UNITED STATES DISTRICT COURT 6521 SOUTHERN DISTRICT OF NE

FIND	THER	FST.	COM	. INC.:
1.11.11	1 1 1 1 2 1 4	1.1.2	COIT.	

Plaintiff.

٧.

LUMEN VIEW TECHNOLOGY LLC; DALTON SENTRY, LLC; DECISIONSORTER, LLC; THE HILLCREST GROUP, INC.; EILEEN C. SHAPIRO; STEVEN J. MINTZ; and DOES 1 through 50,

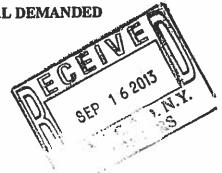
Defendants.

No.		
444	 	 •

ECF CASE

FINDTHEBEST.COM, INC'S COMPLAINT

JURY TRIAL DEMANDED



PLAINTIFF FINDTHEBEST.COM, INC.'S COMPLAINT

Plaintiff FindTheBest.com, Inc. ("FTB" or "Plaintiff") alleges the following claims against Defendants Lumen View Technology LLC ("Lumen"), Dalton Sentry, LLC ("Dalton"), DecisionSorter, LLC ("DecisionSorter"), Hillcrest Group, Inc ("Hillcrest"), Eileen C. Shapiro ("Shapiro"), Steven J. Mintz ("Mintz"), and DOES 1 through 50 (collectively "Defendants"):

NATURE OF THIS ACTION

1. This is a civil action brought under the Federal Racketeering Influenced and Corrupt Organizations Act (18 U.S.C. §§ 1961 et seq. "RICO") and state laws, including abuse of process, malicious prosecution, extortion, and violation of Cal. Bus. & Prof. Code § 17200,

against Defendants based upon their association together for the common purpose of extorting money out of individuals and entities, including FTB, based upon false, objectively unreasonable, and baseless claims of patent infringement. Defendants entered into agreements with one another and formed a series of "shell" entities for the purpose of filing frivolous patent infringement actions and extorting "licensing fees" or settlements from FTB and others, who are the target of those infringement actions. Defendants bring their patent infringement lawsuits without probable cause, without conducting proper due diligence and investigation to have a reasonable belief of infringement, and without a good faith belief that their targets are infringing on the patent.

- 2. Defendants are the holders, licensors, licensees, assignors, or assignees of patents covering abstract, fundamental business-related concepts that they do not use in any of their own commercial enterprises. Rather, Defendants bring serial lawsuits based on alleged infringement of these patents by legitimate businesses, like FTB, that use similar fundamental business-related concepts (but not the same concepts), even though they do not actually infringe any claims of Defendants' patents.
- 3. At all times Defendants either know that the targets of their lawsuits are not infringing upon their patents or have not done proper due diligence and investigation to have reason to believe that the targets have infringed their patents; however, they use the legal process and the threat of huge legal expenses associated with defending a patent infringement lawsuit, threats of criminal prosecution, threats of disruption to the target's business, and threats of public embarrassment to extort "licensing fees" or settlements from their victims in exchange for a dismissal of the frivolous patent infringement suit. Defendants do so knowing that the cost of

fighting their patent infringement suits and the disruption to the target's business are more exorbitant and costly than the "licensing fees" or settlement Defendants seek to extort.

- 4. Defendants create multiple layers of "shell entities" so that their victims have little chance (and therefore little incentive) to recover any monetary relief as a result of Defendants' conduct. These "shell entities" are undercapitalized, do not operate any legitimate business, and do not have any actual offices. As such, these "shell entities" avoid numerous burdens of litigation -e.g. the disruption to business and the expense of compiling discovery responses which they inflict on their victims.
- 5. Defendants have continuously engaged in this pattern and practice of filing false claims and using such threats to harass, annoy and intimidate their victims into paying "licensing fees" or settlements to which Defendants are not entitled. Since their formation of Lumen 18 months ago, Defendants have filed more than 20 patent infringement lawsuits based upon the same patent they allege FTB infringes, the majority of which were dismissed with prejudice after Lumen (in accordance with its agreement with the other Defendants) extorted "licensing fees" or settlements from those defendants. Defendants have asserted many more patent infringement claims using different shell entities and patents apparently related to the patent it alleged against FTB.

PARTIES

- 6. FTB is a Delaware corporation with its principal place of business located at 101 Innovation Place, #A, Santa Barbara, California 93108.
- 7. Eileen C. Shapiro is a resident of Massachusetts and the co-inventor of United States Patent No. 8,069,073 ("the '073 Patent"), the patent referenced in Lumen's Complaint in Case No. 13 CV 3599 (Doc. No. 1) pending in this Court.

- 8. Steven J. Mintz is a resident of River, New Jersey and the co-inventor of the '073 Patent. Mintz is a managing member of DecisionSorter.
- 9. Hillcrest is a Massachusetts Corporation formed by Shapiro and Mintz for the purpose of carrying out the racketeering activity described herein, to hide their involvement in the extortion of "licensing fees" and settlements from their victims and the public, and to avoid the expense and burden of litigation. On information and belief, Shapiro is the President, Chief Executive Officer, Chief Financial Officer, Treasurer, Secretary, and Director of Hillcrest.
- 10. On information and belief, Hillcrest is a manager of DecisionSorter and many other "shell entities" created by Shapiro and Mintz.
- 11. DecisionSorter is a Massachusetts Limited Liability Company formed by Shapiro and Mintz for the purpose of carrying out the racketeering activity described herein, to hide their involvement in the extortion of "licensing fees" and settlements from their victims and the public, and to avoid the expense and burden of litigation. DecisionSorter's registered agent for service of process is Hillcrest located at 20 University Road, Cambridge, MA 02138. DecisionSorter was the original assignee of the '073 Patent.
- 12. On information and belief, FTB alleges that DecisionSorter has no actual business address or business office because it conducts no legitimate business and has no business operations. DecisionSorter is a non-practicing entity, meaning that it does not research and develop new technology but rather acquires patents and licenses the technology for the purpose of filing patent infringement lawsuits and improperly extorting "licensing fees" and settlements.
- 13. Dalton is a Delaware Limited Liability Company formed by Shapiro and Mintz for the purpose of carrying out the racketeering activity described herein, to hide their involvement in the extortion of "licensing fees" and settlements from their victims and the public

and to avoid the expense and burden of litigation. Dalton's registered agent for service of process is located at 2711 Centerville Rd., Suite 400, Wilmington, DE 19808.

- 14. On information and belief, FTB alleges Dalton has no actual business address or business office because it conducts no legitimate business and has no business operations. Dalton is a non-practicing entity, meaning that it does not research and develop new technology but rather acquires patents and licenses the technology for the purpose of filing patent infringement lawsuits and improperly extorting "licensing fees" and settlements.
- 15. On or about September 29, 2010, DecisionSorter purported to assign its rights to the '073 Patent to Dalton.
- 16. Lumen is a Delaware Limited Liability Company formed by Shapiro and Mintz for the purpose of carrying out the racketeering activity described herein, to hide their involvement in the extortion of "licensing fees" and settlements from their victims and the public, and to avoid the expense and burden of litigation. Lumen's registered agent for service of process is located at 113 Barksdale Professional Center, Newark, DE, 19711.
- 17. On information and belief, FTB alleges that Lumen has no actual business address or business office because it conducts no legitimate business and has no business operations. Lumen is a non-practicing entity, meaning that it does not research and develop new technology but rather acquires patents and licenses the technology for the purpose of filing patent infringement lawsuits and improperly extorting "licensing fees" and settlements. On information and belief, Lumen is a shell entity with no ostensible purpose, assets or operation other than as serving as a medium for Shapiro and Mintz to conduct their criminal enterprise.

- 18. On or about March 1, 2012 Dalton purported to assign its rights to the '073 Patent to Lumen. On information and belief, the purpose of this assignment was to enable Lumen to file frivolous patent infringement lawsuits against FTB and others.
- 19. Lumen now claims to be the exclusive licensee of the '073 Patent, however, FTB alleges on information and belief that Shapiro and Mintz still hold an economic interest in the '073 Patent and benefit from the herein alleged illegal enterprise.
- 20. Shapiro and Mintz are the individuals directing the affairs of Lumen, DecisionSorter, Dalton and Hillcrest through a pattern of improper tortious acts and illegal conduct described in this Complaint, which cause financial harm to FTB and others.
- 21. Lumen, DecisionSorter, Dalton, Hillcrest, Shapiro and Mintz have engaged in a pattern of racketeering activity, have each committed numerous criminal acts as part of their scheme to defraud and extort FTB, and others, and have each participated in the operation or management of the criminal enterprise.
- 22. At all times, the Defendants were and are acting in concert with one another, in accordance with their agreement, with a common purpose of carrying out the illegal enterprise and tortious acts described herein.
- 23. At all times, Defendants were aiding and abetting one another in that for each alleged predicate act described herein, each Defendant was associated with the wrongful conduct, participated in that conduct with the intent to bring it about, and sought by their actions to make it succeed.
- 24. Alternatively, FTB alleges that Defendants operate as a single economic unit and are so dominated by the will of Shapiro and Mintz, and are used not to transact lawful business

but to commit extortion and other illegal acts for the benefit of Shapiro and Mintz, that they cease to be separate units and are, in fact, the alter ego of Shapiro and Mintz.

25. Defendants DOES 1-50, inclusive, are individuals and entities not yet known to Plaintiff because Defendants have concealed their identity through a series of shell entities. Once their identities are ascertained, the names of those individuals will be substituted in place of DOE designations.

JURISDICTION AND VENUE

- 26. This Court has subject matter jurisdiction over FTB's claims under 28 U.S.C. §§ 1331 and 1332, and under the RICO Act 18 U.S.C. §§ 1961 *et seq.* This Court has supplemental jurisdiction over FTB's other claims pursuant to 28 U.S.C. § 1367.
- 27. Venue is proper in this District under 28 U.S.C. § 1391(b)(2), as a substantial number of the events giving rise to this action occurred in this District and under 18 U.S.C. § 1965.
- 28. This Court may exercise personal jurisdiction over Lumen because Lumen consented to the personal jurisdiction of this Court by filing a complaint against FTB in this Court. All Defendants have purposefully availed themselves of the laws and protections of New York by filing or causing to be filed multiple patent infringement lawsuits in this district and by abusing the process of the New York courts to cause harm to FTB (and others) as further alleged herein. The Court may assert personal jurisdiction over the other Defendants pursuant to 18 U.S.C. § 1965 and because Defendants used the process of this Court to attempt to extort money from FTB and carry-out its illegal enterprise.

FACTUAL BASIS FOR CLAIMS

A. Lumen View's Pattern and Practice of Filing Frivolous Lawsuits.

- 29. On November 29, 2011, the United States Patent and Trademark Office ("USPTO") issued Patent No. 8,069,073 (the "073 Patent"), entitled "System and Method For Facilitating Bilateral And Multilateral Decision-Making." A copy of this Patent is attached hereto as Exhibit A.
- 30. Lumen contends that the '073 Patent covers the computer enabled process of matching two-party or multi-party preferences through a conjoint analysis. More specifically, the patent purportedly covers a process whereby two or more people enter preferences, rank their preferences and then a computer uses an algorithm to arrive at an optimal meeting point based upon both preferences. Importantly, the patent purports to cover only circumstances where **two or more individuals provide preferences** ("bilateral and multilateral decision-making"); i.e., it does not purport to cover circumstances where **one** individual provides preferences ("unilateral decision-making").
- 31. In fact, in prosecuting the patent and distinguishing the claims from prior art, the inventors represented to the USPTO "that the claims require that conjoint analysis be applied to both sides in a matching situation...." This was distinct from the prior art, which disclosed unilateral conjoint analysis. The inventors made this representation to avoid a determination that the invention was obvious and non-patentable.
- 32. Lumen claims to be the exclusive licensee of the '073 Patent. However, FTB alleges, on information and belief, that Shapiro and Mintz still have an economic interest in the '073 Patent and financially benefit from the illegal acts described herein. In fact, Lumen's current attorney made such a representation.

- 33. On information and belief, Shapiro and Mintz formed Lumen for the purpose of pursuing patent infringement lawsuits based upon the '073 Patent. Specifically, Lumen was formed on February 23, 2012. The '073 Patent was assigned to Lumen on March 1, 2012. Lumen filed its first of more than twenty patent infringement suits eight days later on March 9, 2012 (*Lumen View Technology, LLC v. Avotus, Inc.*, Case No. 12-CV-00291 (D.Del.)). In the last 18 months, Lumen has filed more than twenty patent infringement lawsuits across the United States claiming infringement of the '073 Patent.
- 34. Lumen uses general "form" complaints in furtherance of its scheme so that each complaint is nearly identical aside from changes to the name of the defendant. In this regard, it is apparent that Defendants do not engage in any meaningful pre-filing investigation.
- 35. On information and belief, Shapiro and Mintz have also used other "shell entities" such as Blackstone River, LLC, NewsGems LLC, Gooseberry Natural Resources LLC, Vertigo Holdings LLC, Kolomoki Mounds LLC, and others; to bring frivolous patent infringement suits based upon other patents they own or in which they hold an economic interest and extort license fees or settlements (to which they are not entitled) from their victims. For example, Shapiro and Mintz used these entities to bring patent infringement suits based upon their claimed right to at least three other broad patents. Two of these patents also purport to cover systems and methods for facilitating bilateral and multilateral decision-making and the third purports to cover the basic concept of generating a news or press release online. Using these vague patents and shell companies, Shapiro and Mintz have filed a dozen lawsuits against multiple parties over the past three to four years. On information and belief, most (if not all) of these lawsuits were voluntarily dismissed by Shapiro's and Mintz's shell entities after extorting licensing fees from their victims.

