800 Contacts would increase, by 3.5 clicks per hundred searches. F. 750. Dr. Athey's model predicts clicks per searches and makes no predictions as to sales per searches (conversions). F. 751. Respondent's expert witness, Dr. Murphy, testified that in a counterfactual world without the Challenged Agreements, he would not expect to see the conversion rate going up because the Challenged Agreements relate to the propensity for ad impressions to show up; they do not address what the consumer does once he or she clicks on an ad impression. Murphy, Tr. 4231-32.

Dr. Murphy input data from Google regarding the rate at which consumers who click on an ad for a company convert into a sale. F. 791. Dr. Murphy selected what he termed an "average conversion rate" achieved by 1-800 Contacts on searches for its trademark terms of 27% and an "average conversion rate" achieved by 1-800 Contacts' online competitors of 10%. RX0739 (Murphy Expert Report at 0082-83 ¶ 231). Using Dr. Athey's model and Dr. Murphy's conversion rates, Dr. Murphy predicted that in the counterfactual world without the Challenged Agreements, 1-800 Contacts would have a loss of sales of 0.54 customers per 100 searches and the online competitors would have a gain in sales of 0.35 customers per 100 searches. F. 791. Respondent argues that, because the incremental gain of 0.35 sales for 1-800 Contacts' online competitors is less than the incremental loss of 0.54 sales for 1-800 Contacts, Dr. Athey's model shows that consumers' online purchases of contact lenses are lower in the counterfactual world without the Challenged Agreements, and that, therefore, it should be inferred that the Challenged Agreements increased sales of contact lenses. RB at 60.

Dr. Murphy's report fails to support a conclusion that the Challenged Agreements increased sales of contact lenses by consumers who searched for 1-800 Contacts' trademark

terms. Indeed, Dr. Murphy explained that he performed the above calculations to make the point that, although Dr. Athey's model showed that if the Challenged Agreements were not in place, there would be more clicks on ads for online competitors, this does not necessarily mean that there would be more online sales of contact lenses in the counterfactual world.

[O]nce you tell me these things are going in opposite directions [(referring to Dr. Athey's model showing a decline by 2 clicks on 1-800 Contacts ads and an increase by 3.5 clicks on competitors of 1-800 Contacts ads)], then the net effect of that is ambiguous because it is going to tend to reduce the propensity to buy things on 1-800 [Contacts] and maybe increase the propensity to buy somewhere else, but the net effect could easily be to lower the overall propensity.

F. 792. Dr. Murphy clearly disclaimed that his analysis was intended to show that the Challenged Agreements increased the sales of contact lenses, testifying "I am not saying this proves sales would go down in a but-for world"; "the effect on sales could go either way"

F. 793.

Moreover, when asked if he was suggesting that in a counterfactual world without the Challenged Agreements that fewer people are going to buy contact lenses, Dr. Murphy testified:

I don't think that's the way you would interpret this [analysis]. I think you would interpret this as saying these searches were less effective in helping these people purchase contacts. . . . [People are] going to have to go get their contacts somewhere else, maybe go back to the ECP, maybe do something else.

F. 794. Consumers looking to purchase contact lenses are unlikely not to actually purchase contact lenses, given that they went to the trouble of obtaining a prescription for them. F. 10. Contact lenses are not typically a discretionary product and a consumer has significant incentive not to abandon his or her purchase. F. 795. Dr. Murphy's analysis of conversion rates fails to account for these facts. For this reason also, Dr. Murphy's analysis of conversions fails to show that the Challenged Agreements increased output of contact lenses.

Based on the foregoing, the evidence upon which Respondent relies fails to prove Respondent's assertion that the Challenged Agreements increased sales of contact lenses by consumers who searched for 1-800 Contacts' trademark terms.

7. Summary and Conclusion

For all the foregoing reasons, Respondent has failed to prove that the Challenged Agreements have countervailing procompetitive benefits that outweigh or justify the demonstrated anticompetitive effects of the Challenged Agreements.

In conclusion, the evidence in this case proves that the Challenged Agreements pose significant, unjustified anticompetitive consequences in the relevant market for the sale of contact lenses online. The facts show that the restraints in the Challenged Agreements do not enhance or promote competition in the relevant market, but rather tend to suppress competition. Accordingly, Complaint Counsel has met its burden of proving that the Challenged Agreements unreasonably restrain trade in violation of Section 5 of the FTC Act. The analysis now turns to remedy.

