

**IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

DSM DESOTECH, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	No. 08 cv 1531
	)	
3D SYSTEMS CORPORATION, and	)	Judge Sharon Johnson Coleman
3D SYSTEMS, INC.,	)	
	)	
Defendants.	)	

**Memorandum Opinion and Order**

Coming before the Court is defendants 3D Systems Corporation and 3D Systems, Inc.’s (collectively “3D”) motion for summary judgment on Counts I-VII of DSM Desotech Inc.’s (“Desotech”) Third Amended Complaint. Desotech alleges 3D engaged in unlawful and anticompetitive conduct in the market for stereolithography (“SL”) machines and in the separate aftermarket for resins used in those machines in violation of Sections 1 and 2 of the Sherman Act, Section 3 of the Clayton Act, and the Illinois Antitrust Act. Desotech also alleges violation of the Illinois Deceptive Trade Practices Act and tortious interference with prospective economic advantage. Having considered all the submissions of the parties and heard oral argument on the motion, this Court grants 3D’s motion for summary judgment for the reasons stated below.

**Motions to Strike**

There are two motions to strike relating to 3D’s motion for summary judgment. The first motion (Dkt. No. 393) filed by Desotech moves to strike 3D’s Rule 56.1 Replies to Desotech’s Responses to 3D’s statement of undisputed facts. The motion is granted. Under Local Rule 56.1, the moving party (3D) files a statement of undisputed material facts contained in numbered

paragraphs.<sup>1</sup> The non-moving party (Desotech) then files responses to those statements of fact that either admit or deny the statement and cite to portions of the record supporting denial that the statement is uncontested. The non-moving party also files its own statement of Additional Facts purporting to preclude summary judgment. The moving party then files a reply to the Additional Statements of Fact. There is no provision in the rule for what 3D has done, which is to file replies to all of Desotech's responses and its statement of additional fact. Although 3D argues that it filed the "objections" to each of Desotech's responses under the auspices of supporting its own motion to strike, the form is wholly improper, highly irregular and is stricken.

The second motion to strike is not a separate motion to strike at all. Rather, in another unorthodox manner of filing, 3D moves to strike Desotech's responses to 3D's Rule 56.1 Statement of Undisputed Material Facts as part of its reply to its own motion for summary judgment. The motion is denied. Motions to strike are generally not favored by courts, especially when they merely point out to the court that the party has responded with additional factual or legal argument and conclusions, and has failed to support its responses with citations to the record.<sup>2</sup>

## **Background**

The following facts are not in dispute. 3D manufactures stereolithography machines that

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<sup>1</sup> For reasons that are unclear to this Court, 3D included as an undisputed statement of material fact the answer that Desotech provided in its January 26, 2011, response to Interrogatory No. 34. (SOF ¶ 84.) A party's responses to discovery are not ordinarily issues of fact for jury determination. Naturally, Desotech does not dispute that it provided the response.

<sup>2</sup> The Court notes that there are significant problems with both 3D's statement of undisputed material fact and Desotech's responses. Both contain argument – 3D uses several of its paragraphs, not to enumerate facts, but to introduce and contextualize the paragraphs that follow. 3D has also included more than one or two discrete facts in to its allotted number of paragraphs. Desotech on the other hand responds with a great deal of additional factual material, which rather than admitting or disputing the facts set forth by 3D (many of which are not controverted), but to explain and assert additional facts. Desotech's citations to the record also use numerous introductory "signals" such as "e.g., see, see also." Either Desotech has used these citations improperly or they suggest that much of the record they cite does not directly support the proposition. No introductory signal is necessary if the citation directly supports the proposition it follows.

use lasers to create solid parts or objects from UV-curable photopolymer liquid resins. Both Desotech and 3D manufacture resin used in this process. 3D also distributes and sells resin (its own and other manufacturers' resin) for use in stereolithography. Stereolithography is an additive process for producing parts. Additive technologies produce plastic, metal, ceramic, or composite parts by adding layer upon layer. Subtractive technologies start with a mass of material and remove portions to create a part.

#### *Industry Overview*

Participants in the parts industry include producers of systems, materials manufacturers, end users, and service bureaus. Service bureaus are companies that own one or more additive fabrication technologies and are hired by a company or an individual, either on a regular or one-time basis, to build a product or prototype. End users either make their own parts or buy them from service bureaus. Computer Numerically Controlled ("CNC") machining is an example of a subtractive technology. CNC machining uses a classic milling machine to remove material from a block of material by computer numerical control. Additive fabrication or rapid prototyping is a newer process that uses a computer CAD/CAM design to build a part or prototype out of plastic, metal or other materials. Unlike machining processes, which are subtractive, additive technologies join together liquid, powder or sheet materials to form objects. The following technologies are additive: fused deposition modeling ("FDM"), laser sintering, 3D printing, direct metal laser sintering, digital light processing ("DLP") (operationally similar to stereolithography), power-based technology, and electron beam melting.