- 36. On information and belief, FTB alleges that, in each case, Defendants follow the same format:
 - a. Defendants conduct no investigation into the products or services offered by the alleged infringer, but simply do a broad internet search for companies that offer any type of matching service. Because the concept of matching two parties is as old as Adam and Eve, this general search reveals numerous company websites.
 - b. Defendants then file a lawsuit against the company ("target") without conducting any further good-faith investigation into whether the target actually practices the process purportedly covered by the '073 Patent and without first notifying the target of the '073 Patent or the alleged infringement.
 - c. Defendants conduct no further investigation into the target's "accused products or services" to determine how they operate and whether they actually infringe upon the '073 Patent even after representations by the target that its accused services or products do not practice the claimed invention.
 - d. In each and every case, Defendants serve the complaint on the target with a letter stating that the target may avoid the cost of filing a responsive pleading if it is willing to pay Lumen a "licensing fee." The letter further threatens that if the target fights the lawsuit through "early motion practice" or otherwise, Lumen will increase its settlement demands and engage in "all motion practice as well as protracted discovery" to drive up litigation costs and disrupt its target's business.
 - e. Neither Lumen's letter nor its complaint, describe how the target is infringing the patent. Rather, the letter advises the target that it should be prepared to describe its use of and revenue generated from the '073 Patent.

- f. A true and correct copy of the letter Defendants sent to FTB is attached hereto as Exhibit B and incorporated herein by reference.
- g. In some cases, when Defendants' targets show indications that they intend to defend themselves, Defendants (using Lumen) threaten to contact the target's customers, or add them to the litigation, which would effectively put the target out of business due to lost business and escalating indemnification costs. In fact, in the case of one lawsuit (targeting RealMatch), Defendants named the target's customers in the complaint to exert greater pressure on the target.
- h. In all cases, Defendants settle the lawsuits before any challenge to the patent's validity, any claim construction, or any discovery into Defendants' enterprise. This is intentional to avoid disclosing the ownership and relationship among Defendants.
- 37. In reality the threats made by Defendants (through Lumen) are as hollow, false, and misleading as are the allegations in their complaints. Defendants have no good faith belief that the target is actually infringing the '073 Patent, have no desire to restrain the target from operating in the manner Defendants allege infringes the '073 Patent, have no intention of engaging in "full-scale litigation" to enforce their purported rights under the '073 Patent, and will not increase their settlement demand if the target responds to the complaint or engages in early motion practice. In fact, despite these representations, in the case of FTB, Defendants' settlement demand remained the same after FTB filed an answer to the complaint. And as a last-ditch effort to avoid having to defend its infringement position, Lumen offered a "one-day-only" settlement offer that was discounted by \$30,000 if FTB would not file an answer to the complaint.

- 38. In fact, on at least one occasion, when Defendants discovered after filing their patent lawsuit that the target did not have the funds to pay a "licensing fee," Defendants dismissed their lawsuit without prejudice and without taking any steps to enjoin the alleged use of their patent. On information and belief, Defendants intend to file another lawsuit against this target when Defendants can wrongfully extract more money from it. This is because Defendants do not use the inventions claimed in the '073 Patent, maintain the '073 Patent for the sole purpose of filing lawsuits, and have no real business or competitive interest in deterring infringement of the '073 Patent.
- 39. Because Lumen exists for no purpose other than to file patent infringement lawsuits, it can wage a one-sided war on its victims. Specifically, unlike its targets, Lumen faces no disruption to its business as a result of the lawsuits. Lumen has no legitimate business, therefore, it does not have business records, employees, offices or operations. Accordingly, it has no employees inconvenienced by, and no business disrupted by, subpoenas, discovery, document preservation, depositions, or other incidents of litigation. Since Defendants do not manufacture or produce anything, they have no fear of counter infringement claims. Moreover, because of the "shell game" Defendants play, Lumen has far fewer documents and witnesses to produce and it has no concern regarding its reputation in the marketplace. Thus, Lumen faces far fewer litigation costs than its victims. Since Lumen is undercapitalized and holds no "real" assets, its victims have little recourse.

B. Defendants File a Frivolous Lawsuit Against FTB to Extort Illegal Fees.

- 40. FTB owns and manages the website FindtheBest.com. The website is a research hub that provides consumers with unbiased, data-driven comparisons of a wide array of search topics ranging from subjects such as smartphones, cars, and ski resorts, to name a few.
- 41. Importantly, FTB's website provides only unilateral matching because only one party the consumer visiting the website inserts preferences. The website then uses publically-available information to match consumers with products/services matching their preferences. Functionally, FTB's website provides consumers information similar to Consumer Reports, which first offered its services online in 1987.
- 42. On or about May 30, 2013, FTB received a threatening letter from Lumen's attorney (acting on behalf of all Defendants and at the direction of Shapiro and Mintz) enclosing a complaint that Lumen filed against FTB alleging infringement of the '073 Patent (*Lumen View Technology LLC v. Findthebest.com, Inc.*, Case No. 13-CV-3599 (S.D.N.Y.). (Exh. B)
- 43. Lumen's letter stated that FTB's "AssistMe feature meets one or more claims of the '073 Patent" and that the enclosed complaint had already been filed in the Southern District of New York. (Exh. B.)
- 44. The letter further advised that a response to the complaint must be filed within 21 days but "If Company is interested in avoiding the need for filing a responsive pleading, you must contact us (prior to the date of Company's Response) to discuss license terms. To facilitate such discussions, please be prepared to discuss the extent of the Company's use of and revenues generated from the features described in the Complaint." (Exh. B.)

- 45. To create a sense of urgency, the letter falsely represented that the complaint was already served on the company's New York registered agent, when in truth it was served weeks later on FTB's Chief Marketing Officer.
- 46. The letter threatened that if FTB did not immediately pay Lumen a "licensing fee," Lumen would use the litigation process to disrupt FTB's business and increase expenses for FTB. Specifically, the letter threatened "full-scale litigation" and "all motion practice as well as protracted discovery" if FTB chose to defend the litigation rather than pay a licensing fee. (Exh. B.) The letter also warned that, if FTB "engage[d] in early motion practice," Lumen would "reevaluate and likely increase Plaintiff's settlement demand." It went on to state: "Please be advised that for each nondispositive motion filed by Company, Plaintiff will incorporate an escalator into its settlement demand to cover the costs of its opposition papers and argument." (Exh. B.)
- 47. To further intimidate FTB, the letter outlined the disruption to FTB's business that would result if FTB refused to immediately pay the licensing fee. The letter broadly described electronically stored information ("ESI") and demanded that FTB take steps to preserve all "accessible and *inaccessible* ESI ... without limitation, from six (6) years prior to the date of the filing of the Suit up to the present time, and ongoing, in any way relating to the products implicated by the '073 Patent." (Exh. B (emphasis added).) Lumen also demanded that FTB take steps to prevent alteration and erasure of virtually all data and information FTB keeps or creates in operating its business, including "information *unrelated to the Suit* that [employees, officers or others] regard as personal, confidential or embarrassing." The letter even recommended "confiscating" and "sequestering" electronic devices owned by "certain individuals with significant knowledge of Company's products implicated by the '073 Patent."

In other words, the letter made it clear that, if FTB fought Lumen's baseless patent infringement suit, Lumen would ensure that FTB's key employees would be wrapped up in the litigation causing serious disruption to FTB's business.

- 48. The letter further demonstrates that Defendants use the discovery process, not to investigate and prove their patent infringement claims, but to merely harass, intimidate, injure and annoy FTB (and their other targets).
- 49. The message Defendants intend to convey by this letter is that FTB (and other targets) should settle or pay the licensing fee without a fight, not because Lumen's claims are meritorious, but because Lumen will use the litigation process to cause significant financial hardship and disruption to FTB's (and other targets') business.
- 50. The letter Lumen sent to FTB and the complaint filed by Lumen are nearly identical to those sent to, and filed against, other targets of its '073 Patent Infringement Suits.
- 51. The complaint Lumen filed against FTB is objectively baseless as no reasonable person could determine after a good faith investigation that FTB infringes upon the '073 Patent.
- 52. On information and belief, FTB alleges that at all relevant times Defendants knew that FTB was not infringing upon the '073 Patent.
- 53. Shortly after receiving Lumen's Complaint, FTB's Director of Operations ("DO") contacted Lumen's attorney listed on the complaint to discuss the recently filed lawsuit and gain a better understanding of why Lumen believed FTB was infringing upon the '073 Patent.
- 54. During the discussion, it became apparent from statements made by Lumen's attorney that the Complaint was filed without probable cause and for the sole purpose of extorting illegal "licensing fees" or a "nuisance settlement" from FTB.

- 55. Lumen's attorney lacked any understanding of the publicly-available manner in which FTB's website operated and could give no factual explanation for why he believed FTB infringed upon the '073 Patent.
- 56. Lumen's attorney could not explain, and lacked even a basic understanding of, the process purportedly covered by the '073 Patent.
- 57. FTB's DO explained in that conversation that FTB did not in any way use a bilateral or multilateral process. However, Lumen's attorney refused to discuss such matter and simply reiterated Lumen's position that FTB would have to pay "licensing fees" to avoid filing a responsive pleading.
- 58. Because the DO's conversation with Lumen was less than informative, FTB's Chief Executive Officer ("CEO") subsequently telephoned Shapiro and left a message explaining who he was and stating that he was calling to gain a better understanding of the claims alleged against FTB and the '073 Patent.
- 59. After leaving a second voicemail message, Shapiro returned the CEO's call. In that conversation, Shapiro would only confirm that she was the co-inventor of the '073 Patent but claimed to no longer own the patent.
- 60. Shortly thereafter, Lumen's attorney contacted FTB's counsel and stated that its CEO called Shapiro a "patent troll." According to Lumen's attorney, calling someone a "patent troll" constituted a "hate crime" under "Ninth Circuit precedent." Lumen's attorney then represented that Lumen and Shapiro would report FTB to Judge Cote and pursue criminal charges unless: (1) the CEO apologized to Shapiro; (2) FTB financially compensated Shapiro; (3) FTB financially compensated Lumen's attorney; and (4) FTB settled the civil patent infringement lawsuit by paying a licensing fee. The attorney further stated that this offer was

good until close of business that day. On information and belief, Lumen's attorney was acting at the direction of Shapiro and Mintz to conduct their enterprise affairs.

- 61. These threats were made in bad faith, with knowledge that neither FTB nor its CEO committed a crime and/or without a good faith belief that FTB or its CEO committed a crime. The threats were made for the purpose of intimidating FTB and its CEO and extorting money from FTB. This threat of criminal prosecution had no reasonable relevance to the patent infringement lawsuit, was extraneous to the action, and in no way furthered the ends of justice.
- 62. On or about July 24, 2013, Lumen served FTB with initial disclosures in connection with its patent infringement action against FTB. Those disclosures further demonstrated that Lumen's action was frivolous and that it was, in fact, filed without a good faith investigation or probable case. Lumen names only one individual likely to have discoverable information, Jerald Dawkins. Although Lumen later amended its initial disclosures, it did so only to add the two named inventors in an effort to avoid FTB's communications with those individuals.
- 63. On or about August 8, 2013, FTB's CEO contacted Jerald Dawkins, who informed the CEO that he had never heard of FTB.
- 64. Lumen also served FTB with Interrogatories and Requests for Production. On information and belief, those request are "form" requests Defendants use in any patent infringement case they file in which its victim files an answer before paying a "licensing fee." On information and belief, Defendants have a template with data fields where Defendants simply input the victim's name into these form requests without any additional thought or analysis, without any regard for the local rules or specific patent rules applicable to each lawsuit, and without any consideration of the target's services or products. As such, many of these requests

are nonsensical, improper and impermissible. For example, most (if not all) of the discovery requests served on FTB were premature and/or improper pursuant to the Local Patent Rules of the United States District Courts for the Southern District of New York, Rule 5, Local Rules of United States District Courts for the Southern District of New York, Rule 33.3 and other statutes and rules of procedure. Accordingly, these discovery requests are simply intended to annoy and harass FTB and saddle FTB with increased litigation costs so that FTB will acquiesce to Lumen's demands and settle the frivolous lawsuit or pay illegal "licensing fees."

- On August 30, 2103, Lumen served FTB via email with a Disclosure of Asserted Claims and Infringement Contentions ("Infringement Contentions") as required by the Local Patent Rules of the Southern District of New York. Lumen's Infringement Contentions further demonstrate Defendants' failure to properly investigate before filing a patent infringement action against FTB. Most notably, Lumen contentions are vague, identify FTB's entire "website" as the "Accused Product or Service," and provide little supporting detail. Lumen improperly attempts to string together screenshots from different services provided by FTB as evidence of infringement.
- 66. Despite its threats, Lumen has not increased its settlement demand to FTB even though FTB opted to fight its complaint. Although Lumen's threats have continued (as described herein), Lumen has continued to demand the same settlement amount.
- 67. Specifically, upon service of Lumen's complaint, Defendants offered to dismiss their patent infringement suit if FTB paid an \$85,000 "licensing fee." When FTB rejected that offer and informed Lumen that it would fight the frivolous lawsuit, Lumen made a last-ditch effort to persuade FTB to "settle" by dropping its licensing fee the day before FTB's answer was due to \$55,000. Lumen stated that this "offer" was a "one-day only offer" that would expire

when FTB filed its responsive pleading the next day. On information and belief, Lumen reduced the "licensing fee" at the direction of and/or with the knowledge of Shapiro and Mintz because Defendants have no interest in the outcome of the patent litigation, have no desire to enjoin FTB's alleged infringement, know that FTB does not infringe upon the '073 Patent, and do not intend to engaged in "full scale litigation."

- 68. Contrary to Lumen's representations that it would continue to increase its settlement demands, after FTB filed its answer to the patent infringement lawsuit, Lumen (at the direction and with the knowledge of Defendants) again offered to drop the lawsuit in exchange for a \$85,000 "licensing fee."
- 69. As a result of Defendants' wrongful acts, as described herein, FTB has sustained injury to its business and property, including, but not limited to, damage to its business reputation, disruption of its business affairs, and expenses incurred investigating and defending FTB's frivolous claims

COUNT I RACKETEERING INFLUENCED AND CORRUPT ORGANIZATIONS ACT (RICO) 18 U.S.C. § 1961 et seq. (Against All Defendants)

- 70. FTB re-alleges and incorporates each and every foregoing paragraph of this Complaint as though fully set forth herein.
- 71. At all relevant times, FTB is a person within the meaning of 18 U.S.C. §§ 1961(3) and 1962(c).
- 72. At all relevant times, Shapiro and Mintz are persons within the meaning of 18 U.S.C. §§ 1961(3) and 1962(c), each of whom (through an express agreement) direct the affairs of Lumen, DecisionSorter, Dalton and Hillcrest through a pattern of improper tortious acts and illegal conduct described in this Complaint, which cause financial harm to FTB and others.