G. Remedy

1. Applicable Legal Standards

Pursuant to Section 5 of the FTC Act, upon determination that the challenged practice is an unfair method of competition, the Commission “shall issue . . . an order requiring such person . . . to cease and desist from using such method of competition or such act or practice.” 15 U.S.C. § 45(b); *FTC v. Nat’l Lead Co.*, 352 U.S. 419, 428 (1957).

Courts have long recognized that the Commission has considerable discretion in fashioning an appropriate remedial order, subject to the constraint that the order must bear a reasonable relationship to the unlawful acts or practices found to exist. *See, e.g., FTC v. Colgate-Palmolive Co.*, 380 U.S. 374, 394-95 (1965) (stating that the FTC is permitted “to frame its order broadly enough to prevent respondents from engaging in similarly illegal practices” in the future and that “[h]aving been caught violating the Act, respondents ‘must expect some fencing in’”) (quoting *Nat’l Lead*, 352 U.S. at 431); *FTC v. Ruberoid Co.*, 343 U.S. 470, 473 (1952); *Jacob Siegel Co. v. FTC*, 327 U.S. 608, 612-13 (1946). As stated in *Polygram*:

[T]he Commission is empowered to enter an appropriate order to prevent a recurrence of the violation. The Commission has wide discretion in its choice of a remedy. *Federal Trade Commission v. National Lead Co.*, 352 U.S. 419, 428

(1957); *Jacob Siegel Co. v. Federal Trade Commission*, 327 U.S. 608, 611 (1946). “The Commission is not limited to prohibiting the illegal practice in the precise form in which it is found to have existed in the past,” but “must be allowed effectively to close all roads to the prohibited goal, so that its order may not be by-passed with impunity.” *Federal Trade Commission v. Ruberoid Co.*, 343 U.S. 470, 473 (1952). The remedy selected, however, must be reasonably related to the violation found to exist. *Id.*; *Jacob Siegel*, 327 U.S. at 613.

Polygram, 136 F.T.C. at 379.

Complaint Counsel submitted a proposed order with its Post-Trial Brief. However, notwithstanding the clear direction of the Administrative Law Judge,⁴⁶ Complaint Counsel devoted little of its Post-Trial Brief to explaining or justifying the provisions of the proposed order, and, in fact, only Paragraph II of the proposed order was discussed. Respondent submitted revisions to the proposed order with its Reply Brief, together with argument in support thereof.

Based on full consideration of the applicable legal authorities, the proposed order, and Respondent’s proposed revisions thereto, the attached Order, to be entered herewith, adopts the provisions of Complaint Counsel’s proposed order except as explained below. The Order accomplishes the remedial objectives of the FTC Act and is reasonably related to the proven violations. Moreover, the Order is sufficiently clear and precise. The Order also is necessary and appropriate to remedy the violations of law found to exist.

2. Specific Provisions

a. Paragraph I

Respondent does not seek to modify the set of definitions in the proposed order, except that Respondent would omit from the definition of “1-800 Contacts” the partners, directors, officers, employees, agents, and representatives of “joint ventures, subsidiaries, partnerships, divisions, groups, and affiliates in each case controlled by 1-800 Contacts.” As written, the definition is standard and not unreasonably broad. Accordingly, the definitions in the proposed order will be included in the Order.

⁴⁶ Tr. 4552-53 (instructing both parties to “concentrate heavily on the remedy” in post-trial briefing); Order on Post-Trial Briefs (“The parties shall specifically include briefing in support of or in opposition to the proposed order.”).

b. Paragraphs II.A and II.B

Respondent seeks revisions to certain provisions in Paragraphs II.A and II.B of the proposed order.

Paragraph II.A prohibits: “Entering Into⁴⁷] any combination, conspiracy, or agreement with a Seller to prohibit, restrict, regulate, or otherwise place a limitation on the ability of a Seller to participate in a Search Advertising auction, or to provide instructions to a Search Engine regarding the nature and extent of a Seller’s participation, including but not limited to, prohibiting or restricting the use of a Keyword or requiring the use of a Negative Keyword.”

Paragraph II.B prohibits: “Entering Into any combination, conspiracy, or agreement with a Seller to prohibit, restrict, regulate, or otherwise place a limitation on any Search Advertising . . .” Paragraph II.B specifies that the prohibitions do not prevent Respondent from entering into an agreement regarding certain types of advertising, such as false advertising, advertising that misrepresents an affiliation with or sponsorship by Respondent, or advertising using a confusingly similar name to any 1-800 Contacts’ trademark. II.B.1, 2.

In addition, Paragraph II.B contains a “carve-out” clause with respect to future litigation by Respondent, as follows:

[N]othing in this Paragraph II.B shall prohibit Respondent from (a) initiating or prosecuting a lawsuit, (b) communicating to any Seller Respondent’s intention to initiate or prosecute a lawsuit, or (c) implementing or enforcing the order entered by any court of law at the conclusion of a contested litigation.