3D's stereolithography machines are sold under the registered trademark of SLA systems. SLA systems use lasers to make parts from ultraviolet-curable photopolymers, referred to as "resins." 3D's SLA system builds plastic parts one layer at a time by tracing a laser beam

on the surface of a vat of liquid photopolymer resin. The resin quickly solidifies wherever the laser strikes the surface of the liquid. When each layer is complete a new one is placed on top. The self-adhesive property of the material causes the layers to bond to one another and eventually form a complete three-dimensional object after many layers are formed. 3D markets resins under the brand name Accura. Desotech's only involvement in the additive fabrication industry is through its "business activity" known as DSM Somos. DSM Somos' only products are its Somos resins, which are only used in stereolithography.

Concept modeling produces parts used to visualize the final product. Some customers produce concept and presentation models using Objet, Z-Corp, Stratasys' 3D printers, stereolithography, selective laser sintering, CNC machining, perfactory and polyjet, depending on the application. Form and fit modeling verifies part designs and the fit of the designed part with the final assembly. Some customers use stereolithography, selective laser sintering, CNC machining, polyjet, Z-Corp, and cast urethane to make form and fit models. Rob Connelly, owner of Fineline Service Bureau testified that, depending on the application, most rapid prototyping technologies can be used to make parts for fit testing, but "[y]ou have to pair the right [technology] up with the application." Functional modeling makes parts for testing under the operating conditions of the final product, e.g., to test the movement of a door hinge. Some customers use stereolithography, selective laser sintering, direct metal laser sintering, polyjet, FDM, CNC machining, and cast urethane for making models for functional testing, depending on the application. Investment casting is a process to make parts using a tool to create a pattern (for example, made of wax) which is then used to create a mold that can be filled, after melting away the mold, with material to create a part; additive technologies can produce the pattern without requiring tooling.

According to Wohlers Report 2009,<sup>3</sup> “[v]irtually any additive process is capable of making patterns for investment casting” and more than 95% of all the patterns are created by either stereolithography, laser sintering, Thermojet, solidscape, and Envisiontec, with ProJet and Voxeljet likely to “expand the number of additive-manufacturing systems that produce patterns for castings.” (3D Sys., Rule 56.1 Statement of Facts “SOF”, Ex. Z, Wohlers Report 2009 at 132-33). In response to the question “Could CNC machining be used to make investment casting patterns?” Proto Labs’ Brad Cleveland answered “yes.” (Cleveland Tr. at 59.) Metal casting is a similar process producing parts made out of metal. Some customers use stereolithography, selective laser sintering, Z-Corp, and the thermojet process to make metal casting patterns, depending on the application. Tooling is used to make machine tools, like molds and dies, to then be used with other processes to make parts. Some customers use stereolithography, selective laser sintering, direct metal laser sintering, FDM, Objet, and traditional machining methods for tooling, depending on the application.

FineLine Prototyping has published on its website some comparisons of the features and capabilities of the various part making technologies and the applications for which each is good. (Connelly Dep., Ex. 9; Connelly Tr. at 278:21-280:1) Dr. Jeffrey MacKie-Mason, Desotech’s economics expert witness, relied on other industry sources’ comparison of the technologies. (MacKie-Mason Report 5/11, Tab C at 5.) Neither list is exhaustive. Purchasers of part making technologies look at the suitability of the type of technology for specific applications and the total cost of machine ownership, including the purchase price of the machine, the cost of maintenance, and the cost of materials over the lifetime of the machine. (Sorovetz Tr. at 218:6-222:23; Allison Tr. at 166:22-169:25) Desotech cites to three customers that testified that a five

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<sup>3</sup> The Wohlers Report is a trade publication that provides a review and analysis of additive manufacturing and three-dimensional printing for product development and manufacturing professionals. Desotech questions the reliability of the Wohlers Report for semantic reasons. However, both experts and both parties rely on it at various points.

to ten percent price increase would not deter them from purchasing a stereolithography machine. (Des. Rule 56.1 Response to SOF, “RSOF,” at ¶ 27; Allison Dep.; Bordner Dep.; Weber Dep.)

### *3D Systems and Stereolithography*

In 1988, 3D Systems began selling stereolithography in the United States. It has produced a number of SLA models, including the SLA 250, 500, 5000, 7000, the Viper, and the Pro Series (Viper Pro and iPro). Currently, 3D markets new SLA equipment, specifically the Viper SLA System (“Viper”) and the iPro SLA Center (“iPro”). Several SLA models have been discontinued. Both 3D and various resellers offer used SLA systems and multiple users of SLA machines testified that they purchased such used equipment. The Viper continues to outsell all the Pro systems. (MacKie-Mason Report 5/11 at Ex. 8) Testimony suggests that there are between 2000 and 3500 SLA machines in place as of 2010. (MacKie-Mason Tr. at 123:11-18) Some SLA machines have been in operation for nearly 20 years.