- 73. Lumen, DecisionSorter, Dalton and Hillcrest, in any combination associated in fact, are an "Enterprise," as defined by 18 U.S.C. § 1961(4), controlled and directed by Shapiro and Mintz, associated together in fact for the common purpose of filing frivolous patent infringement cases and extorting "licensing fees" and/or settlements from individuals and entities who do not actually infringe upon the patent at issue in the lawsuits. The Defendants have a continuing and ongoing relationship that has endured for several years and has resulted in more than twenty patent infringement lawsuits enabling Defendants to extort unlawful "settlements" and "licensing fees" to which they are not entitled.
- 74. Each of the Defendants participated in the operation or management of the Enterprise. Among other things, Shapiro and Mintz direct the affairs of the enterprise, DecisionSorter, Dalton, and Hillcrest serve as "holding companies" set up to conceal Shapiro's and Mintz's involvement in the enterprise, to hide exculpatory evidence and other materials that would assist their victims in defeating the patent infringement claims, and to funnel, hide, and shield the improper financial gains that result from the Enterprise. Lumen is the "front" of the enterprise that, acting upon the direction of Shapiro and Mintz, files the litigation and carries out the threats and fraudulent conduct further described herein.
- 75. At all relevant times, the Enterprise was engaged in, and its activities affected interstate commerce within the meaning of 18 U.S.C. § 1962(c).
- 76. The Defendants conducted or participated, directly or indirectly, in the conduct, management, or operation of the Enterprise's affairs through a "pattern of racketeering activity" within the meaning of 18 U.S.C. § 1961(5) and in violation of 18 U.S.C. § 1962(c), to wit:

Extortion in Violation of Hobbs Act, 18 U.S.C. § 1951 and California State Penal Law §§ 518, 519, 524

- 77. At all times material to this Complaint, FTB was engaged in interstate commerce and in an industry that affects interstate commerce.
- 78. Defendants, individually or collectively, conducted the affairs of the Enterprise through numerous acts of extortion, attempted extortion and conspiracy to commit extortion in violations of 18 U.S.C. § 1951, which constitute "predicate acts" under 18 U.S.C. § 1961 in furtherance of their overall scheme to defraud and enhance their wealth through improper means.
- 79. As described herein, Defendants have threatened frivolous lawsuits and criminal prosecution unless FTB paid substantial sums of money. The Defendants did so with the intent and effect of causing a reasonable fear of economic loss on the part of FTB, to disrupt FTB's business operations, and to disrupt and encourage FTB to abandon its defense of the frivolous patent infringement lawsuit initiated by Defendants.
- 80. Similarly, the Defendants' wrongfully attempted to appropriate FTB's property by instilling fear that, if the property was not delivered, the Defendants would accuse FTB and its CEO of a crime and FTB and its CEO would face additional expense, embarrassment, business disruption, damage to their reputation, and legal fees.
- 81. Defendants also used litigation and the discovery process without any interest in the outcome of the litigation, but with the intent to harm FTB's business and persuade FTB to pay a "licensing fee" even though Defendants knew (or reasonably should have known) that FTB was not infringing upon the '073 Patent.
- 82. Defendants' conduct did in fact instill fear in FTB, causing additional interruptions to FTB's business, causing the harm Defendants so intended, including additional

legal fees, disruption to FTB's business, injury to FTB and its CEO's reputation and disruption of FTB's defense to Lumen's patent infringement complaint.

Mail Fraud, 18 U.S.C. 1341 and Wire Fraud, 18 U.S.C. § 1343

- 83. As described herein, the Defendants engaged in a scheme to defraud and extort substantial sums of money and property from FTB.
- 84. In furtherance of their scheme, and as described herein, the Defendants transmitted, or caused to be transmitted, by means of wire communication in interstate or foreign commerce, writings, signs, signals, pictures, and sounds for the purpose of executing such scheme.
- 85. Specifically, Defendants delivered their threats, false representations regarding the nature of the '073 Patent, their purported right to "licensing fees," their "settlement demands," and their threats of criminal prosecution via email and telephone. Defendants used the U.S. Postal Service and/or private mail carriers to deliver its letter and complaint to FTB and other victims, both of which were used to deliver threats and intimidate FTB.
- 86. The Defendants participated in the scheme to defraud and extort FTB by knowingly, willfully, and threatening FTB with the specific intent to deceive and/or defraud FTB into paying the Defendants illegal licensing fees and settlements.
- 87. The Defendants' false and misleading statements were relied upon by FTB and have caused FTB substantial damages, as further described herein.
- 88. The Defendants participated in the scheme to defraud and extort knowingly, willfully, and with the specific intent to deceive and/or defraud FTB into paying the Defendants.
- 89. The Defendants' false and misleading statements were relied upon by FTB and have caused FTB substantial damages.

- 90. Each of the Defendants have engaged in multiple predicate acts, as described herein. The conduct of each of the Defendants constitutes a pattern of racketeering activity within the meaning of 18 U.S.C. § 1961(5).
- 91. FTB was injured in its business and property by reason of the Defendants' violations of 18 U.S.C. § 1962(c). The injuries to FTB caused by reason of the violations of 18 U.S.C. § 1962(c) include, but are not limited to, damage to FTB's reputation and goodwill, disruption to FTB's business, legal fees and costs in defending itself from Defendants' objectively baseless, improperly motivated sham patent lawsuit and threats of criminal prosecution.
- 92. Further, these injuries to FTB were a direct, proximate, and reasonably foreseeable result of the violation of 18 U.S.C. § 1962. FTB has been and will continue to be injured in its business and property in an amount to be proven at trial.
- 93. Pursuant to 18 U.S.C. § 1964(c), FTB is entitled to recover treble damages plus costs and attorneys' fees from the RICO Defendants.
- 94. FTB seeks a preliminary and/or permanent injunction to enjoin the Defendants from filing any more frivolous patent infringement lawsuits.

COUNT II CONSPIRACY TO VIOLATE RICO (18 U.S.C. 1962(d)) (Against All Defendants)

- 95. FTB re-alleges and incorporates each and every foregoing paragraph of this Complaint as though fully set forth herein.
- 96. Defendants Shapiro, Mintz, DecisionSorter, Dalton and Hillcrest, individually and collectively conspired with Lumen to commit wire fraud, extortion and violate the RICO statute as described herein.

- 97. FTB was injured in its business and property by reason of the Defendants' violations of 18 U.S.C. § 1962. The injuries to FTB caused by reason of the violations of 18 U.S.C. § 1962 include, but are not limited to, damage to FTB's reputation and goodwill, disruption to FTB's business, legal fees and costs in defending itself from Defendants' objectively baseless, improperly motivated, sham patent lawsuit and threats of criminal prosecution.
- 98. Further, these injuries to FTB were a direct, proximate, and reasonably foreseeable result of the violation of 18 U.S.C. § 1962. FTB has been and will continue to be injured in its business and property in an amount to be proven at trial.
- 99. Pursuant to 18 U.S.C. § 1964(c), FTB is entitled to recover treble damages plus costs and attorneys' fees from the RICO Defendants.

COUNT III EXTORTION (Against all Defendants)

- 100. FTB re-alleges and incorporates each and every foregoing paragraph of this Complaint as though fully set forth herein.
- 101. As set forth *supra*, Defendants agreed to accomplish the unlawful purpose of commencing frivolous patent infringement actions against FTB and others, without probable cause or a good faith investigation for the purpose of extracting money from FTB and these other victims.
- 102. As part of this agreement, Shapiro and Mintz transferred their rights to the '073 Patent to the "shell entities," DecisionSorter, Dalton, and Hillcrest, and then to Lumen to allow Lumen to initiate a litigation campaign. At all times the Defendants had an agreement that the

illegal funds obtained through this scheme would be collected for Shapiro and Mintz and Shapiro and Mintz would maintain a secret interest in the '073 Patent.

- 103. The agreement and scheme created by Defendants constitutes fraud and extortion and is contrary to public policy.
- 104. Defendants used the process of this Court for the collateral purpose of extorting money from FTB and others because at no time did Defendants have any desire to deter or enjoin any alleged patent infringement or protect their purported rights to the '073 Patent. Defendants did not believe (or did not reasonably believe) that FTB was, in fact, infringing the '073 Patent.
- 105. Despite threats of criminal prosecution, Defendants had no good faith belief that FTB or its CEO committed any crime, but simply used this threat in an effort to extort funds from FTB.
- 106. As a proximate result of the actions taken by Defendants, FTB has suffered disruption to its business, loss of business goodwill, substantial litigation expense, and other damages in an amount to be proven at trial.

COUNT IV ABUSE OF PROCESS (Against All Defendants)

- 107. FTB re-alleges and incorporates each and every foregoing paragraph of this Complaint as though fully set forth herein.
- 108. Defendants entered into an agreement and created "shell entities" and license agreements for the purpose of commencing patent infringement actions against FTB and others, based upon a vague patent for the purpose of extracting money from FTB and other victims.

- 109. At all times, Defendants did not intend to enjoin infringement of the '073 Patent and did not use the process to do so, or in any way protect the '073 Patent. Instead, Defendants used the process of this Court to extort money from FTB and others and to harm FTB's business.
- 110. Defendants also used the discovery process to harass, annoy, injure and intimidate FTB, rather than to actually discover information relevant to their patent infringement claims or to prove their claims.
- 111. As a proximate result of the actions taken by Defendants, FTB has suffered disruption to its business, loss of business goodwill, substantial litigation expense, and other damages in an amount to be proven at trial.

COUNT V CIVIL CONSPIRACY (Against all Defendants)

- 112. FTB re-alleges and incorporates each and every foregoing paragraph of this Complaint as though fully set forth herein.
- 113. Defendants Shapiro and Mintz formed an agreement for the purposes of engaging in a nationwide pattern and practice of baseless threats, fraud, misrepresentations, unfair competition, and extortion from businesses and individuals, including FTB.
- 114. Each Defendant participated in, contributed to, and substantially assisted one another in the commission of the wrongful conduct described herein, including violation of RICO, abuse of process, extortion and violation of Cal. Bus. & Prof. Code § 17200.
- 115. In furtherance of that conspiracy, Shapiro and Mintz formed DecisionSorter, Dalton, Hillcrest, and Lumen (all "shell entities" that are undercapitalized) and created and/or executed various licensing agreements between themselves and those entities so that Lumen could serve as the vehicle for filing frivolous and unfounded patent infringement lawsuits and

delivery unsubstantiated and absurd threats (including threats of criminal prosecution) for the purpose of extorting money from FTB, and others.

116. Through these unlawful acts, as further described herein, Defendants have damaged FTB by causing FTB to expend substantial sums investigating, defending and preparing to defend against fraudulent and baseless threats and claims; disrupting FTB's business operations, its goodwill and business reputation, and other damages to be proven at trial.

COUNT VI CAL. BUS. & PROF. CODE §§ 17200 ET SEQ. (Against All Defendants)

- 117. FTB re-alleges and incorporates each and every foregoing paragraph of this Complaint as though fully set forth herein.
- fraudulent business acts or practices under Cal. Bus. & Prof. Code § 17200 et seq., including for example, but not limited to, making affirmative misrepresentations and omissions about the need to take a license to the '073 Patent, the alleged scope of the '073 Patent, and the characterization of FTB's CEO's alleged statement to Shapiro as "a hate crime"; engaging in a broad scheme to use fear in an effort to extort license fees for amounts to which Defendants were not entitled; filing frivolous patent infringement actions; threatening Defendants with unfounded claims of criminal prosecution; and abuse of process and violations of RICO, as alleged above.
- 119. Misconduct and injuries pertaining to the conduct referenced herein have occurred within California, either of which gives rise to a § 17200 claim. With respect to injury in California, FTB's principal place of business is in California. Thus, the disruption to FTB's business caused by Defendants' misconduct occurred in California as did its damages. With

respect to misconduct, Defendants' letter demanding licensing fees was sent to FTB in California and Defendants' threats were made to FTB in California.

- 120. As a result of Defendants' conduct, as described herein, FTB's business was disrupted, as its officers, directors and key employees had to devote significant time and resources to defend FTB from Defendants' frivolous and false claims. Plaintiff also suffered damage to its business goodwill and reputation.
- 121. Plaintiff is entitled to remedies, including a permanent injunction barring continued commission of the unlawful activities alleged herein, and restitution.

PRAYER FOR RELIEF ON FTB'S COMPLAINT

WHEREFORE, FTB prays for the following relief against Defendants on FTB's Complaint, as follows:

- 1. For judgment in favor of FTB on all claims;
- 2. For general damages according to proof at trial,
- 3. For restitutionary damages;
- 4. For trebled damages according to statutes, 18 U.S.C. § 1964(c);
- 5. For pre-judgment interest according to statute;
- For FTB's reasonable attorneys' fees and costs according to statute, 18 U.S.C.
 § 1964(c);
- 7. For injunctive relief;
- 8. For such other legal and equitable relief as the Court may deem FTB is entitled to receive.

DEMAND FOR JURY TRIAL

Plaintiff hereby demands a trial by jury on all claims and issues so triable.

Dated: September 16, 2013 Respectfully submitted,

By: 2 6 D

JEFFREY K. DAMAN (JD7723) DAMAN & ASSOCIATES, L.L.C. 1500 Walnut Street, 21st Floor Philadelphia, PA 19102

Ph: (484) 775-0468 Fx: (203) 738-3582

jeffrey.daman@damanllc.com

JOSEPH S. LEVENTHAL (pro hac vice forthcoming) THE LEVENTHAL LAW FIRM, APC

600 West Broadway, Suite 700 San Diego, CA 92101

Ph: (619) 356-3518 Fx: (619) 615-2082

jleventhal@leventhallaw.com

Counsel for Plaintiff FINDTHEBEST.COM, INC.

(12) United States Patent Shapiro et al.