(the “litigation carve-out”).

Respondent proposes to delete from subparagraph (c) of the litigation carve-out the phrase, “at the conclusion of contested litigation,” and replace it with language expressly including in the litigation carve-out “an order approving a litigation settlement.” Thus, Respondent requests that subparagraph (c) of the litigation carve-out be modified as follows: “(c) implementing or enforcing the order entered by any court of law, including an order

⁴⁷ The proposed order makes “Entering Into” a defined term, meaning “entering into, adhering to, participating in, maintaining, implementing, enforcing, inviting, offering or soliciting.” Paragraph I.D.

approving a litigation settlement.” Respondent also requests that the litigation carve-out, as modified by Respondent, be added to Paragraph II.A.

Respondent argues that limiting the exemption to court orders that are entered “at the conclusion of contested litigation” interferes with the ability of an Article III court to issue court orders approving settlements and dismissing litigation, prior to conclusion. Respondent further contends such a limitation contravenes public policy that encourages settlements of litigation. Complaint Counsel did not address the litigation carve-out in its brief, except to assert that the proposed order “permit[s] 1-800 Contacts and its rivals to pursue litigation . . . or to settle any trademark dispute” within the boundaries set by the order. CCB at 183.

In order to preserve the prerogatives of a court overseeing litigation, while still ensuring that the purposes of the Order are carried out, subparagraph (c) of the litigation carve-out will be included in the Order, but modified as requested by Respondent, and the same litigation carve-out will be added to Paragraph II.A.⁴⁸

It should be noted that the modification effectively exempts settlement agreements that would otherwise be prohibited by Paragraphs II.A and B, so long as the settlement agreement is submitted to and adopted by a court as an order. This could be problematic if a court receiving such submission has not been made aware of the prohibitions of the Order in this case. The proposed order contains a number of notification requirements in connection with Respondent’s future litigation and settlements that should mitigate the risk that a court reviewing a settlement agreement for potential entry as a court order will not be made aware of the prohibitions of the Order. Specifically, Paragraph IV.B of the proposed order requires Respondent, for a period of five years, to notify Commission staff of communications with any Person regarding suspected trademark infringement and to provide such persons with a statement (attached to the proposed order as Appendix A) summarizing the prohibitions of the order. IV.B.1, 2. Further, Paragraph

⁴⁸ Respondent’s proposed litigation carve-out clause would further add a subparagraph (d) to allow Respondent to enforce “any settlement agreements already entered into prior to the initiation of the Commission’s complaint in this matter.” Respondent included subparagraph (d) in its proposed order but failed to submit any argument to specifically justify this provision. To the extent Respondent argues that this provision is necessary to prevent improper retroactive application of the order to existing agreements, the provision is rejected for the reasons set forth in Section III.G.2.d.

IV.B.3 requires Respondent to provide to Commission staff a copy of any agreement that Respondent enters into with a Seller⁴⁹ relating to Search Advertising,⁵⁰ within 30 days of entering into such agreement.

In addition to the foregoing notice provisions, a new subparagraph 5 is added to Paragraph IV.B of the Order, to require Respondent to: “Provide a copy of this Order to any court evaluating a settlement agreement relating to Search Advertising for approval and/or incorporation into a court order.”

c. Paragraphs II.C and II.D

Paragraph II.C of the proposed order prohibits:

Entering Into any combination, conspiracy, or agreement with a Seller to prohibit, restrict, regulate, or otherwise place any limitation on truthful, non-deceptive, and non-infringing advertising or promotion.

Paragraph II.D of the proposed order prohibits:

Entering Into any combination, conspiracy, or agreement with a Seller to:

1. Fix, raise, or stabilize prices or price levels, or engage in any other pricing action; or
2. Allocate or divide markets, customers, contracts, transactions, business opportunities, lines of commerce, or territories.

Respondent requests that Paragraphs II.C and II.D of the proposed order not be included in the Order. Respondent argues that these provisions are unduly vague “obey-the-law” provisions, which have been held impermissible and unenforceable. Respondent further argues that the provisions go “further than is reasonably necessary to correct the evil and preserve the rights of competitors and public,” RRB at 147 (quoting *FTC v. Royal Milling Co.*, 288 U.S. 212, 217 (1933)), and that they are not justified as fencing-in relief because the provisions do not bear a “reasonable relation to the unlawful practices found to exist.” RRB at 147 (quoting *Jacob*

⁴⁹ Paragraph I.K of the proposed order defines “Seller” as “any Person that markets or sells any contact lens product and includes its employees, agents, and representatives.”