Materials for stereolithography are produced by Desotech, 3D, Dreve, Allied PhotoPolymers, Solid Concepts, and Huntsman. Approximately 64 different materials are available for use in stereolithography machines. Customers can use any of Desotech’s resins on the Viper and the other older SLA systems. (3D Sys. Corp. Wit. Dep., Ex. 6) Dr. MacKie-Mason testified that 325 customers bought stereolithography resin from 3D and/or Desotech in 2006 and in 2010 there were only 268 such customers.

An SLA system fabricates parts with a guided laser beam according to shapes defined by “STL files.” STL files are created using Computer Aided Drafting (CAD) programs, and they define the coordinates of numerous triangular facets that approximate the shape of an object or part. Another type of electronic file called a build style (also called a “style file”) acts to adapt the SLA machine to the particular properties of a resin and a particular style of producing a part.

(Sherrick Tr. at 147:1-3) A build style sets parameters for the machine to operate, including Ec, which refers to the “critical energy at which the resin moves from liquid to the solidification phase,” and Dp, which refers to the depth of “penetration of the [laser] light” respectively. (Dr. Khalil Moussa Tr. at 69.) Build styles vary by application of the part desired, the machine used, and the material used. John Janicki, an engineer for 3D, testified that style files “are a part of the mechanism that instructs the machine how to build parts.” (Janicki Tr. at 29.)

The use of improper build styles in SLA machines can cause problems, including negatively affecting component quality. (SOF ¶33). 3D tests resins and creates STL files to be used in an SLA system to optimize the material and so that users can build good quality parts. (Moussa Tr. at 61:19-62:11.) In one instance, Lockheed Martin had a problem with part quality when it ran Accura 48 resin in its Viper Pro before that resin was tested and STL files developed for it. (Dockstader Tr. at 145:16-148:6.) Lee Dockstader, currently 3D’s Vice President of Business Development and previously the Vice President and General Manager of the Stereolithography Business Unit, testified in reference to the Lockheed problem: “We made a bad judgment call on this. We should have not assumed it was going to work and – and tested it at our facility first.” (Dockstader Tr. at 146.)

Dr. Khalil Moussa testified extensively about 3D’s testing of resin. Dr. Moussa also testified that, although 3D had a standard operating procedure developed in 1998 prior to the development of the RFID enabled Pro systems, 3D technicians sometimes alter to the standard operating procedure on an ad hoc basis. Dr. Moussa testified that there is no list of requirements that must be met before a resin is qualified and no formal records are kept for the qualification process.

The testing process results in a set of build styles or STL files for a specific resin to run

on a specific model of SLA machine to suit different applications. (Moussa Tr. at 144:11-146:8.) Dr. Moussa testified that there are parameters in the style files for Pro machines that do not exist for non-Pro machines that directly affect the Pro system's operation, therefore style files designed for an older system cannot simply be modified for use on an iPro. (*Id.* at 191:2-192:11, 193:11-13.) Abe Reichental, 3D's corporate witness, testified that one reason 3D tests resins for use on its machines is to protect 3D's reputation since customers will blame 3D if a part does not turn out. (3D Sys. Corp. Wit. Tr. at 152:15-153:8.)

In 2004, 3D began developing a new generation of stereolithography machines under the name "Project Falcon." It released the new generation of machines first in October 2005 with the Viper Pro and then later the iPro was introduced. The Viper Pro included a Resin Delivery Module ("RDM") that promised to offer "about ten tangible benefits" to customers, including the ability to "do quick resin changeovers, the ability to monitor replenishment in an automated way and have longer time between required replenishments, the ability to extend resin shelf life, the ability to provide for recirculation infiltration," and others. (3D Sys. Corp. Wit. Tr. at 357:20-358:19.) Mr. Reichental testified that 3D included with the RDM technology a Radio Frequency Identification ("RFID") tag on smart cartridges of resin to provide certain customer benefits. 3D began looking at using RFID technology in its products around 2000.<sup>4</sup> By 2005 when it was included with the Viper Pro, it had already been in use in 3D's thermal jet and InVision printers. In December 2004, Mr. Dockstader, who oversaw development of the Viper Pro, listed thirteen goals that 3D was trying to accomplish with RFID tags on the resin bottle and vat, including to "[e]nsure 3D Systems has a revenue stream from material used in its equipment." (Dockstader Dep., Ex. 1.) He went on to state that 3D "prefer to provide benefits to the customer to accomplish this rather than a strict lockout from the system." (*Id.*) Among the