(10) Patent No.:

US 8,069,073 B2

(45) Date of Patent:

*Nov. 29, 2011

(54) SYSTEM AND METHOD FOR FACILITATING BILATERAL AND MULTILATERAL DECISION-MAKING

(75) Inventors: Effeen C. Shapiro, Cambridge, MA (US); Steven J. Mintz, Saddle River, NJ

(US)

(73) Assignee: Dalton Sentry, LLC, Wilmington, DE (US)

(*) Notice: Subject to any disclaimer, the

Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a

This patent is subject to a terminal disclaimer.

(21) Appl. No.: 12/754,291

(22) Filed: Apr. 5, 2010

(65) Prior Publication Data

US 2010/0191664 A1 Jul. 29, 2010

Related U.S. Application Data

- (63) Continuation of application No. 11/711,249, filed on Feb. 27, 2007, now Pat. No. 7,725,347, which is a continuation of application No. 11/171,082, filed on Jun. 29, 2005, now Pat. No. 7,184,968, which is a continuation of application No. 09/538,556, filed on Mar. 29, 2000, now Pat. No. 6,915,269.
- (60) Provisional application No. 60/173,259, filed on Dec. 23, 1999.

(51)	Int. Cl.	
	G06O 10/00	(2006.01)

(56) References Cited

U.S. PATENT DOCUMENTS

OTHER PUBLICATIONS

Gilbert, "The Myth of Fingerprints", Stumbling on Happiness, pp. 245-257 (2006).

Lehrer, "Choking on Thought", How We Decide, pp. 133-166 (2009).

* cited by examiner

Primary Examiner - Johnna Loftis (74) Attorney, Agent, or Firm — Sunstein Kann Murphy & Timbers LLP

(57) ABSTRACT

Techniques for facilitating evaluation, in connection with the procurement or delivery of products or services, in a context of at least one of (i) a financial transaction and (ii) operation of an enterprise, are disclosed. The techniques involve retrieving party and counterparty preference data from digital storage media; performing multilateral analyses of the combined preference data by computing a closeness-of-fit value; and delivering a list matching the at least one party and the at least one counterparty using the computed closeness-of-fit value;

9 Claims, 11 Drawing Sheets



Nov. 29, 2011

Sheet 1 of 11

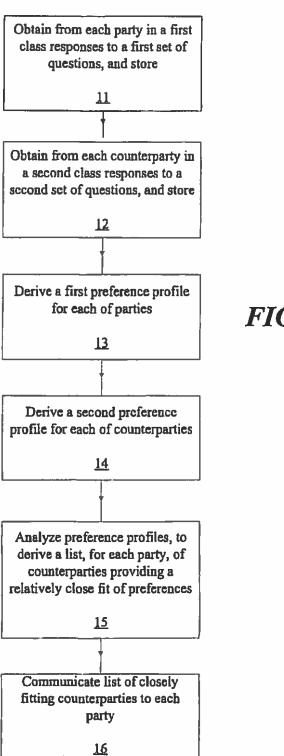
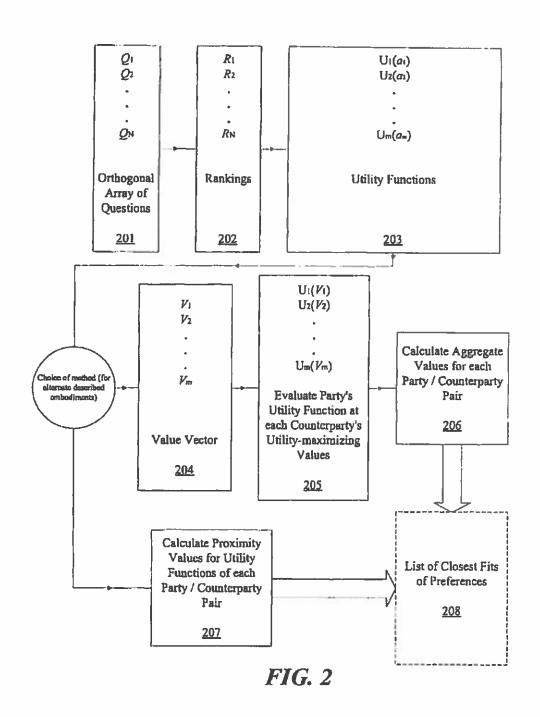


FIG. 1

Nov. 29, 2011

Sheet 2 of 11



Nov. 29, 2011

Sheet 3 of 11

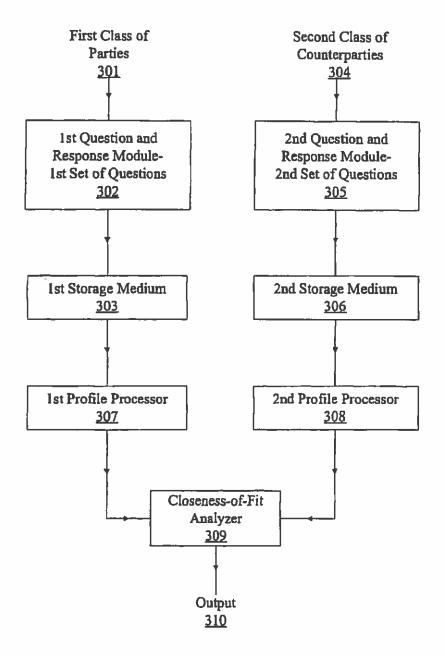
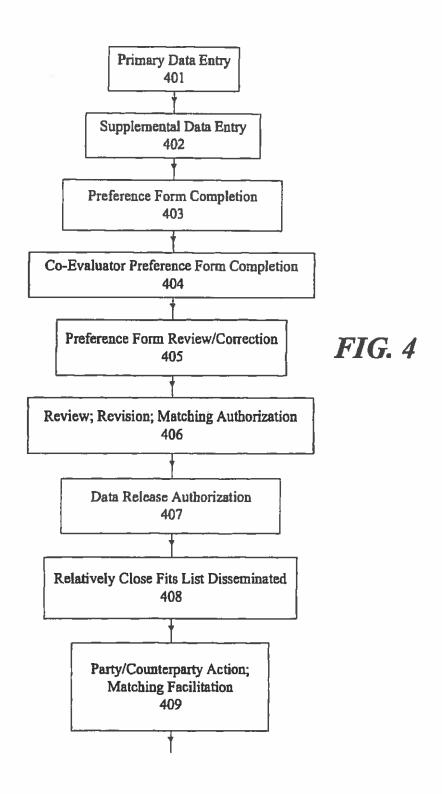


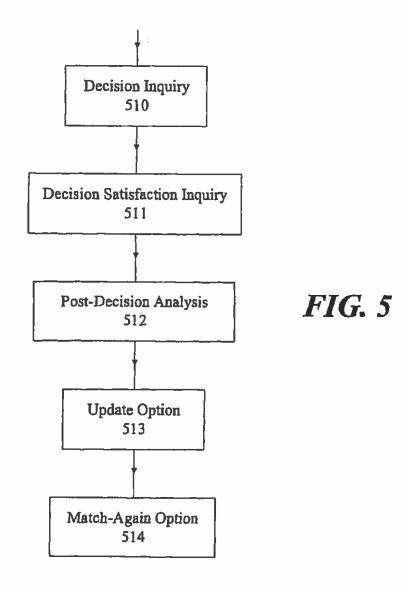
FIG. 3

Nov. 29, 2011

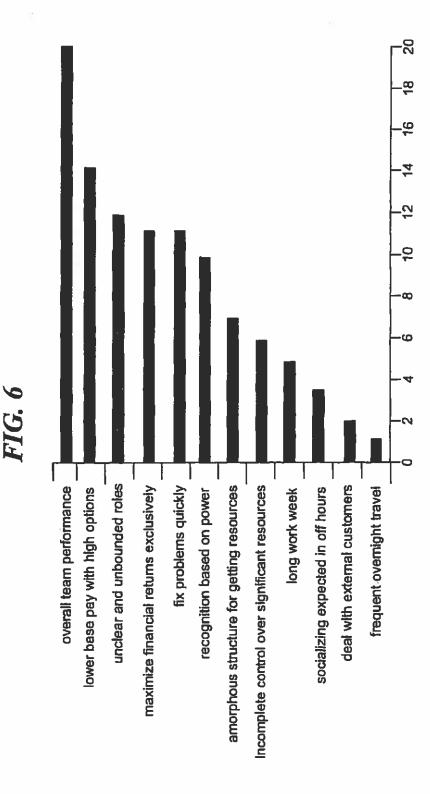
Sheet 4 of 11



U.S. Patent Nov. 29, 2011 Sheet 5 of 11







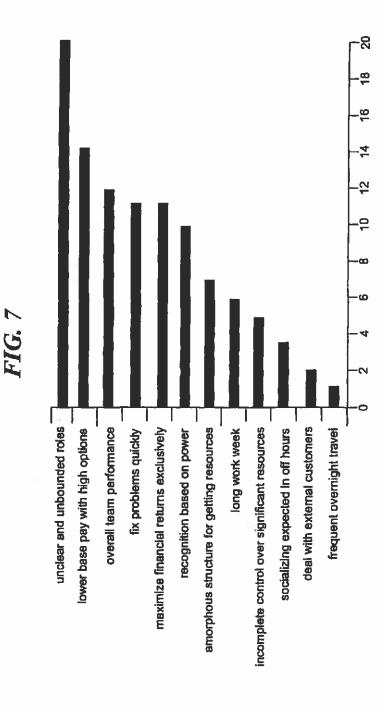
Applicant



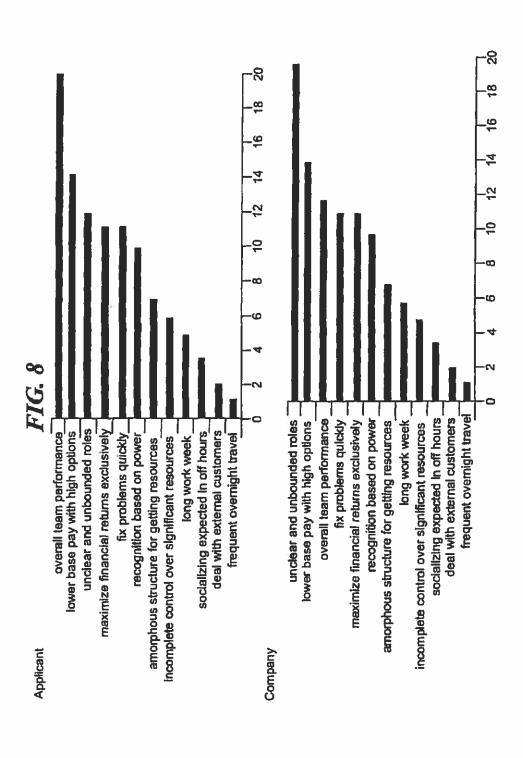
Company

Page 15 of 29

Case 1:13-cv-03599-DLC Document 1 Filed 05/29/13



Case 1:13-cv-03599-DLC Document 1 Filed 05/29/13 Page 16 of 29



U.S. Patent

Nov. 29, 2011

Sheet 9 of 11

US 8,069,073 B2

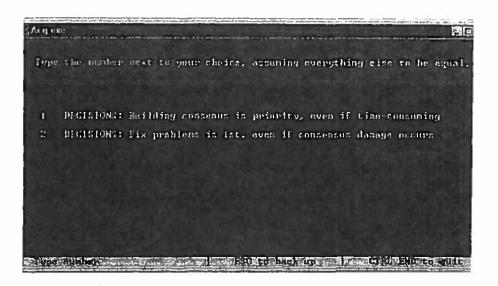


FIG. 9

U.S. Patent

Nov. 29, 2011

Sheet 10 of 11

US 8,069,073 B2

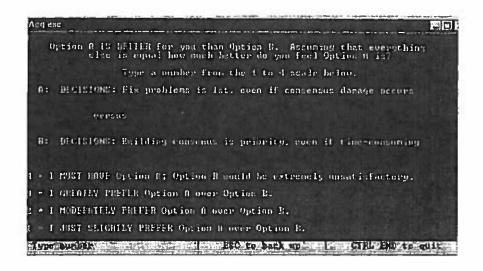


FIG. 10

U.S. Patent

Nov. 29, 2011

Sheet 11 of 11

US 8,069,073 B2

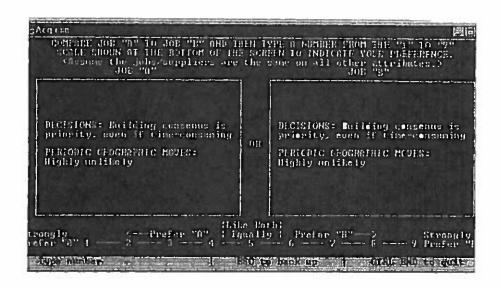


FIG. 11

1

SYSTEM AND METHOD FOR FACILITATING BILATERAL AND MULTILATERAL DECISION-MAKING

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of our application Ser. No. 11/711,249, filed Feb. 27, 2007, which is a continuation of our application Ser. No. 11/171,082, filed Jun. 29, 2005 (U.S. Pat. No. 7.184,968), which is a continuation of our application Ser. No. 09/538,556, filed Mar. 29, 2000 (U.S. Pat. No. 6,915,269), which claims the benefit of our provisional application Ser. No. 60/173,259, filed Dec. 23, 1999; these related applications are hereby incorporated herein by reference.

TECHNICAL FIELD

The present invention relates to bilateral and multilateral evaluation methods and systems.

BACKGROUND

Consumers constantly decide which products and services best satisfy their needs and desires. Producers correspondingly decide how best to configure their products and services, from amongst a wide array of choices. They must not only choose a suitable price, but also must decide which combination of other attributes of their products and services will best satisfy consumers.

In order to facilitate these decisions, there have therefore arisen a variety of marketing research techniques. Among these are forced trade-off or forced choice methodologies, including conjoint analysis. Through statistical methods, these techniques allow prediction of which attributes of products and services are relatively more and less valuable to a given group of constituents.

Based on these conventional techniques, producers of 40 goods and services are able to model buyers' or users' preferences, thereby facilitating design or selection of products and processes that best satisfy those preferences. For persons on two sides of a transaction (a producer and a group of consumers, for example), conventional techniques permit 45 persons on one side of the transaction to model the preferences of a group of constituents on the other side of the transaction. Conventional techniques may therefore be called unilateral, or one-sided, evaluation techniques.