⁵⁰ Paragraph I.H of the proposed order defines “Search Advertising” as “online advertisements displayed on a Search Engine Results Page in response to a user query.”

Siegel, 327 U.S. at 613). Regarding Paragraph II.C in particular, Respondent further argues that the prohibition against any agreement that would “place any limitation on truthful, non-deceptive, and non-infringing advertising” would effectively prevent 1-800 Contacts from entering into any settlement agreement involving alleged trademark infringement or deceptive advertising, either as a plaintiff or a defendant. RRB at 148. Complaint Counsel states that Paragraph II.C is similar to a provision in the Commission’s order in *Polygram*. Complaint Counsel does not explain the basis or reasoning for Paragraph II.D.

Respondent’s objections to Paragraph II.C are without merit, and Paragraph II.C will be included in the Order. Prohibiting Respondent from entering into agreements in the future that limit “truthful, non-deceptive, and non-infringing advertising or promotion” is reasonably related to the unlawful advertising restraints found in this case, and is appropriate fencing-in relief. In *Polygram*, where the respondent’s horizontal agreement not to advertise was held to be an unlawful advertising restraint, the Commission’s order prohibited, *inter alia*, any agreement to restrict truthful or “nondeceptive” advertising. 2003 FTC LEXIS 120, at *105-06. The Sixth Circuit upheld the Commission’s order. 416 F.3d at 38.

In addition, the language of Paragraph II.C is not impermissibly vague. An order’s prohibitions need only be sufficiently clear that “that they may be understood by those against whom they are directed” *Colgate Palmolive*, 380 U.S. at 392. The prohibitions in Paragraph II.C meet this standard. Additionally, some level of uncertainty is contemplated by the FTC Act, as noted by the Supreme Court in *Colgate-Palmolive*: “If, however, a situation arises in which respondents are sincerely unable to determine whether a proposed course of action would violate the present order, they can, by complying with the Commission’s rules, oblige the Commission to give them definitive advice as to whether their proposed action, if pursued, would constitute compliance with the order.” 380 U.S. at 394; *see, e.g.*, 16 C.F.R. § 2.41(d) (“Any respondent subject to a Commission order may request advice from the Commission as to whether a proposed course of action, if pursued by it, will constitute compliance with such order.”).

Paragraph II.D of the proposed order will not be included in the Order. The provisions focus on conduct, such as price-fixing and market allocation, that is too far removed from the

unlawful conduct found to exist in this case to conclude that the provisions of Paragraph II.D are justified as reasonably related, fencing-in provisions.

Paragraph II.E of the proposed order will be included in the Order, renumbered as Paragraph II.D.

d. Paragraph III

Paragraph III of the proposed order would prohibit Respondent from enforcing, or attempting to enforce, any “existing agreement or court order that imposes a condition on a Seller that is not consistent with Paragraph II,” and further requires Respondent to take steps to vacate or nullify any such agreement or court order. Respondent objects to Paragraph III in its entirety. Respondent contends that, in finding the Challenged Agreements unreasonably restrain trade, this adjudication adopts a “new rule” which cannot properly be applied retroactively. Respondent contends it might have proceeded differently in its trademark litigation had it anticipated such a new rule, and reiterates its assertions that the Settlement Agreements were reasonable, typical, and/or based on a sincere belief that such agreements were valid as a matter of trademark law and antitrust law. Complaint Counsel failed to address Paragraph III of the proposed order.

Respondent’s assertion that this case adopts a “new rule” is without merit. Respondent’s assertion ignores the fact that this Initial Decision found that the Challenged Agreements have anticompetitive effects, and that, based on the totality of the record, they constitute an unreasonable restraint of trade. The notion that horizontal agreements to restrict advertising can constitute an unreasonable restraint of trade is scarcely a new rule. *See Indiana Fed’n*, 476 U.S. at 461-62. Similarly, balancing asserted procompetitive effects against anticompetitive effects, as done in this case, does not reflect a “new rule.” Rather, it is well-established that “harms and benefits must be weighed against each other in order to judge whether the challenged behavior is, on balance, reasonable.” *Law*, 134 F.3d at 1019; *see also Cal. Dental Ass’n*, 224 F.3d at 957-58 (holding that the central factual determination is whether challenged restraints are net procompetitive or net anticompetitive).