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<sup>4</sup> The Viper is not a Pro system and does not use RFID technology.

other goals Mr. Dockstader listed were: blocking the use of the wrong resin vat, auto detection of resin types and limit selection of styles to appropriate choices, track type and amount of resin used by the system over time. (*Id.*)

3D's Pro machines had larger resin vats than their predecessors and thus a larger investment in materials for purchasers. (3D Sys. Corp. Wit. Tr. at 152:13-153:8.) The very large vats on the Pro machines mean much larger quantities of resin, creating a risk for customers if the resin was not properly used or maintained. (Dockstader Tr. at 17:7-9.) Mr. Reichental testified that: "The RFID tag is not meant to block use. It [is] meant to communicate resin type, it [is] meant to communicate resin consumption, it [is] meant to track resin shelf life, it [is] meant to make smart decisions about recirculating resin to extend its shelf life, and it [is] meant to provide other intelligence to extend the consistency of the whole resin delivery module, which goes back to our discussion that if vats go bad prematurely in age, it's expensive for the end user, it's expensive for the supplier... What the RFID is just a read/write module that enables some of the intelligence in the same way that your car will tell you – if you have a new car – if you lost pressure in one of the tires. It's an intelligence mechanism." (3D Sys. Corp. Wit. Tr. at 340:5-341:18.) Desotech has admitted that RFID "can have some advantage to customers in specific markets." (Des. Corp. Wit. Tr. at 362:10-23.)

In August 2007, 3D began activating the RFID software that was installed in the Viper Pro machines. 3D admits that the Viper Pro was a technical failure. 3D launched the iPro at the end of 2008. The iPro machines include the RDM with activated RFID. Once the iPro was commercialized, 3D stopped manufacturing the Viper Pro. In each of the years that the Viper and either of the Pro systems have been available, sales of the Viper have exceeded those of the Pro machines. According to Dr. MacKie-Mason, between 2005 when 3D launched the Viper Pro

machine until 2010, 3D sold approximately 53 Pro machines and approximately 159 Viper machines, including 28 Viper machines in 2010. (MacKie-Mason Rep. 5/11, Ex. 8.)

*3D Systems and DSM Desotech: Business Relationship*

In June 2002, 3D and Desotech entered a two-year worldwide resin distribution agreement under which 3D sold two Desotech Somos resins under a 3D private label. (Reitz, Ex. 13.) In June 2004, 3D and Desotech entered a two-year distribution agreement under which 3D had access and could distribute all Somos resins, which included twenty products at the time. (3D Sys. Corp. Wit. Ex, 13; MacKie-Mason Rep. 5/11 at 17-18.) The 2004 Distribution Agreement automatically renewed for additional one-year periods unless a party provided written notice to the contrary to the other party no less than one hundred and eighty days prior to the end of the then-existing term. (3D Sys. Corp. Wit. Ex, 13, ¶6.1.) 3D continued to distribute Somos 11120 and 14120 until the wind-down period terminated in 2010. (3D Sys. Corp. Wit. Tr. at 336:17-20; 325:16-21.) In 2008 and 2009, approximately 10 percent of Desotech's total resin sales were to 3D. (Deso. Corp. Wit. Tr. at 69:19-76:15.) 3D also sold its own brand of resins. Prior to the termination of the 2004 Distribution Agreement, Desotech created a PowerPoint presentation titled "Proposed Cancellation of current 3D Systems Supply Agreement." (Reitz, Ex. 50 at DSM00173305.) The presentation asserted that 3D had "accelerated development of competitive products in the last year," and "contractual disincentives had not prevented active poaching of direct Somos sales accounts, including high discounts." (*Id.* at DSM00173307.)

In 2005, 3D demonstrated its RDM technology, including RFID, to James Reitz at Desotech, explaining how it would work, how resins would be qualified, and the benefits of such a system. (3D Sys. Corp. Wit. Tr. at 357:13-359:20.) Desotech contends that 3D never fully explained the technology, particularly the intellectual property associated with RFID.

In January 2006, the parties signed an agreement titled “Summary of Terms and Conditions of Proposed Cross-Licensing Agreement,” known as the “memorandum of understanding” or “MOU”. (Reitz Dep., Ex. 46, 47.) The goal of the agreement was to grant a general release of all claims arising out of the German patent litigation between Desotech and 3D and give Desotech a non-exclusive worldwide license to sell materials for use in the Viper Pro systems covered by any of the claims of 3D Systems’ Licensed Viper Pro Patents. (*Id.*) On January 11, 2006, 3D and Desotech issued a joint press release stating that, “3D would grant to DSM the right to sell DSM stereolithography materials to users of 3D’s new Viper Pro SLA systems under 3D Systems’ patents, patent applications and other intellectual property relating to those systems.” (Grace Dep., Ex. 27.) The parties have differing perspectives on how and why the MOU negotiations broke down. The MOU negotiations never produced a finalized document and Desotech terminated the 2004 Distribution Agreement in June 2007. 3D applied the licensing terms of the MOU for two of Desotech’s resins, Somos Watershed 11120 and 14120, because 3D had already qualified those two resins for use on the Pro Machines. These resins are still qualified and licensed.