SUMMARY OF THE INVENTION

In accordance with one aspect of the invention there is provided a method for facilitating evaluation, in connection with the procurement or delivery of products or services, in a 55 context of at least one of (i) a financial transaction and (ii) operation of an enterprise, such context involving a member of a first class of parties in a first role and a member of a second class of counterparties in a second role. The method involves supplying to at least one of the parties a series of 60 forced choice questions so as to elicit party responses; supplying to at least one of the counterparties a series of forced choice questions so as to elicit counterparty responses; and delivering a list matching the at least one party and the at least one counterparty according to analysis of preference profiles 65 determined using conjoint analysis of the party responses and the counterparty responses.

2

In alternative embodiments, the list may be ranked according to closeness of fit.

In alternative embodiments, the method may further involve supplying to at least one party or counterparty co-evaluator a series of forced choice questions so as to elicit co-evaluator responses, wherein the list matches the at least one party and the at least one counterparty according to analysis of preference profiles determined using such co-evaluator responses.

In alternative embodiments, the party responses may reveal, with respect to each level of each of a first series of attributes, a utility value which indicates the value that the party places on the level of the attribute. Such party responses may reveal the utility values without the utility values being provided explicitly. Additionally, the counterparty responses may reveal, with respect to each level of each of a second series of attributes that complements the first series of attributes, a utility value which indicates the value that the counterparty places on the level of the attribute. Such counterparty responses may reveal the utility values without the utility values being provided explicitly

In alternative embodiments, the series of forced choice questions and/or the list may be obtained from a remote server over a communication network. The series of forced choice questions may be supplied by making available a set of web pages providing a set of questions and permitting entry of responses thereto. The party responses and the counterparty responses may be provided to a remote server over a communication network.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing features of the invention will be more readily understood by reference to the following detailed description, taken with reference to the accompanying drawings, in which:

FIG. 1 shows a block diagram of an embodiment of a method in accordance with the present invention for facilitating bilateral and multilateral decision-making;

FIG. 2 shows a block diagram of a further embodiment of a method in accordance with the present invention in which conjoint analysis is employed;

FIG. 3 shows a block diagram of an embodiment of a system in accordance with the present invention;

FIGS. 4 and 5 illustrate the logical flow of a method according to an embodiment of the invention, that may be implemented using a web server on the Internet;

FIGS. 6 and 7 are histogram representations of a preference profile of a party who is a job applicant and of a counterparty
 employer in accordance with an embodiment of the invention;

FIG. 8 presents a side-by-side comparison of the preference profiles of FIGS. 6 and 7; and

FIGS. 9, 10, and 11 are screenshots demonstrating hierarchically structured questions organized into three stages in accordance with an embodiment of the invention.

DETAILED DESCRIPTION OF SPECIFIC EMBODIMENTS

By contrast with conventional methods, embodiments of the present invention enable a bilateral evaluation of preferences: a decision is recommended based on its providing a relatively close fit between the preferences of each potential pairing of party and counterparty to a potential transaction, when compared with other possible pairs of parties to the potential transaction. Indeed, embodiments of the present

3

invention may likewise be employed when information about preferences is provided not just by two parties to the transaction (a party and a counterparty), but also by at least one co-evaluator, who provides a useful perspective on the preferences of a party or a counterparty. In this case, the evalua- 5 tion is multilateral rather than bilateral.

In various embodiments of the present invention, there can be employed questions that require a forced choice to reveal preferences of the respondent. The benefit of the forced choice approach is that it helps to uncover underlying prefer- 10 ences that are hidden and sometimes not consciously evident even to the respondent.

In this connection embodiments of the invention may employ conjoint analysis. See for example, Cattin, P. and R. R. Wittink, "Commercial Use of Conjoint Analysis: A Sur- 15 vey", 45 Journal of Marketing 44-53 (No. 3, Summer, 1982), and "Commercial Use of Conjoint Analysis: An Update", 53 Journal of Marketing 91-96 (July, 1982): Green, P. E. and Y. Wind, "New Way to Measure Consumers' Judgments," //arvard Business Review, July 1975 ("Green and Wind"); see 20 also the references identified in the extensive bibliography of Patrick Bohl: Conjoint Literature Database CLD, University of Mainz, Germany, 1997. The foregoing articles and references are hereby incorporated herein by reference.

the following terms shall have the meanings indicated, unless the context otherwise requires:

The term "party" includes a natural person or an entity, wherein an entity may be any association, organization, or governmental agency. A "counterparty" is similarly any other 30 natural person or an entity.

A "financial transaction" is a transaction in which services or products are being procured or delivered under circumstances involving an expectation that they will be paid for. Thus "financial transactions" include enrollment at a college 35 or university or a private school (wherein educational services are rendered for tuition), employment by an entity (wherein an employee's services are rendered for payment by the employer), engagement of a physician or health maintenance organization (wherein health care services are provided for 46 compensation), choosing a retirement community, investing in a mutual fund, taking a vacation, or in executing a merger or joint venture or acquisition. The terms "services" and "products" include the singular as well as the plural.

An "enterprise" is a business organization (regardless of 45 form), a government agency or organ, or a non-profit-organization (including a religious, scientific, or charitable organization).

"Attributes" of a product or service include characteristics, features, and benefits of the product or service. Hence (as an 50 example) if the service is college education, attributes may include the size of the school, the prestige of the school, and the degree of structure of the school's educational program.

A "level" of an attribute is a value associated with the a product or service. The value may, but need not, be quantitative; the value may be categorical. Hence if the service is college education, the level of the attribute "school size" may be quantitative, as for example, "9378 students", or may be Attribute levels may be categorized even when more abstract attributes are involved. For example, if the attribute is prestige, a level may be "widely viewed as highly prestigious"; if the attribute is degree of structure in the education program, a level may be "low degree of structure".

FIG. 1 is a block diagram of an embodiment of a method in accordance with the present invention for facilitating bilateral

and multilateral decision-making. In this embodiment, six activities are involved. As shown in item 11, first there is obtained from each party in a first class responses to a first set of questions, and the responses are stored in a suitable digital storage medium. Also, in item 12, there is obtained from each counterparty in a second class responses to a second set of questions, and the responses are stored in a suitable digital storage medium. (We discuss the nature of suitable questions in connection with later figures.) (Note items 11 and 12 need not be contemporaneous and need not be sequenced in any order.) In item 13, a first preference profile is generated for each party, based on the party's responses to the first set of questions; and, similarly, a second preference profile is generated, in item 14, for each counterparty, based on the counterparty's responses to the second set of questions. The questions and the resulting profiles may be developed using any of a wide range of approaches. In some embodiments, as described below, there may be employed conjoint analysis or other forced-choice methodologies. It is within the scope of the invention to utilize a first methodology in connection with the first set of questions and a second methodology in connection with the second set of questions. Once these preference profiles have been generated, the method next analyzes, for each party in the first class, the preference profiles of As used in this description and the accompanying claims, 25 counterparties in the second class, and derives a ranked list of counterparties that provide the closest fit of preferences with that party, as compared with the fit of all counterparties in the second class (item 15). Finally, in item 16, the list of closest fitting counterparties for each party is communicated to that party. (Similarly for each counterparty, the method derives a ranked list of parties that provide the closest fit of preferences with that counterparty, as compared with the fit of all parties in the first class; and the list of closest fitting parties for each counterparty is communicated to that counterparty.) By providing such a list in each case, based on a bilateral or multilateral preference analysis, the method facilitates parties and counterparties in making decisions that are based on the closeness of the fit between their preferences,

FIG. 2 shows one embodiment of a method according to the invention, in which, first, preference profiles for parties and counterparties are generated using conjoint analysis techniques. Conventional conjoint analysis techniques, used in a unilateral fashion, are described in the references described above near the beginning of this section of the description.

Once preference profiles have been generated according to the embodiment of FIG. 2, they are then used to recommend to each party a set of counterparties who provide the closest fit of preferences amongst the counterparties considered. Since the embodiment uses a preference profile for both parties and counterparties to evaluate the closeness of fit of preferences. it is a bilateral preference analysis method as apposed to the unilateral methods of the prior art.

We now consider the embodiment of FIG. 2 in further detail. First, in the embodiment of FIG. 2, a set of questions attribute that pertains to a characteristic, feature or benefit of 55 201 is posed to each party and counterparty. The questions are designed to reveal the utility value that each respondent places on the possible levels of a set of attributes $\{a_1, a_2, \dots \}$ a_m} related to the proposed transaction.

Bilateral preference methodologies according to the categorical, as for example, "between 5,000 and 10,000." so embodiment of FIG. 2 are useful in, but are not limited to, three exemplary contexts.

In the first exemplary context, an individual party wishes to enter a transaction with an organization counterparty. In the transaction, the party seeks to identify an organization with 55 respect to which the preferences of such party are a good fit relative to the alternatives. The organization counterparty, on the other hand, seeks to give entry to parties who will be

5

successful within the organization. Examples of the first exemplary context include a student (as the individual party) choosing colleges to attend (the organization counterparty), and an employee (the individual party) choosing a corporate employer (the organization counterparty).

In the first exemplary context, the questions asked of the party are designed to reveal the utility values that the party places on possible levels of a set of attributes related to the environment within the counterparty organization. The preference profile created by the party's answers can thus be 10 called a "value profile" in this context. By contrast, the questions asked of each potential counterparty organization are designed to reveal the preference profile that the counterparty considers necessary for a party to be successful within its party's answers in this context can thus be called a "success profile". In the first exemplary context, a decision is recommended to the party based on a relatively close fit between the party's value profile and the counterparty's success profile.

Note that questions for a counterparty organization in the 20 class size." first exemplary context are not necessarily directed to revealing profiles of successful individuals within its organization in the past. The questions may instead elicit the value profiles of individuals that the counterparty believes will be successful within its organization in the future,

In a second exemplary context, both the party and the counterparties to a potential transaction are organizations. In the transaction, the party and counterparty seek to join together to form one organization. An example of such a context is a corporate merger or acquisition. In the second 30 exemplary context, the questions asked of both the party and potential counterparties are designed to reveal the value profile that each respondent considers necessary for success within its organization. Thus, in the second exemplary context, a decision is recommended based on a relatively close fit 35 between the success profiles of the party and counterparty. In a merger example, such a recommended decision maximizes "culture fit" between merging companies.

Finally, in a third exemplary context, both the party and the counterparties to a potential transaction are individuals. In the 40 transaction, the party and counterparty seek to enter a financial relationship. For example, an individual party may seek a counterparty partner for a joint venture. In this third context, the questions asked of the party and each potential counterparty are designed to reveal the utility value that each respon- 45 dent places on possible levels of a set of attributes related to the proposed relationship. A decision is then recommended based on a relatively close fit between the resulting value profiles of the party and a counterparty.

For convenience in this section of the description, we refer 50 predominantly to a "potential transaction". However, embodiments of the present invention may also be used in dealing with operation of an enterprise. In such a case, the party and the counterparty may (but need not) be different constituents of the same enterprise and the issues of fit 55 between the constituents may involve, for example, addressing organizational inefficiencies in the workplace and a wide variety of other activities. In one example, the party and counterparty may be management and labor, and the issue of fit may involve a company policy to deal with staggered work hours. Alternatively, the party and counterparty may be a managers of two different divisions of a company having competing claims on a common resource to them, such as marketing. Or, as yet another example, the enterprise may be city government, the party may be the police force, the coun- 65 terparty may be the mayor, and the issues of fit may be related to employee benefits, including terms of a health insurance, to

cover the police force. In any case, the technical approach for embodiments of this type is similar to that described below with respect to a potential transaction between party and counterparty.

6

A common feature of questions used in each of the exemplary contexts is that the attributes are chosen so that those of the parties "mirror," or otherwise complement, those of the counterparties. For example, for a party who is a college applicant deciding which college to attend, the attributes may include: population of the locality in which the school is located, degree of structure of the learning environment, and average class size. The counterparties for this transaction may be college admissions personnel, and their "mirror" attributes in helping students to decide whether this school would proorganization. The preference profile created by the counter- 15 vide a close fit of preferences may be: "students who do well here prefer being in a locality with what population"; "students who do well here prefer attending a school with what degree of structure of the learning environment"; and "students who do well here prefer having classes of what average

> An example of questions according to one embodiment of the invention is provided in Table 1 for college applicants and for colleges seeking applicants. Table 2 provides a similar set of questions for mutual fund purchasers and mutual funds 25 seeking investors. Table 3 provides a set of questions for job seekers and employers seeking job candidates.

In process 201 of the embodiment of FIG. 2, each respondent is posed N questions $\{Q_1, Q_2, \dots, Q_N\}$. As described above, questions for counterparties typically mirror the questions for parties. These questions may be fashioned in a wide variety of forms. In one form of questioning, each respondent is provided a series of individual multi-attribute descriptions and asked to rate each of these descriptions. In another form of questioning, each respondent is provided with a series of pairs of multi-attribute alternative descriptions, and is asked. for each pair, to select a desired one of the alternatives. In yet another form of questioning, each respondent may be asked to select from among two or more alternative multi-attribute descriptions.

Proper design of the questions permits statistical evaluation of the responses, from which may be derived utility values for each respondent. For example, the college applicant may be asked to rate a selection of potential colleges from 1 to 10, with 10 being most favorable; each college may be characterized by a level for each of a series of attributes. For example, in the case of attributes such as population of locality, degree of structure of the learning environment, and class size, one of the colleges to be ranked may be characterized by levels as follows: in a locality with population 100, 000, unstructured learning environment, and small class size.

In general, each attribute {a,} will have possible attribute levels which characterize it—in the example, there may be possible college locations with populations between 15,000 and 100,000; two options for learning environment (structured or unstructured); three class sizes (small, medium, and large), and so on. Note that the attribute levels need not be numbers, but may also be yes/no choices, or choices of items from a list of categories. Furthermore, note that attributes, and levels of the attribute, may also be directed to "soft" characteristics related to a transaction; that is, characteristics which are more emotional in nature and less quantifiable. For example, in an employment setting, a relevant attribute could be the degree of expected after-work socializing with fellow employees, and the levels of the attribute could be "rare." "moderate," and "frequent."