Preventing Respondent from enforcing restrictions that have been determined to be unlawful is necessary and appropriate to remedy the violations found to exist. In *Polypore*, where it was determined that a non-compete provision in an agreement unlawfully restrained trade, the appropriate remedy was to prohibit enforcement of the challenged provision and to require modification of the agreement. *In re Polypore Int'l, Inc.*, 2010 FTC LEXIS 17, at **654, 669-71 (Mar. 1, 2010) (Initial Decision), *aff'd in part* 2010 FTC LEXIS 97 (Dec. 13, 2010), *aff'd Polypore v. FTC*, 686 F.3d 1208 (11th Cir. 2012). *See also In re Ky. Household Goods Carriers Ass'n*, 2004 FTC LEXIS 107, at *95 (June 21, 2004) (holding that where it was demonstrated that the respondent engaged in horizontal price fixing through the association's collective ratemaking practices, the appropriate remedy was an order requiring respondent to cease and desist from such collective ratemaking in the future and to take action to cancel or withdraw existing tariffs) (Initial Decision), *aff'd*, 2005 FTC LEXIS 124 (June 21, 2005), *rev. denied*, 2006 U.S. App. LEXIS 21864 (6th Cir. 2006). Based on the foregoing, Paragraph III of the proposed order will be included in the Order. However, in order to ensure that the Order prohibits only those provisions of an agreement that impose a condition on a Seller that is not consistent with Paragraph II of the Order, Paragraph III will be modified, for the purpose of specificity, to require that Respondent:

- A. Cease and desist from enforcing or attempting to enforce any and all provisions, terms, or requirements in an existing agreement or court order that impose a condition on a Seller that is not consistent with Paragraph II of this Order.

and

- B. Within sixty (60) days after the date this Order is issued, take whatever action is necessary to vacate or nullify any and all provisions, terms, or requirements in any court order or agreement that impose a condition on a Seller that is not consistent with Paragraph II of this Order.

e. Paragraph IV

Paragraph IV of the proposed order would impose certain notification requirements on Respondent, including requirements that Respondent notify the settling parties, as well as others that Respondent may contact concerning alleged trademark infringement, of the contents of the Order, and to notify Commission staff of any trademark infringement claims and settlements relating to Search Advertising. Respondent objects to, and seeks deletion of, most of the

notification provisions of Paragraph IV. Complaint Counsel does not address Paragraph IV. Respondent does not specifically justify its proposed deletions.

The notification requirements in Paragraph IV of the proposed order are reasonable and will assist in enforcement of the Order in the future. Accordingly, Paragraph IV of the proposed order will be included in the Order.

f. Paragraphs V-VIII

The remaining Paragraphs V through VIII of the proposed order contain standard reporting and notification requirements that are appropriate for future enforcement of the Order, and are not objected to by Respondent, except that Respondent proposes to limit Paragraphs VI and VII to five years and proposes that the Order shall terminate five years from the date it issued.

Pursuant to the Policy Statement Regarding Duration of Competition and Consumer Protection Orders, 60 Fed. Reg. 42,569 (August 16, 1995), the Commission's stated policy is for administrative cease and desist orders to terminate after twenty years. Accordingly, Respondent's request to limit the Order to five years is rejected. Paragraphs V through VIII of the proposed order are included in the Order.

IV. SUMMARY OF CONCLUSIONS OF LAW

1. Complaint Counsel bears the burden of proving jurisdiction and liability by a preponderance of evidence.
2. Respondent is a corporation, as “corporation” is defined in Section 4 of the FTC Act, 15 U.S.C. § 44.
3. Respondent’s challenged activities relating to the sale of contact lenses are in or affect commerce in the United States, as “commerce” is defined in Section 4 of the FTC Act, 15 U.S.C. § 44.
4. The FTC has jurisdiction over Respondent and the subject matter of this proceeding, pursuant to Section 5 of the FTC Act.
5. The FTC Act’s prohibition of unfair methods of competition under Section 5 of the FTC Act encompasses violations of Section 1 of the Sherman Act.
6. Section 1 of the Sherman Act prohibits every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States. 15 U.S.C. § 1.
7. *FTC v. Actavis*, 133 S. Ct. 2223 (2013) is not authority for the proposition that Respondent’s trademark settlement agreements are immune from antitrust scrutiny.
8. A Sherman Act Section 1 violation requires a determination of (1) whether there was a contract, combination, or conspiracy – or, more simply, an agreement; and, if so, (2) whether the contract, combination, or conspiracy unreasonably restrained trade in the relevant market.
9. Without a well-defined relevant market, a court cannot determine the effect that an allegedly illegal act has on competition.
10. An antitrust market is comprised of a relevant geographic market and a relevant product market.
11. A relevant geographic market is the area of effective competition in which the seller operates, and to which the purchaser can practicably turn for supplies.
12. The outer boundaries of a relevant product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.
13. The boundaries of a submarket may be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the

product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.