Desotech’s share of resin sales began declining following termination of the 2004 Distribution Agreement. (MacKie-Mason Rep. 5/11 at Ex. 3.) Dr. Mohan Rao, Desotech’s damages expert, identified a list of 21 customers, which Desotech describes as “constrained” and defines as those customers who would have continued purchasing resin from Desotech but for 3D’s challenged conduct. (Rao Rep. 5/11 at 18, Tab 4.) Desotech asserts that 3D informed seven customers (Dynacept Corp., Express Pattern, FineLine Prototyping, Forecast3D, Harvest Technologies, RSU Dental Lab, and Solid Concepts Inc.) after purchasing Viper Pro systems that they would be required to use only qualified resins. Five of these customers, Dynacept

Corp., Express Pattern, FineLine Prototyping, Forecast3D, and Solid Concepts, bought their Viper Pro after 3D and Desotech entered the MOU but before negotiations broke down. (Rao Rep. 5/11 at Tab 4.) FineLine and Express Pattern bought their Viper Pro machines in December 2005 and it was a second Viper Pro machine that FineLine bought in September 2006. (RSOF ¶ 82.) Only Harvest Technologies bought its Pro system after negotiations broke down between 3D and Desotech.

In July 2010, 3D entered a Joint Development Agreement with Align Technologies (makers of Invisalign), which provided that 3D would create customized SLA machines for Align and that the two companies would collaborate on the design and proprietary resins customized for use in Align's manufacturing process. The custom SLA machine did not contain the RFID element because Align only uses one resin and it does not need the detection functions of RFID. (Reichental Dep., Ex. 84.)

Manufacturers have been promoting easier-to-use and less expensive machines as the part making industry has developed. (Reichental Tr. at 46:16-47:5.) Objet machines and 3D printers were developed. The 2009 Wohlers Report says that while "3D Systems was the unit sales leader" in 2001, its "[s]ales then declined significantly the following two years." (SOF, Ex. Z at 49.) "In 2003, Stratasys took over as the company with the largest installed base and has extended its lead. Through the end of 2008, Stratasys had sold 11,366 FDM systems, compared to an estimated 4,274 by 3D Systems. With a customer base of 4,975, Z Corp. pulled ahead of 3D Systems in 2008 with the second largest number of installations worldwide." (*Id.*) The trend continued in 2009. (SOF, Ex. AA, Wohlers Report 2010 at 44.)

There is ample testimony in the record that there are alternatives or substitutes for stereolithography for some applications. Dr. MacKie-Mason testified "I've made it very clear in

my expert report. I don't think there is actually really any material dispute that there are some technologies, which for certain uses, are an alternative to stereolithography.” (MacKie-Mason Tr. at 91:13-22.) Dr. Dennis W. Carlton, 3D's economist agreed. More than one witness testified that “it's not one size fits all” or that “no single technology optimally satisfies all the customers need.” (See Witness Testimony cited in SOF ¶¶ 60-64; RSOF ¶¶ 60-64.)

### *3D Systems' Agreements with Customers*

3D's new machines come with a one-year warranty that is renewable for an annual service agreement for a fee. Customers may also opt out of the service agreement and call 3D on a time and materials basis or use a different service provider. 3D's standard warranty contains the following exclusion: “repairs required during the warranty period because of the use of non-integrated, non-approved or non-licensed materials in the equipment are excluded from this warranty.” (SOF, Ex. H, Cooper Lighting iPro™9000 Proposal and Agreement.)

In early 2007, 3D announced that it would stop offering support for the nearly twenty-year-old SLA 250 and the SLA 500 models. According to the testimony of Mr. Dockstader, 3D only stopped providing new service contracts for those systems, while continuing to honor existing service contracts. (Dockstader Tr. at 293:24-295:2.) 3D services all SLA systems on a “time and materials” basis. 3D has also serviced machines on a “time and materials” basis even if customers have used unqualified resins. (Elfering Tr. at 144:19-147:8.)

3D sometimes enters into Volume Purchase Agreements (“VPA”) with its customers that offer discounted resin prices based on the customer's purchase of a certain volume of resin over a given time period. These agreements have occasionally require customers to purchase only the agreed upon resins for use in some or all of its SLA machines. These agreements typically last two years, though at least two are for longer than two years. (3D Sys. Corp. Wit. Tr. at 200:15-

205:2.)