The questions {Q_i} need not, however, ask each respondent to evaluate a list of all possible combinations of attribute

levels. Rather, the set of questions actually posed to the respondents are selected to achieve a balance across independent contributions of each attribute (or, alternatively, such that every point in the space of possible attribute level combinations may be represented as a linear combination of the 5 chosen combinations). In other words, the questions may be designed so that responses to them can be analyzed in terms of attributes that, in mathematical terms, are orthogonal to one another or nearly so.

In order to increase efficiency of the process of obtaining 10 information from respondent or, to enhance the collection of information that is most pertinent, questions may be structured hierarchically. In this way, responses for one or more questions may be used to gate the selection of subsequent questions. Alternatively, or in addition, questions may be in 15 suites, with each suite dealing with a given area of inquiry. For example, in the college selection example, one suite of questions may address factors governing the experience of life at the school such as school size, social activities, geographic location, climate, facilities, nature of housing accommoda- 20 tions, and another suite may address conditions associated with pursing a given major (say history or engineering) at the school (conditions such as class size, expected hours per week studying, use of teaching assistants or use of full professors). Also, for example, in the job example, one suite may 25 address company-related factors (such as expectation/participation in company-sponsored events, expectation around consensus building, locations, and emphasis on cross-training between functions), and another suite may address function specific matters (such as frequency of overnight travel, 30 work week hours, and type of job training programs).

In one particular embodiment, the questions are organized into three stages. In the first stage, the respondent ranks the levels of each attribute, in descending order of preference. For example, "1" could signify the most preferred level, and "3" 35 the least preferred level, for three possible levels of an attribute. In the second stage, the respondent is asked to rate his or her degree of preference for the most preferred level of each attribute, over its least preferred level; for example, the degrees of preference could be "1, slightly preferred"; "2, 40 moderately preferred"; "3, greatly preferred"; "4, I must have—the least preferred level would be upsetting." Finally, in the third stage, a series of two-option choices is given to the respondent, forcing the respondent to express the degree to which he or she would prefer one of two multi-attribute com- 45 binations. For example, the respondent could be presented with option A and option B, each having different levels of two attributes, and asked to rank them on a scale of 1 to 9 (1 meaning "strongly prefer option A", 5 meaning "the two are of questions from each of these three stages are shown in FIGS. 9 through 11.

Once each respondent has provided a set of ratings {R₁, R_2, \dots, R_N in answer to the questions (process 202), the embodiment of FIG. 2 next calculates a preference profile for 55 each respondent, which includes the utility value that each respondent places on possible levels of the attributes {a,} related to the proposed transaction. The preference profile is generated in process 203 by establishing, for each respondent, a utility function U_i(a_i) for each attribute; this function 60 provides a utility value corresponding to each level of the attribute a. The utility functions are generated by first calculating a total utility for each example combination that was ranked by the respondent. The total utilities are calculated by evaluating proposed utility functions for each attribute at the 65 attribute levels composing each combination, and, for each combination, summing the resulting utility values. The func-

tions are then chosen from amongst the proposed functions by the criterion that a ranking of the total utilities should correspond to the respondent's actual rankings as closely as possible. The result, for each respondent, is a utility function $U_i(a_i)$ chosen for each attribute $\{a_1, a_2, \dots, a_m\}$. Each utility function translates each level of its attribute into a utility for that respondent. So, for example, a utility function will be established for the college applicant's evaluation of the college location attribute (with a utility value corresponding to each location A, B, and C-say 0.3, 0.2, and 0.4), the class size attribute (with a utility value corresponding to small, medium, and large class sizes—say 0.5, 0.2, 0.1), and so on.

As in conventional conjoint analysis methods, the utility functions are normalized to permit comparisons between the utility values of given levels of different attributes. However, in conventional methods, respondents are typically treated as a class and their responses are analyzed collectively. Here the context is typically different, and the responses of each party (and counterparty) are typically analyzed separately, so that for each party and each counterparty there is obtained a separate set of utility functions. Furthermore, conventional methods produce utility functions in a one-sided, or unilateral, fashion. For example, a producer conventionally obtains a set of utility functions describing the preferences of consumers. By contrast, the method of the embodiment of FIG. 2 produces a set of utility functions for the party and each potential counterparty, and continues with a bilateral analysis as discussed below. However, as described below, in some circumstances the preferences of a group may be evaluated collectively. Also, the responses of any individual to questions may be augmented and extrapolated on the basis of data previously obtained for similar individuals.

The set of utility functions associated with a respondent (be the respondent a party or counterparty) are sufficient to characterize the preferences of the respondent. For example, there can be determined the relative importance that the respondent places on each attribute by calculating, for that attribute, the range of the utility function over the interval of possible attribute levels. A higher range for an attribute's utility function indicates a greater relative importance for that attribute. As an example, consider the hypothetical in the paragraph before last; the respondent's range of utility values for the college location attribute was 0.2 (from a low of 0.2 to a high of 0.4); and the range for the class size attribute was 0.4 (from a low of 0.1 to a high of 0.5). Class size is therefore relatively more important for that respondent than college location. More generally, there may be derived from the utility functions U_i(a_i) for a respondent, a range vector {R_i}having a series of components R corresponding in each case to the equal," and 9 meaning "strongly prefer option B"). Examples 50 range of the utility function U_i(a_i) over levels of the attribute

> From the utility functions of a respondent there can be similarly determined the level of each attribute giving rise to the greatest utility experienced by the respondent. In other words, from the utility functions can be derived the attribute levels most preferred by the respondent. One may therefore determine a value vector {V_i} for each respondent, as shown in process 204. The components of the value vector {V_i} represent the levels of each attribute {a,} that maximize the respondent's utility function with respect to that attribute. In particular, if, for counterparty number two, three levels A, B. and C of attribute one (a1) correspond to utility function values of 0.2, 0.3, and 0.4 respectively, then level C will be chosen as V1, since it gives the maximum utility value for this

> Given the seminal nature of the utility functions, the preference profile for each respondent, in this embodiment, is the

utility function vector $\{U_i(a_i)\}$ for each attribute $\{a_1, a_2, \ldots a_m\}$. In other embodiments, the preference profile may be composed of one or more of the value vector $\{V_i\}$ and the range vector $\{R_i\}$.

Once the utility functions are generated, the process of determining the counterparties having the closest fit with a party begins. As shown in FIG. 2, there are two alternate embodiments of the method of FIG. 2. In the first, called the aggregate value method, a list of counterparties having the closest fit is determined by following processes 204, 205, 206, and 208. In a second, alternative embodiment of the method of FIG. 2, called the distance value method, the list may be generated by following processes 207 and 208 (instead of processes 204, 205, 206, and 208).

In process 205 of the aggregate value method, a vector is generated corresponding to a pairing of each counterparty with the party. These vectors are formed by evaluating the party's utility functions (from process 203) at each counterparty's value vector levels (from process 204)—that is, at the counterparty's utility-maximizing values. There is thus formed, for each counterparty paired with the party, a vector $\{U_i(a_i)|_{H_i}\}$, where the vertical bar notation indicates evaluation of the party's utility function for attribute a_i at $a_i = V_i$, and V_i is the counterparty's utility-maximizing value for attribute 25

In process 206 of the aggregate value method, there is computed an aggregate value for each vector $\{U_i(a_i) \mid_{ij}\}$ by summing the components $U(a_i) \mid_{ij}$ of the vector, i.e. by evaluating the sum

$$\sum_{i=1}^{m} U_i(a_i) \bigg|_{U_i}$$

In process 208 of the aggregate value method, the counterparty that, when paired with the party, produces the greatest aggregate value is identified as having the closest fit of preferences to the party. Similarly counterparties yielding lower aggregate values when paired with the party are viewed as having a poorer fit of preferences to the party. By selecting a group of the highest ranking counterparties, there can be provided a list of counterparties having a relatively close fit of preferences with those of the party.

In the distance value version of the embodiment of FIG. 2, a list of counterparties providing a relatively close fit of preferences is generated by using a distance measure between the utility functions generated in process 203 for the party and each counterparty. First, a utility function vector {U(a,)} is generated for the party and each counterparty as described in process 203 above. Then, in process 207, for each possible counterparty that can be paired with the party, a distance value is generated by comparing the utility functions of the pair. For example, a linear distance value D may be computed using a distance measure as follows:

$$D = \sum_{i=1}^{n} \sum_{j=1}^{l_i} \left\{ \operatorname{Abs} \left\{ U_i(a_i) \left|_{L_j} - U_i'(a_i) \right|_{L_j} \right\} \right|,$$
 [Equation 1]

where the distance value D is calculated for each possible counterparty paired with the party; and where Abs { } indicates the absolute value of the subtraction result in the brackets; m is the number of attributes {a,}; J, is the number of levels of attribute a,; U,(a,) is the party's utility function for

attribute a_i : U_i (a_i) is the counterparty's utility function for attribute a_i ; and the vertical bar notation indicates evaluation of the function at attribute level L_i .

In process 208 of the distance value method of FIG. 2, the counterparty that, when paired with the party, produces the lowest distance value P is identified as having the closest fit of preferences with the party. Similarly counterparties yielding higher distance values when paired with the party are viewed as having a poorer fit of preferences with the party. By selecting a group of the lowest distance valued counterparties, there can be provided a list of counterparties having a relatively close fit of preferences with those of the party. While the illustration above uses a linear distance measure that is minimized, other distance measures may also be employed, including, for example, a least-squares approach. In such a way, the embodiment of FIG. 2 allows parties and counterparties to make decisions about potential transactions based on a bilateral evaluation of preferences.

While the embodiment of FIG. 2 has been described with reference to a list of counterparties being provided to a party, it should be understood that, given any two classes of parties denominated "parties" and "counterparties," the embodiment of FIG. 2 can equally be used to recommend a list of parties to a counterparty; this may be accomplished by simply follow-ing the described processes, but replacing the term "party" with "counterparty," and vice versa. Generally, it should be understood that embodiments of the invention are symmetrical with respect to two sides of a transaction, in that they may be used equally to recommend decisions to one side as to the other.

Furthermore, where embodiments are described in which, first, a preference profile is generated for persons on one side of a transaction, and then a preference profile is generated for persons on the other side of the transaction, it should be understood by those of ordinary skill in the art that the order of questioning the persons, and of generating the preference profiles, is not essential. Thus, where it is described to ask questions of persons on one side of a transaction first, and then of persons on the other, it should be understood that it is equally possible to reverse the order of questioning (by asking questions of the opposite side of the transaction first), or even to ask questions of both sides simultaneously.

In a further related embodiment, parties and counterparties are enabled to make decisions based on a multilateral evaluation of preferences. In such an embodiment, the method proceeds as described for FIG. 2, except that questions are asked not only of parties and counterparties, but also of one or more co-evaluators. A co-evaluator may be any natural person or an entity, as with the parties and counterparties. The party, and any of the possible counterparties, may wish to include the input of a co-evaluator as an aid to decision making. Thus, for example, a college applicant party may wish to have a guidance counselor or his parents evaluate the circumstances under which he performs best, or seems most content, in order to aid him in deciding which college to attend. Similarly, a college counterparty may wish to have input from alumni/ac. faculty, and current students to guide in selection of students to admit. In a merger, a corporation party may wish to have the members of its various departments, and even some of its customers and/or suppliers, act as co-evaluators, to assist in determining the degree of "culture fit" with a corporate counterparty with which it is merging.

in each case, the co-evaluator chosen has a useful perspective on the party or counterparty's preference profile. The question array, ranking, utility function, and value vector procedures are followed as in boxes 201 through 204, except that in this multilateral embodiment they are performed for at

-11

least one co-evaluator, based on his or her own perception of the associated party's or counterparty's preferences, in addition to being performed by the parties and counterparties themselves.

Co-evaluators may fall into two exemplary categories, 5 although they are not limited to these categories. In the first exemplary category, the co-evaluator provides input concerning the circumstances under which his or her associated party or counterparty is most content or satisfied. In this category, the co-evaluator can be said to provide a preference profile for 10 his or her associated party or counterparty.

In the second exemplary category, the co-evaluator provides input concerning the circumstances under which his or her associated party or counterparty performs best. In this category, the co-evaluator can be said to provide a success 15 profile for his or her associated party or counterparty.

Attributes for co-evaluators typically mirror those for parties and counterparties. For example, in the college-admissions example discussed in connection with FIG. 2, attributes for a guidance counselor co-evaluator could be: "Prospect to does best in environments that..." or "Prospect is happier with products or services that..." Similarly, questions for a co-evaluator for a counterparty may be structured to elicit answers to the questions: "People who do well here typically like jobs that..." or "Users who are satisfied with this 25 purchase typically prefer items that..."

A co-evaluator for a party or counterparty need not be a single person, it could also be a group of people. For example, a corporate counterparty may wish to use the members of a given department as its co-evaluators in a transaction. In such 30 a case, i.e. where a co-evaluator consists of a group of individuals, questions are asked of each member of the group of co-evaluators, and rankings are obtained from each. Then a single set of utility functions (one function for each attribute) is generated for the group of co-evaluators. This may be done by averaging utility functions for each member of the group; by weighting some members' utility functions more highly, in a weighted average of functions (with the optimal weighting determined based on the context of the transaction); or by allowing the counterparty (or party) associated with the co- 40 evaluator to choose which group member's profile to use as the co-evaluator's profile.

Where there is a group co-evaluator, or where there is more than one co-evaluator for a single party or counterparty, it may also be useful to provide a visual display of each co-evaluator's preference profile to parties and counterparties. Such a visual display could take the form of a histogram, with a bar indicating the relative value of attributes; or the visual display could graphically display a utility function for each attribute, for each co-evaluator. Another useful visual display could be a scatterplot or distribution (characterized, for example, by a mean and standard deviation) of the preference profile results from more than one cu-evaluator. By using such visual displays, parties and counterparties may be enabled to weigh the input of multiple co-evaluators in a 55 comparative and qualitative fashion.

When a party or counterparty uses a co-evaluator, methods according to embodiments of the invention may require the party or counterparty's permission, before releasing a co-evaluator's preference profile to other respondents in the 60 decision-making process.