14. The relevant market in which to analyze the effects of the Challenged Agreements is the online sale of contact lenses in the United States.
15. The evaluation of whether a particular horizontal agreement unreasonably restrains trade takes place along an analytical continuum in which a challenged practice is examined in the detail necessary to understand its competitive effect.
16. Under a "quick look" rule of reason analysis, also referred to as "inherently suspect" analysis, certain types of restraints are presumed to have anticompetitive effects.
17. Abandonment of the rule of reason in favor of presumptive rules (or a "quick-look" approach) is appropriate only where an observer with even a rudimentary understanding of economics could conclude that the arrangements in question would have an anticompetitive effect on customers and markets.
18. A full rule of reason approach requires courts to engage in a thorough analysis of the relevant market and the effects of the restraint in that market. This may extend to a plenary market examination, which may include an analysis of the facts peculiar to the business, the history of the restraint, and the reasons why it was imposed.
19. The context and circumstances surrounding a restraint are examined, not because a good intention will save an otherwise objectionable regulation or the reverse; but because knowledge of intent may help the court to interpret facts and to predict consequences.
20. If a restraint is demonstrated to be "inherently suspect" and has not been justified, it may be condemned without proof of market power or actual effects. Otherwise, a plaintiff must show that the challenged restraints have resulted in, or are likely to result in, anticompetitive effects, in the form of higher prices, reduced output, degraded quality of products or services, retarded innovation, or other manifestations of harm to consumer welfare.
21. A plaintiff may demonstrate actual anticompetitive effects in the relevant market, or make an indirect showing based on a demonstration of defendant's market power, which when combined with the anticompetitive nature of the restraints, provides the necessary confidence to predict the likelihood of anticompetitive effects.
22. If actual anticompetitive effects are shown, then proof of market power is unnecessary, because an inquiry into market power is a surrogate for detrimental effects.
23. Complaint Counsel met its burden of proving that the Challenged Agreements pose actual anticompetitive effects, in the form of harm to consumers and competition.

24. If the plaintiff meets its burden of demonstrating actual anticompetitive effects, or likely anticompetitive effects based on proof of market power, the burden shifts to the defendant to prove legitimate, countervailing procompetitive justifications for the challenged restraint.
25. A court applying a rule of reason analysis asks whether a practice produces net benefits for consumers; it is no answer to say that a loss is reasonably small.
26. A legitimate justification is one that creates or improves competition, and the evidence must show a specific link between the challenged restraint and the purported justification.
27. An agreement limiting consumer choice by impeding the ordinary give and take of the market place, cannot be sustained under the rule of reason unless the defendant proves countervailing procompetitive virtue, such as, for example, the creation of efficiencies in the operation of a market or the provision of goods and services.
28. Cognizable justifications ordinarily explain how specific restrictions enable the defendants to increase output or improve product quality, service, or innovation.
29. The proponent of the restraint bears a heavy burden of establishing an affirmative that competitively justifies the demonstrated competitive harm.
30. If the defendant is able to demonstrate procompetitive effects, the plaintiff then must prove that the challenged conduct is not reasonably necessary to achieve the legitimate objectives or that those objectives can be achieved in a substantially less restrictive manner.
31. Respondent failed to demonstrate that the Challenged Agreements have procompetitive benefits that outweigh or otherwise justify the anticompetitive harm.
32. Pursuant to Section 5 of the FTC Act, upon determination that the challenged practice is an unfair method of competition, the Commission shall issue an order requiring such person to cease and desist from using such method of competition or such act or practice.
33. The FTC has considerable discretion in fashioning an appropriate remedial order, subject to the constraint that the order must bear a reasonable relationship to the unlawful acts or practices found to exist.
34. The Order entered herewith is necessary and appropriate to remedy the violations of law found to exist, is reasonably related to the proven violations, and is sufficiently clear and precise.

ORDER

I.