Since the filing of this lawsuit, 3D has expanded its business through acquisition of several suppliers of additive fabrication systems and six service bureaus in the United States and Europe. (SOF ¶ 69.) On November 1, 2011, 3D announced it had acquired Huntsman Corporation's stereolithography resin business and an additive fabrication system still in development. (SOF, Ex. B.) 3D also bought Moeller Design and Development. Dave Moeller placed an order with Desotech for resin after 3D acquired Moeller Design. (Robertson Tr. at 188:1-22; Ex. 9, 10.) In January 2011, 3D purchased National RP Support, which was a third-party provider of technical support for SLA equipment.

### **Legal Standard**

Summary judgment is appropriate where “the pleadings, depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law.” *Fed. R. Civ. P.* 56(c). When considering a summary judgment motion, the Court construes the facts and all reasonable inferences in the light most favorable to the non-moving party. *Abdullahi v. City of Madison*, 423 F. 3d 763, 773 (7th Cir. 2005). A genuine issue of material fact exists “if the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Serednyj v. Beverly Healthcare, LLC*, 656 F.3d 540, 547 (7th Cir. 2011). “The Supreme Court has emphasized, however, that summary judgment may be especially appropriate in an antitrust case because of the chill antitrust litigation can have on legitimate price competition.” *Indiana Grocery, Inc. v. Super Valu Stores, Inc.*, 864 F.2d 1409, 1412 (7th Cir. 1989)(citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 594-95 (1986)). For this reason, an antitrust plaintiff opposing a motion for summary judgment must

present evidence that tends to exclude the possibility that the defendant's conduct was as consistent with competition as with illegal conduct. *Matsushita Elec. Indus. Co.*, 475 U.S. at 588.

## **Discussion**

3D moves for summary judgment on the first seven counts of Desotech's Third Amended Complaint: Count I: Violation of Section 1 of the Sherman Act (tying); Count II: Violation of Section 3 of the Clayton Act (tying); Count III: Violation of Section 1 of the Sherman Act (unreasonable restraint of trade); Count IV: Violation of Section 2 of the Sherman Act (attempted monopolization); Count V: Violation of the Illinois Antitrust Act; Count VI: Violation of the Illinois Uniform Deceptive Trade Practices Act; and, Count VII: Tortious Interference with Prospective Economic Advantage.

### *1. Counts I-V: Antitrust Allegations*

With respect to Counts I-V, 3D makes three main arguments: that the undisputed facts demonstrate (1) that Desotech cannot meet its burden to establish a relevant market, (2) that there is no genuine issue of material fact that 3D's addition of RFID technology is procompetitive, and (3) that there is no antitrust injury. 3D makes additional arguments for summary judgment as to each of these counts; however this Court will focus on the definition of relevant market because that is dispositive of Counts I-V.

Counts I and II allege unlawful tying in violation of Section 1 of the Sherman Act, 15 U.S.C. §1, and Section 3 of the Clayton Act, 15 U.S.C. §14. The standards for showing an illegal tying arrangement are the same for claims whether brought under the Sherman Act or the Clayton Act. *See Sheridan v. Marathon Petroleum Co., LLC*, 530 F.3d 590, 592 (7th Cir. 2008). "In a tying agreement, a seller conditions the sale of a product or service on the buyer's buying another product or service from or by direction of the seller." *Id.* In order to establish per se

illegal tying in violation of Section 1 of the Sherman Act, plaintiff must show: “(1) the tying arrangement is between two distinct products or services, (2) the defendant has sufficient economic power in the tying market to appreciably restrain free competition in the market for the tied product, and (3) a not insubstantial amount of interstate commerce is affected.” *Reifert v. South Central Wisconsin MLS Corp.*, 450 F.3d 312, 316 (7th Cir. 2006). Even if a plaintiff cannot establish per se illegal tying, courts evaluate the claim under the “rule of reason.” *Sandburg Vill. Condo. Assoc. No. 1 v. First Condo. Dev. Co.*, 758 F.2d 203, 210 (7th Cir. 1985). The rule in this circuit is that a tying agreement is not actionable unless the defendant has substantial market power in the tying product market. *Hardy v. City Optical*, 39 F.3d 765, 767 (7th Cir. 1994) (citing *Will v. Comprehensive Accounting Corp.*, 776 F.2d 665, 670-74 (7th Cir. 1985)).

3D moves for summary judgment on Desotech’s tying claims arguing that Desotech cannot prove a per se violation because the alleged tie is a technological tie, which is exempt from per se analysis. *Condesa Del Mar, Inc. v. White Way Sign & Maintenance Co.*, 1987 U.S. Dist. LEXIS 8618 (N.D. Ill. Sept. 23, 1987). 3D also asserts that Desotech cannot prove a relevant tying market for stereolithography machines, and thus cannot establish that 3D has market power to sustain its illegal tying claim. Illegal tying also depends on coercion to take the products as a package, which 3D argues that Desotech cannot show because consumers can use several different machines, including older machines without RFID, and can use a variety of resins by different manufacturers.