Once a preference profile has been obtained for the party, each counterparty, and each co-evaluator, the next process in a multilateral embodiment of the invention is, as with the bilateral embodiments described above, to recommend a list of counterparties providing a relatively close fit of preferences. First it must be determined, for each party and coun-

12 valuator, how to

terparty who used a co-evaluator, how to use the co-evaluator's preference profile in the analysis. In one embodiment, this is performed by the following algorithm:

 Determine the closeness of fit of the party or counterparty's preference profile with that of its associated co-evaluator. This may be done using the aggregate value method or the distance value method (each described above for a bilateral embodiment).

2) If the profile of the co-evaluator is close enough to that of the party or counterparty, as judged against a pre-established standard, then the party or counterparty's own profile will be used for comparison with potential partners to the transaction.

3) If, however, the co-evaluator's preference profile differs sufficiently from that of its associated party or counterparty (as judged against the pre-established standard), then the associated party or counterparty is given a choice as to which preference profile to use for comparison with potential partners to the transaction. The party or counterparty may choose to use its own profile only, or that of the co-evaluator only, or (optionally, for an additional fee) to use each profile separately and obtain results using each.

Once it is determined which preference profile will be used for the party and each counterparty, a multilateral embodiment of the invention proceeds as described above for bilateral embodiments. The result of this multilateral embodiment, then, is to provide a list of counterparties to the proposed transaction who provide a relatively close fit of preferences with those of the party, in a way that takes into account the perspective of at least one co-evaluator.

Because decisions are recommended based on the preferences of more than one party to a transaction, embodiments of the invention are particularly advantageous for long-term. relational transactions. Examples have been provided above of utilization of embodiments in situations where parties and counterparties may lack any previous business relationship. However, such a circumstance is in no way a necessary foundation for application of embodiments of the present invention. For example, embodiments of the present invention may be employed for evaluation of existing relationships between employer and employee. Questions in such a circumstance may, for example, be directed to particular work conditions, such as scheduling of employee's work hours during the day, work rules and changes to physical facilities. In this manner, management and employees may usefully evaluate potential issues of importance in the work environment. As another example, embodiments of the present invention may be applied within corporations to determine where there is "gear grinding" within the organization (inefficient or counterproductive relationships), or areas of difficulty in "culture fit" between merged companies.

Similarly, embodiments of the present invention may be used in tandem with more traditional evaluation techniques. For example, potential employees may be identified using traditional techniques, and thereafter promising candidates along with human resources managers may be subjected to co-evaluation in accordance with an embodiment of the present invention.

It is equally possible to refine evaluation techniques in various embodiments herein. One method of refinement is to consider instances wherein a close fit has been predicted by an embodiment, but wherein experience later shows there to be a problem. (Or alternatively, a close fit has not been predicted, but nevertheless resulted.) When the reason for the outcome is uncovered, it may be due to an attribute that had not been previously identified, or due to an ineffective or badly worded question. In such cases, the questions posed to respondents

13

may be modified to take into account a new attribute or to correct ineffective questions. The questions may then be used for new submissions to future respondents or can optionally be resubmitted to former respondents. Alternatively, or in addition, the problem may be attributable to improper analysis of the answers to the questions, and these matters can be adjusted by modifying, for example, the utility functions associated with the party or counterparty as appropriate, and re-performing the analysis.

FIG. 3 shows a block diagram of an embodiment of a 16 system in accordance with the present invention. A first question and response module 302 obtains responses from each member of a first class of parties 301 to a first set of questions. The questions are designed to elicit revelation of preferences that can be used to estimate the closeness of each party's fit with potential counterparties to the transaction. The first question and response module then stores the party's responses in a first digital storage medium 303.

Similarly, a second question and response module 305 obtains responses from each member of a second class of 20 counterparties 304 to a second set of questions. These questions are, similarly, designed to clicit revelation of preferences that can be used to estimate the closeness of each counterparty's fit with potential parties to the transaction. The second question and response module then stores the counterparty's responses in a second digital storage medium 306.

A first profile processor 307 uses the responses stored in first storage medium 303 to derive a first preference profile for each party, and a second profile processor 308 uses the responses stored in second storage medium 308 to derive a 30 second preference profile for each counterparty.

A closeness-of-fit analyzer 309 analyzes the preference profile generated for each party by first profile processor 307 in relation to the preference profiles generated by second profile processor 308. For each party, the result is an output 35 ranked list 310 of counterparties providing a relatively close fit of preferences with that party, compared with the other potential counterparties. The closeness-of-fit analyzer communicates such a list to each party.

In embodiments of systems according to the invention, the 40 first and second question and response modules 302 and 305, the first and second profile processors 307 and 308, and the closeness-of-fit analyzer 309 may be implemented as computer processes running on multiple computers in communication with each other (for example over a network, including 45 the Internet), or as processes running on a single computer. Similarly, the first and second digital storage media 303 and 306 may be separate storage devices, or portions of a single digital storage medium.

In a preferred embodiment, the system of FIG. 3 is implemented as a host computer accessible over a network, such as the Internet. In particular, parties 301 and counterparties 304 may access the system using remote computers which are in communication with a host computer via Web pages of a web site on the World Wide Web. The host computer is then a web 55 server, which runs computer processes that implement the first and second question and response modules 302 and 305, the first and second profile processor 307 and 308, and the closeness-of-fit analyzer 309. The server stores responses to questions in an associated content storage device (for 60 example at least one hard disk drive), which serves as first and second storage media 303 and 306. The server may communicate with parties and counterparties using e-mail, or by making information available on a web site, or by other communication methods.

Further information concerning the Internet and E-mail (both of which terms are used throughout this specification) is

provided, for example, in Gralla. How the Internet Works (Ziff-Davis Press, 1996), which is hereby incorporated by reference; see especially pages 44-49.

14

In further embodiments of systems and methods according to the invention, communication with a server and information processing may be implemented using wireless devices.

FIGS. 4 and 5 illustrate the logical flow of a method according to an embodiment of the invention that may be implemented using a web server on the Internet. This embodiment also illustrates use of the processes described above in connection with the system of FIG. 3.

In box 401, a system, which may be a website server on the Internet, receives primary data from parties and counterparties, via guided templates for data entry. Each party or counterparty enters the site, registers basic information (for example name, address, and other contact information), and selects a decision area from a set of pre-set parameters. The pre-set decision areas may be, for example, college selection or employment searching. For college selection, the party could be a college applicant, and the counterparty may be a college looking for or decided which students to admit; for employment searching, the party may be a job candidate looking for a job, and the counterparty may be an employer looking for employees or deciding amongst candidates. After receiving the decision area choices, the system prompts the party or counterparty, via guided templates, for information on co-evaluators that he or she wishes to include in the decision-making process. The system also gives the party or counterparty the option of using data from only the co-evaluators in making the decision (with no input from the party or counterparty himself). Finally, the party or counterparty authorizes payment, and the system receives and verifies the payment method (for example, credit card payment).

Next, in box 402, the system prompts each party and counterparty, via guided templates, for supplemental data that might be useful later in the process of evaluation. For example, a job candidate party may be prompted for, and register, a formatted résumé. A college applicant party may be prompted for, and register, a summary of his academic history. In each case, the prompted supplemental data is potentially useful to a counterparty (e.g. an employer or a college) later in the process of evaluation (described below). Similarly, the system prompts counterparties for supplemental data that are potentially useful to parties later in the decision-making process. For example, if the counterparty is a company searching for job candidates, the company's supplemental data may be "leads" on housing opportunities, which would be attractive to job candidates who need to find housing near the company. Once the parties and counterparties have entered supplemental data, the system assigns a unique identifier to each user, including parties, counterparties, and any co-evaluators that they have named. The system also creates a file for each user, and associates each file with the corresponding unique identifier.

The system next, in box 403, disseminates a questionnaire form to each party and counterparty, along with the unique identifier assigned to each. (This process is omitted for a party or counterparty who has elected to have evaluation performed by a co-evaluator only, as described above in connection with box 401.) The system then administers the questionnaire forms to each party or counterparty. For example, the system may guide the party or counterparty through a series of questions formatted as templates on Web pages on a web site, through which the system receives each party's (or counterparty's) answers to the questions. The questions on the questionnaire form are designed to elicit the utility value which the respondent places on possible levels of each attribute, without

15

necessarily asking for preferences directly. For example, the questions may be structured to elicit from the parties answers to the questions: "I do best in environments that ... " or "I'm happier with products or services that ... " Similarly, the questions for counterparties may be structured to elicit answers to the questions: "People who do well here typically like jobs that ... " or "Users who are satisfied with this purchase typically prefer items that"

As previously discussed, Tables 1-3 show examples of questions that may be used, in various embodiments of the 10 invention, for eliciting preferences in the areas of college selection (Table 1), mutual fund selection (Table 2), and employment selection (Table 3).

In box 404, the system disseminates a questionnaire form to each co-evaluator, and administers the form to the co- 15 evaluator, in a fashion similar to that described for box 403. (If no co-evaluators were named for a given party or counterparty, then this process is omitted). The questions for a coevaluator are structured to elicit the co-evaluator's perspective on the associated party or counterparty's preferences, 20 without necessarily asking for preferences directly. The questions may, for example, elicit input concerning the utility value which the associated party or counterparty places on possible levels of each attribute; or may elicit input concerning the circumstances under which the associated party or 25 counterparty performs best. For example, questions for a co-evaluator for a party might be structured to elicit answers to the questions: "Prospect does best in environments " or "Prospect is happier with products or services that " Similarly, questions for a co-evaluator for a coun- 30 terparty may be structured to elicit answers to the questions: "People who do well here typically like jobs that . . . " or "Users who are satisfied with this purchase typically prefer items that .

In box 405, the system reviews for internal consistency the 35 completed preference forms that it received from boxes 403 and 404. For each form, when the extent of logical inconsistency exceeds a desired level, the system communicates the fact of inconsistency to the respondent who completed the form, and asks whether he or she wishes to fill out the form 40 again. A stark example of such an internal inconsistency is where a respondent has answered three questions, in the same answer form, with the answers "I prefer A to B"; "I prefer B to C"; and "I prefer C to A." Checks of internal inconsistency are useful, for example, in detecting respondents who are 45 attempting to "game the system," by providing answers that show preferences for given attributes, when in fact their preferences are otherwise; often, in such a case, the respondent inadvertently answers questions in an inconsistent fashion. If the inconsistent form was completed by a party or counter- 50 party, then the party or counterparty is also given the option of allowing the process to continue using only input from coevaluators. If a respondent who filled out an inconsistent form does not respond to a request to fill out the form again, then the process continues without that respondent's input.

Next, in box 406, the system sends to each party such party's preference profile and profiles of any co-evaluators and to each counterparty such counterparty's preference profile and profiles of any of such counterparty's co-evaluators. The aggregated profile reveals to the party or counterparty the 60 results of performing a forced-choice analysis, or other preference analysis (including conjoint analysis) using the party's answers to the preference form questions. Thus it may reveal to the party or counterparty the weight that he or she places on attributes that were analyzed, or the levels of each attribute 65 that he most preferred, or the utility value that he or she places on possible levels of each attribute, as determined by the

16

preference analysis. Optionally, such information may be presented in a histogram or other graphical display, in order to visually display the results of the analysis. An example of such a histogram for a job applicant is shown in FIG. 6; a corresponding histogram for a counterparty employer is shown in FIG. 7; and a histogram showing a side-by-side comparison of the two is shown in FIG. 8. Note that histograms may be used to display weights or values or both; they are used for values only where the values in question are quantitative (as opposed to categorical or yes/no) variables.

The party or counterparty is also given information about significant gaps between the results of his preference analysis and the results of his co-evaluators, either in weighting of attributes, or in most preferred attribute levels, or both. Such gaps may optionally be displayed by a side-by-side comparison of histograms, as is illustrated by FIG. 8. Knowing these gaps may lead a party (or counterparty) to re-examine its conception of its own preferences; a large gap between the respondent's own perception of its preferences as compared with that of others may mean that the respondent was not truly aware of its own preferences. Accordingly, the party or counterparty (as the case may be) is given the choice of using its own preferences or those of one of its co-evaluators, as described further below.

As described below in connection with box 513, it is possible to permit each party and counterparty to update its preference profile; when there is a decision to update, the process must accommodate the collection of new preference data to provide a new analysis that will differ from the original analysis if responses to the questionnaire form are different from the original responses. In presenting the option to update, the system sends the party or counterparty his original decision area choice, and gives him the opportunity to revise the choice (thereby returning to box 401). The system asks the party or counterparty for authorization to proceed to the process of looking for relatively close fits amongst a pool of counterparties or parties (respectively). The system also gives the party or counterparty the option of repeating the preference form processes (thereby repeating boxes 403 through 405), or of adding or dropping co-evaluators (thereby returning to boxes 402 and 404-406). (The addition of a co-evaluator or the updating of the profile may optionally trigger the requirement of paying an extra (ee.)

In box 407, the system obtains authorization from each party and counterparty to release the results of the search for relatively close fits. Each party has three or more options, including: a) to receive the results, without the same information being sent to any counterparties; b) to receive the results, and to have the results sent to counterparties with name or other key identifying data on the party withheld; or c) to receive the results, and to have the results sent to counterparties with full information on the party. Each counterparty is given corresponding options for release to parties (including the option to withhold the counterparty's name or other key identifying data from the parties).

Next, in box 408, the system generates, and communicates to each party and counterparty, a ranked list of relatively close fits for that party or counterparty amongst the pool of reciprocal parties, based on the use of a bilateral or multilateral preference methodology. This list may contain network addresses, web links or e-mail addresses, or other methods of contacting reciprocal parties on the list. Also, it may contain a listing of what information about the recipient has been sent to each of the reciprocal parties on the list, in accordance with the authorization received in box 407 (above).

In box 409, the system facilitates action by parties and counterparties to identify and contact reciprocal parties. For example, the system may enable a party to contact a counter-

17

party by using a web link on a web site, or by using a web link sent to the party as part of an e-mail; or the system may provide phone numbers or other contact information, as authorized in box 407 (above).