IT IS ORDERED that, as used in this Order, the following definitions shall apply:

- A. “1-800 Contacts” means 1-800 Contacts, Inc., its directors, officers, employees, agents, representatives, successors, and assigns; and any joint ventures, subsidiaries, partnerships, divisions, groups, and affiliates in each case controlled by 1-800 Contacts, and the respective partners, directors, officers, employees, agents, representatives, successors, and assigns of each.
- B. “Commission” means the Federal Trade Commission.
- C. “Communicate,” “Communicating,” or “Communication” means the exchange, transfer, or dissemination of any information, without regard to the manner or means by which it is accomplished.
- D. “Entering Into” means entering into, adhering to, participating in, maintaining, implementing, enforcing, inviting, offering or soliciting.
- E. “Keyword” means a word or phrase used to instruct a Search Engine to display specified Search Advertising.
- F. “Negative Keyword” means a word or phrase used to instruct a Search Engine not to display specified Search Advertising.
- G. “Person” means both natural persons and artificial persons, including, but not limited to, corporations and unincorporated entities.
- H. “Search Advertising” means online advertisements displayed on a Search Engine Results Page in response to a user query.
- I. “Search Engine” means a computer program, available to the public, that enables Persons to search for and identify websites and sources of information on the World Wide Web.
- J. “Search Engine Results Page” means a web page displayed by a Search Engine in response to a user query.
- K. “Seller” means any Person that markets or sells any contact lens product and includes its employees, agents, and representatives.
- L. “Trademark Infringement Claim” means a lawsuit threatened or filed in the United States of America purporting to enforce rights under a trademark.

II.

IT IS FURTHER ORDERED that Respondent, directly or indirectly, or through any corporate or other device, in connection with the advertising, marketing, sale, or distribution of contact lenses in or affecting commerce, as “commerce” is defined in Section 4 of the Federal Trade Commission Act, 15 U.S.C. § 44, shall cease and desist from:

- A. Entering Into any combination, conspiracy, or agreement with a Seller to prohibit, restrict, regulate, or otherwise place a limitation on the ability of a Seller to participate in a Search Advertising auction, or to provide instructions to a Search Engine regarding the nature and extent of a Seller’s participation, including but not limited to, prohibiting or restricting the use of a Keyword or requiring the use of a Negative Keyword.

Provided further that nothing in this Paragraph II.A shall prohibit Respondent from (a) initiating or prosecuting a lawsuit, (b) communicating to any Seller Respondent’s intention to initiate or prosecute a lawsuit, or (c) implementing or enforcing the order entered by any court of law, including an order approving a litigation settlement.

- B. Entering Into any combination, conspiracy, or agreement with a Seller to prohibit, restrict, regulate, or otherwise place a limitation on any Search Advertising; *provided, however,* that nothing in this Paragraph II.B shall prohibit Respondent from entering into or complying with a written agreement providing that a:

1. Seller shall not include in the text of any Search Advertising (a) a false or deceptive claim, (b) a representation that Respondent is the source of the goods or services advertised therein, (c) a representation that the Seller is affiliated with or sponsored by Respondent, or (d) a name that is identical to or confusingly similar to any trademark owned by Respondent; or
2. Seller’s Search Advertising shall clearly identify the Seller (for the avoidance of doubt, including the name of the Seller in the URL, website address, or domain name shall constitute clear identification of the Seller); and

Provided further that nothing in this Paragraph II.B shall prohibit Respondent from (a) initiating or prosecuting a lawsuit, (b) communicating to any Seller Respondent’s intention to initiate or prosecute a lawsuit, or (c) implementing or enforcing the order entered by any court of law, including an order approving a litigation settlement.

- C. Entering Into any combination, conspiracy, or agreement with a Seller to prohibit, restrict, regulate, or otherwise place any limitation on truthful, non-deceptive, and non-infringing advertising or promotion;
- D. Attempting to engage in any conduct that is prohibited by Paragraph II of this Order.

III.

IT IS FURTHER ORDERED that Respondent shall:

- A. Cease and desist from enforcing or attempting to enforce any and all provisions, terms, or requirements in an existing agreement or court order that impose a condition on a Seller that is not consistent with Paragraph II of this Order.
- B. Within sixty (60) days after the date this Order is issued, take whatever action is necessary to vacate or nullify any and all provisions, terms, or requirements in any court order or agreement that impose a condition on a Seller that is not consistent with Paragraph II of this Order.

IV.

IT IS FURTHER ORDERED that Respondent shall:

- A. Within thirty (30) days from the date this Order is issued:
 - 1. Distribute by first-class mail, return receipt requested or by electronic mail with return confirmation, a copy of this Order and the Complaint to each of its officers, directors, and managers;
 - 2. Send by first-class mail, return receipt requested or by electronic mail with return confirmation, on Respondent's official letterhead, the statement attached to this Order as Appendix A to each Person:
 - (a) To whom Respondent communicated regarding that Person's involvement as a plaintiff or defendant in any actual or potential Trademark Infringement Claim; and
 - (b) With whom Respondent entered into any agreement prohibited by Paragraph II of this Order.
- B. For a period of five (5) years from the date this Order is issued:
 - 1. Provide to Commission staff a copy of any Communication by Respondent with any Person regarding that Person's suspected trademark infringement no later than ten (10) days after Communicating with such Person;
 - 2. Send by first-class mail, return receipt requested or by electronic mail with return confirmation, on Respondent's official letterhead, the statement attached to this Order as Appendix A to each Person referenced in Paragraph IV.B.1. of this