Count III alleges unreasonable restraint of trade in violation of Section 1 of the Sherman Act, 15 U.S.C. §1, which prohibits “[e]very contract, combination..., or conspiracy, in restraint of trade or commerce.” The Sherman Act only prohibits unreasonable restraints on trade. *Cont’l*

*T. v. V Gte Sylvania*, 433 U.S. 36, 49 (1977). For a restraint to be unreasonable, it must have a substantially adverse effect on competition in the market place. *Magnus Petroleum Co. v. Shelly Oil Co.*, 599 F.2d 196, 204 (7th Cir. 1979). 3D argues that none of its conduct constitutes an unreasonable restraint on trade and, because Desotech fails to present evidence supporting its definition of the market, Desotech cannot show an adverse effect on competition.

Count IV alleges attempted monopolization in violation of Section 2 of the Sherman Act 15 U.S.C. § 2. To prove attempted monopolization, Desotech must show (1) 3D's specific intent to achieve monopoly power in a relevant market; (2) predatory or anticompetitive conduct directed to accomplishing this purpose; and (3) a dangerous probability that the attempt at monopolization will succeed. *Mercatus Group, LLC v. Lake Forest Hosp.*, 641 F.3d 834, 854 (7th Cir. 2011); *Lektro-Vend Corp. v. The Vendco Co.*, 660 F.2d 255, 270 (7th Cir. 1981). "Section 2 forbids not the intentional pursuit of monopoly power but the employment of unjustifiable means to gain that power." *State of Illinois ex rel. Burriss v. Panhandle Eastern Pipe Line Co.*, 935 F.2d 1469, 1481 (7th Cir. 1991). Even "lawful competition aims to defeat and drive out competitors... the mere intention to exclude competition and to expand one's own business is not sufficient to show the specific intent to monopolize." *Great Escape, Inc. v. Union City Body Co.*, 791 F.2d 532, 541 (7th Cir. 1986). In order to show a dangerous probability of monopolization in the relevant market, the plaintiff must show that the defendant had sufficient market power to have been reasonably able to create a monopoly. *See Lektro-Vend. Co.*, 660 F.2d at 270. 3D argues that, in addition, to not being able to establish the relevant market, Desotech cannot show that 3D had the specific intent to monopolize.

In Count V Desotech alleges per se violations of 740 ILCS 10/3, and alternatively, unreasonable conduct in violation of 740 ILCS 10/3. Desotech contends that 3D's conduct

constitutes tying, unreasonable restraint of trade, and attempted monopolization. Desotech's allegations under the Illinois Antitrust Act are the same as under the Sections 1 and 2 of the Sherman Act. The Illinois Antitrust Act, by its own terms, is to be construed with applicable federal precedent. 740 ILCS 10/11. *See State of Ill. ex rel. Burriss v. Panhandle Eastern*, 935 F.2d 1469, 1480 (7th Cir. 1991); *Weinberg v. Chicago Blackhawks Hockey Team*, 274 Ill. App. 3d 637, 640 (1st Dist. 1995). 3D argues that Desotech's Illinois Antitrust claims fail for the same reasons as its Sherman Act claims.

Because all the claims in Counts I through V require Desotech to establish proof of the relevant market and that 3D had market power, this Court first addresses whether there is a genuine issue of material fact as to the relevant market. It is uncontested for purposes of the motion that the relevant geographic market is the United States. In order to determine market power (the ability to raise prices and decrease output in a relevant market) the Court must first determine the relevant market. The burden is on the antitrust plaintiff, Desotech, to define the relevant market. *Spectrum Sports v. McQuillan*, 506 U.S. 447, 455 (1993).

Desotech asserts that 3D's stereolithography machines comprise a relevant market (it is undisputed that 3D is currently the only manufacturer of stereolithography machines) and there is a separate market for the resins used in those machines. The Seventh Circuit has "explicitly rejected the proposition that a firm can be said to have monopoly power in its own product, absent proof that the product itself has no economic substitutes." *Elliott v. United Ctr.*, 126 F.3d 1003, 1005 (7th Cir. 1997) (citing *Digital Equip. Corp. v. Uniq Digital Technologies*, 73 F.3d 756, 761 (7th Cir. 1996)). A relevant product market is determined by "the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it." *Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962).

3D asserts that there is no genuine dispute that other technologies are alternatives to stereolithography. This Court agrees. As evidence, 3D points to Desotech's internal strategy documents that describe other technologies as competitors for stereolithography, 3D's sales staff's statements in declarations that they have competed for system sales against other technologies and lost on price, and customer testimony that for many applications there are several different technologies that meet their needs. Desotech responds that the existence of substitutes depends on the specific use.