Continuing with box 510 in FIG. 5, the system next queries 5 each party and counterparty as to what decisions it has made in the decision area for which the analysis was performed; for example, a party could be asked what job he or she accepted, or what product he or she selected; and a counterparty could be asked which job candidates it selected for employment. 10 These decision inquiries are repeated at time intervals that are either chosen by the registrant in the primary data entry process of box 401, or are specified to the registrant during the primary data entry process, or are otherwise scheduled by the

In box 511, the system communicates a query to each party and counterparty as to its satisfaction with the decision that it made, after it has been informed that the party or counterparty has made the decision. This decision satisfaction inquiry is performed at a time interval after process 510 that is either 20 chosen by the registrant in the primary data entry process of box 401, or pre-determined in the system.

Next, in box 512, the system, in one embodiment, performs a post-decision analysis. It analyzes key attributes that contributed to each party and counterparty's degree of satisfac- 25 tion, by comparing each one's reported degree of satisfaction (from box 511) with the analyzed preference form results obtained in boxes 406 and 408. The system communicates to each party and counterparty its individual post-decision analysis, and provides each with a structured opportunity to 30 respond to the analysis, e.g. by providing a set of web-page templates enabling the party or counterparty to comment on the key attributes identified in the post-decision analysis. Additionally, the system stores the results of the post-decision analysis, and the comments on it. Owing to the collection, in 35 the course of practicing embodiments discussed in this description, of substantial quantities of data that tend to be of a personal nature, it is within the scope of various embodiments to preserve the confidentiality of such data and to disclose such data only under circumstances to which the 40 affected individuals and organizations have given their con-

Large discrepancies between a preference form analysis and a post-decision report may indicate that the respondent did not understand its own preferences well. Thus, such post- 45 decision reports may help parties and counterparties to learn about themselves, and therefore to make better decisions in the future.

Results of post-decision analyses may be used to revise the system's method of preference form analysis, or to revise the 50 questions which are asked in each decision area. For example, if it is discovered that some college applicant parties have decided to attend colleges with which they were unhappy, and some were unhappy based on attributes that the preference form did not elicit, then the preference form for the college 55 choice decision area could be altered to incorporate the overlooked attributes.

As part of the post-decision analysis, the system may also provide a co-evaluator with a report on the party or counterparty's reported degree of satisfaction. For example, a college 60 guidance counselor co-evaluator can be provided with a report on a college applicant party's (or a group of parties') degree of satisfaction, so that the counselor can modify his or her counseling in the future.

guarantee that a party's post-decision report will be kept in confidence with respect to (at a minimum) the counterparty

18

with which the party entered a transaction (and vice versa for a counterparty's confidences). For example, it is preferable to guarantee confidentiality to an employee party who reports dissatisfaction with an employer counterparty in a post-decision report.

In box 513, the system invites each party and counterparty to update its preference profile. If the party or counterparty agrees, the process begins anew, beginning with box 401, above. For such updates, the process retains the data from the original analysis process, and updates it according to the new input which the party or counterparty provides. The pricing to users may be configured so that additional charges may be made for updates, as opposed to original analyses. A party or counterparty may also initiate the update process itself, without an invitation; this may, for example, be implemented by providing an update option for registrants on a web site. As part of an update, the system also allows a party or counterparty to add or delete co-evaluators. If the update option is not selected, the process proceeds to box 514.

In box 514, the system invites each party and counterparty to perform a new matching process for closeness of fit, based on its current preference profile. If the party or counterparty agrees to do so, the process begins anew at box 407, with the pricing changed accordingly.

Although this description has set forth the invention with reference to several preferred embodiments, one of ordinary skill in the art will understand that one may make various modifications without departing from the spirit and the scope of the invention, as set forth in the claims.

1. A computer-implemented method for facilitating evaluation, in connection with the procurement or delivery of products or services, in a context of at least one of (i) a financial transaction and (ii) operation of an enterprise, such context involving a first class of parties in a first role and a second class of counterparties in a second role, the method compris-

- in a first computer process, retrieving first preference data from a first digital storage medium, the first preference data including attribute levels derived from choices made by at least one of the parties in the first class:
- in a second computer process, retrieving second preference data from a second digital storage medium, the second preference data including attribute levels derived from choices made by at least one of the counterparties in the second class:
- in a third computer process, for a selected party, performing multilateral analyses of the selected party's preference data and the preference data of each of the counterparties, and computing a closeness-of-fit value based thereon; and
- in a fourth computer process, using the computed closeness-of-fit values to derive and provide a list matching the selected party and at least one of the counterparties.
- 2. A method according to claim 1, wherein the list is ranked according to closeness of fit.
- 3. A method according to claim 1. further comprising receiving co-evaluator choices made by a party co-evaluator or a counterparty co-evaluator, wherein the list matches the at least one party and the at least one counterparty according to a multilateral analysis of preference data determined using such co-evaluator choices.
- 4. A method according to claim 1, wherein the party Note, however, that in some contexts it is preferable to 65 choices reveal, with respect to each level of each of a first series of attributes, a utility value which indicates the value that the party places on the level of the attribute

19

- A method according to claim 4, wherein the party choices reveal the utility values without the utility values being provided explicitly.
- 6.A method according to claim 4, wherein the counterparty choices reveal, with respect to each level of each of a second 5 series of attributes that complements the first series of attributes, a utility value which indicates the value that the counterparty places on the level of the attribute.
- 7. A method according to claim 6, wherein the counterparty choices reveal the utility values without the utility values being provided explicitly.
- 8. A method according to claim 1, wherein at least one of the first preference data, second preference data, and the list is obtained from a remote server over a communication network.

20

 A method according to claim 1, wherein the party choices and the counterparty choices are provided to a remote server over a communication network.

.



Acton Law Partners LLP 101 Centerpoint Drive Suite 105 Middletown, CT 06457

T 860,724,2160 F 860,724,2161 actoriaw.com

DAMIAN
WASSERBAUER
Of Counsel
T 860,398 6031
damiun@setonlaw.cum

VIA HAND DELIVERY

May 30, 2013

Danny Seigle Find The Best.com, Inc. 101 Innovation Place, # A Santa Barbara, California 93108

c/o
Thomas N. Harding Seed Mackall LLP
1332 Anacapa St., Suite 200
Santa Barbara, CA 93101

RE: Lumen View Technology LLC v. FindTheBest.com, Inc., S.D.N.Y.

Dear Mr. Seigle:

This firm represents Lumen View Technology LLC ("Plaintiff") in connection with U.S. Patent Number 8,069,073, entitled "System and Method for Facilitating Bilateral and Multilateral Decision- Making" ("the '073 Patent"). We write to you as Director of Operations for FindTheBest.com, Inc. ("Company") regarding Company's unlicensed use of subject matter covered by the claims of the '073 Patent.

Based on our examination, Company's AssistMc feature meets one or more claims of the '073 Patent, as more fully described in the Complaint attached hereto which already has been filed against Company in the United States District Court for the Southern District of New York (the "Suit"), and that Company has directed this infringing activity to residents in the State of New York.

A service copy of the Complaint is attached. The Complaint has been filed and served on the Company's New York registered agent listed above. Please note that a response to the Complaint ("Response") must be filed within twenty-one (21) days from the date of service or a default judgment may be entered against the Company.

If Company is interested in avoiding the need for filing responsive pleadings, you must contact us (prior to the due date of Company's Response) to discuss license terms. To facilitate such discussions, please be prepared to discuss the extent of the

Company's use of and revenues generated from the features described in the Complaint.

While it is Plaintiff's desire that the parties amicably resolve this matter, please be advised that Plaintiff is prepared for full-scale litigation to enforce its rights. This includes all motion practice as well as protracted discovery.

Should Company engage in early motion practice, however, we must advise that it will force us to reevaluate and likely increase Plaintiff's settlement demand. Please be advised that for each nondispositive motion filed by Company, Plaintiff will incorporate an escalator into its settlement demand to cover the costs of its opposition papers and argument.

Preservation Request

Please allow this correspondence to also serve as our request for preservation of evidence to include all documents, tangible things and electronically stored information ("ESI") potentially relevant to the issues in this case. As used in this Preservation Notice, "you" and "your" refers to Company, and its predecessors, successors, parents, subsidiaries, divisions or affiliates, and their respective officers, directors, partners, agents, attorneys, employees or other persons occupying similar positions or performing similar functions.

You should anticipate that much of the information subject to disclosure or responsive to discovery in this matter is stored on your computer systems or other media and devices (including personal digital assistants, smart phones, BlackBerry, iPhone, voice messaging systems, online repositories and cell phones).

ESI should be afforded the broadest possible definition and includes (by way of example and not as an exclusive list) potentially relevant information electronically, magnetically or optically stored as:

- Digital communications (c.g., email, voicemail, instant messaging);
- Word processed documents (e.g., Word documents and drafts);
- Spreadsheets and tables (e.g., Excel worksheets);
- Accounting application data (c.g., Quickbooks, Peachtree data files);
- Image and facsimile files (e.g., PDF, TIFF, JPG, GIF images);
- Sound recordings (e.g., .WAV and .MP3 files);
- Vidco and animation (e.g., .AVI and .MOV);
- Databases (c.g., Access, Oracle, SQL, SAP);
- Contact and relationship management data (e.g., Outlook, ACT);
- Calendar and diary application data (e.g., Outlook PST, Gmail, blogs);

- Online access data (e.g., temporary internet files, history, cookies);
- Network access and server activity logs;
- Project management application data;
- Computer aided design; and
- Backup and archival files (e.g., ZIP and .GHO)

ESI resides not only in areas of electronic, magnetic or optical storage media reasonably accessible to you, but also in areas you may deem not reasonably accessible. You are obliged to preserve potentially relevant evidence from both of these sources of ESI, even if you do not anticipate producing such ESI.

The demand that you preserve both accessible and inaccessible ESI is reasonable and necessary. You will be asked in this litigation to identify all sources of ESI you decline to produce and demonstrate to the court why such sources are not reasonably accessible. For good cause shown, the court may order production of ESI even if it is not reasonably accessible. Accordingly, even ESI that you deem reasonably inaccessible must be preserved in the interim so as not to deprive Plaintiff of its right to secure this evidence or request that the court order it to be produced.

Preservation Requires Immediate Intervention

You must act immediately to preserve potentially relevant ESI including, without limitation, from six (6) years prior to the date of the filing of the Suit up to the present time, and ongoing, in any way relating to the products implicated by the '073 Patent.

Adequate preservation of ESI requires more than simply refraining from efforts to destroy or dispose of such evidence. You must also intervene to prevent loss due to routine operations and employ proper techniques and protocol suited to protection of ESI. You should be advised that sources of ESI that are altered and erased may very well be detectable and subject you to sanctions. You should also be advised that sources of ESI are altered and erased by continued use of your computers and other devices.

Consequently, alteration and erasure may result from your failure to act diligently and responsibly to prevent loss or corruption of ESI.

Suspension of Routine Destruction

We request that you immediately initiate a litigation hold for potentially relevant ESI, documents and tangible things, and to act diligently and in good faith to secure and audit compliance with this litigation hold. Your failure to do so is gross negligence. You are further directed to immediately identify and modify or suspend features of your information systems and devices that, in routine operation, operate to cause the loss of potentially relevant ESI. Examples of such features and operations include:

- Purging the contents of email repositories by age, capacity or other criteria;
- Using data or media wiping, disposal, erasure or encryption utilities or devices;
- Overwriting, erasing, destroying or discarding backup media;
- Reassigning, re-imaging or disposing of systems, servers, devices or media;
- Running antivirus or other programs affecting wholesale metadata alteration;
- Releasing or purging online storage repositories;
- Using metadata or stripper utilities;
- Disabling server or IM logging; and
- Executing drive or file defragmentation or compression programs.

Obligation to Guard Against Deletion

It should be anticipated that your employees, officers or others may seek to hide, destroy or alter ESI and you should act to prevent or guard against such actions. Especially where company machines have been used for Internet access or personal communications, it should be anticipated that users may seek to delete or destroy information <u>unrelated to the Suit</u> that they regard as personal, confidential or embarrassing and, in doing so, may also delete or destroy potentially relevant ESI. This concern is not one unique to you or your employees or officers. It is simply an event that occurs with such regularity in electronic discovery efforts that any custodian of ESI and their counsel are obliged to anticipate and guard against its occurrence.

You should take affirmative steps to prevent anyone with access to your data, systems and archives from seeking to modify, destroy or hide electronic evidence on network or local hard drives. With respect to local hard drives, a method of protecting existing data on local hard drives is through the creation and authentication of a forensically qualified image of the sectors of the drive.

With respect to specific ESI in relevant to the Suit, we understand that Your employees may have frequently used computers and smart phones. We also understand that employees regularly communicate via email. You should take affirmative steps to prevent anyone with access to these systems from seeking to modify, destroy, or delete any ESI contained on their laptops, PCs, or personal smart phones.

With respect to servers like those used to manage electronic mail (e.g., Microsoft Exchange) or networked storage (often called a user's network share), the complete contents of each user's network share and email accounts should also be preserved.

To the extent that officers, board members or employees have sent or received potentially relevant emails or created potentially relevant documents away from the office, you must preserve the content of the systems, devices and media used for these purposes. Similarly, if employees, officers or board members used online or browser-based email accounts or services (such as Gmail) to send or receive potentially relevant messages and attachments, the contents of these account mailboxes should be preserved.

Agents and Third Parties

Your preservation obligation extends beyond ESI in your care, possession or custody and includes ESI in the custody of others that is subject to your direction or control. Accordingly, you must notify any current or former agent, employee, custodian or contractor in possession of potentially relevant ESI to preserve such ESI to the full extent of your obligation.

System Sequestration

We suggest that with respect to certain individuals with significant knowledge of Company's products implicated by the '073 Patent, that you remove their ESI systems, media and devices from service to properly sequester and protect them. This may be the most appropriate and cost effective preservation step to ensure non-destruction of ESI.

We are available to discuss reasonable preservation steps of ESI in your possession, custody or control. However, you should not defer preservation steps pending such discussion because ESI may be lost or corrupted as a consequence of delay.

Should your failure to preserve potentially relevant ESI result in the loss, corruption or inability to produce evidence in this matter, such failure may constitute spoliation

of evidence and we will not hesitate to seek sanctions, court costs, or an independent action for spoliation where appropriate.

Thank you for your attention to this matter. We look forward to hearing from you as soon as possible.

Very truly yours,

Damian Wasserbauer of Aeton Law Partners

Attachments