Order no later than the time Respondent initially Communicates with such Person;

3. Provide to Commission staff a copy of any agreement (or description, if the agreement is not in writing) that Respondent enters into with a Seller relating to Search Advertising, no later than thirty (30) days after it enters into such agreement;
 4. Distribute by first-class mail, return receipt requested or by electronic mail with return confirmation, a copy of this Order and the Complaint to each Person who becomes an officer, director, or manager and who did not previously receive a copy of this Order and Complaint, no later than ten (10) days after the date such Person assumes his or her position; and,
 5. Provide a copy of this Order to any court evaluating a request that a litigation settlement agreement relating to Search Advertising be approved by the court and/or incorporated into a court order.
- C. Retain documents and records sufficient to record Respondent's compliance with its obligations under this Paragraph IV.

V.

IT IS FURTHER ORDERED that Respondent shall file a verified written report with the Commission setting forth in detail the manner and form in which it intends to comply, is complying, and has complied with this Order:

- A. No later than ninety (90) days from the date this Order is issued, and
- B. One (1) year from the date this Order is issued and annually thereafter for four (4) years on the anniversary of the date on which this Order is issued, and at such other times as the Commission may request.

VI.

IT IS FURTHER ORDERED that Respondent shall notify the Commission at least thirty (30) days prior to:

- A. Any proposed dissolution of Respondent;
- B. Any proposed acquisition, merger, or consolidation of Respondent; or
- C. Any other change in Respondent, including, but not limited to, assignment and the creation or dissolution of subsidiaries, if such change might affect compliance obligations arising out of this Order.

VII.

IT IS FURTHER ORDERED that, for the purpose of determining or securing compliance with this Order, and subject to any legally recognized privilege, and upon written request and upon five (5) days' notice to Respondent, that Respondent shall, without restraint or interference, permit any duly authorized representative of the Commission:

- A. Access, during office hours of Respondent and in the presence of counsel, to all facilities and access to inspect and copy all books, ledgers, accounts, correspondence, memoranda, and all other records and documents in the possession, or under the control, of Respondent relating to compliance with this Order, which copying services shall be provided by Respondent at its expense; and
- B. To interview officers, directors, or employees of Respondent, who may have counsel present, regarding such matters.

VIII.

IT IS FURTHER ORDERED that this Order shall terminate twenty (20) years from the date it is issued.

ORDERED:

D. Michael Chappell
Chief Administrative Law Judge

Date: October 27, 2017

Appendix A

[Letterhead of 1-800 Contacts]

[Name and Address of the Recipient]

Dear (Recipient):

As you may know, the Federal Trade Commission issued an administrative complaint in 2016 against 1-800 Contacts, Inc. (“1-800 Contacts”) challenging several agreements between 1-800 Contacts and other contact lens sellers that restrict the ability of such sellers to purchase trademark keywords in search advertising auctions, or to place search advertising triggered by those keywords on internet search engine results pages.

The Federal Trade Commission has issued a Decision and Order (“Order”) against 1-800 Contacts in connection with its complaint. This Order provides, in part, that 1-800 Contacts may not prohibit competing sellers of contact lenses from engaging in truthful, non-deceptive advertising or solicitation through the display of search advertising. Specifically, 1-800 Contacts may not:

1. Enter into, enforce, or attempt to enforce any agreement between or among 1-800 Contacts and a contact lens seller to restrict the ability of the seller to participate in any internet search advertising auction, including restricting the use of keywords or requiring the use of negative keywords;
2. Enter into, enforce, or attempt to enforce any agreement with a contact lens seller that otherwise places any limitation on any search advertising; or
3. Enter into, enforce, or attempt to enforce any agreement with a contact lens seller to allocate or divide markets or customers; or to raise, fix, maintain, or stabilize prices or price levels.

The Order further requires 1-800 Contacts to take whatever action is necessary to have vacated all court orders or other restraints related to trademark infringement claims initiated to accomplish any of the above-listed prohibited activities.

The Order does not prohibit 1-800 Contacts from entering into an agreement with a seller of contact lenses that requires certain disclosures in the *text* of an advertisement, including a clear identification of the seller placing the advertisement.

For more specific information, you should refer to the FTC order itself. The Federal Trade Commission’s Complaint and Decision and Order are available on the Commission’s website, <http://www.ftc.gov>.