Desotech's own internal strategy documents expressly state that "[c]ompetitors exist at two main levels: Stereolithography resins and Rapid Prototyping technology." (Reitz Ex. 10) A presentation slide titled "2.10 Business Dynamics – Substitutes)," another Desotech internal document, unequivocally states that stereolithography competes with other rapid prototyping technology, specifically, FDM and SLS. (Reitz Ex. 11 at DSM00143936). The Department of Justice also considered stereolithography to be in the same market as other rapid prototyping systems. *See* Competitive Impact Statement, *United States v. 3D Systems Corp.*, No. 1:01-cv-01237, filed Sept. 14, 2001, *available at* <http://www.justice.gov/atr/cases/f9000/9019.htm>. Thirteen out of 268 stereolithography machine owners testified as follows: 5 testified that some technologies are substitutes for stereolithography for certain uses, 5 stated that certain systems were not substitutes for stereolithography, but none of the customers were asked about the term "reasonable." Most tellingly, Desotech's own expert Dr. MacKie-Mason conceded that other technologies are alternatives to stereolithography at least for some uses. In order to be reasonable substitutes, and thus within the same market, products need not be fungible. *United States v. Continental Can Co.*, 378 U.S. 441, 449 (1969). Accordingly, there is no genuine dispute that there are reasonably interchangeable substitutes to stereolithography.

In order to show market power, Desotech has to show that 3D can raise prices without losing its business. Thus, the question becomes whether enough consumers will respond to a price increase by switching to an alternative to make price increases unprofitable. Indeed, Desotech's own expert Dr. MacKie-Mason identified this as the pivotal question. It is undisputed that 3D's stereolithography systems cost around \$400,000 to \$500,000. Once purchased, therefore, they are not inexpensive to simply replace. Desotech points out that 3D's expert, Dr. Carlton, admitted that one technology that is suggested as a substitute, the three-dimensional printer, costs \$10,000 or less and such an inexpensive machine is not going to constrain the price of a printer that sells for several hundred thousand dollars. Yet, Dr. MacKie-Mason acknowledged that Objet 3D printers restrain the price of 3D's Viper system to some extent and that it might restrain pricing on other stereolithography systems, including the Pro machines.

In 2010, there were 268 resin customers. Only thirteen of the 268 customers were asked to testify in this case.<sup>5</sup> Desotech refers to three customers who were asked whether a 5-10% increase in pricing by 3D (the "hypothetical monopolist" test used by the Department of Justice and Federal Trade Commission) would cause them to switch to a different machine and all three responded that they would not switch. (*See Desotech's Response to 3D's Statement of Material Facts* at ¶27.) The Court notes that during oral argument on this motion both Desotech and 3D referred to four customers as having testified that they would not switch from stereolithography with a 5-10% price increase. Certainly, three or four customers out of 268 are not a significant enough proportion to demonstrate the requisite degree of cross-elasticity of demand for stereolithography and its substitutes to establish market power. Based on the evidence before it, this Court is unable to find that Desotech can sustain its burden and show that "a significant

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<sup>5</sup> This Court recognizes that the parties are limited in the number of depositions they may take. However, Desotech could have obtained information from customers by other means.

number of users” would not switch to alternative methods of part making. *See United States of America v. Sunguard Data Systems, Inc.*, 172 F.Supp.2d 172, 183 (D.C. 2001). Accordingly, 3D is entitled to summary judgment on Counts I-V because Desotech has failed to provide a factual basis sufficient to justify its definition of the relevant market.

Desotech also asserts that stereolithography resins constitute a distinct market. Essentially, this is a situation involving a primary market and an aftermarket. *See, e.g., Eastman Kodak Co. v. Image Tech. Servs.*, 504 U.S. 451, 482 (1992); *S.M.S Sys. Maint. Serv. Inc. v. Digital Equip. Corp.*, 188 F.3d 11 (1st Cir. 1998). In order for an aftermarket to be the relevant market, the manufacturer (3D), must be able to “exert raw power in the aftermarket without regard for commercial consequences in the foremarket....” *SMS Sys. Maint. Servs.*, 188 F.3d at 17. Desotech alleges that 3D’s implementation of the RFID and its qualification and licensing policy has coerced business away from Desotech in the resin market. Desotech argues that because the machines are so expensive stereolithography owners are “captive resin consumers who, in light of their massive ‘sunk investment[s]’, cannot rationally substitute SL with an alternative technology, regardless of the prices charged for resin.” (Dkt. No. 371 at 34).

What is clear from the record is that there are multiple suppliers of resin for use in stereolithography machines and the undisputed facts also show that there are substitutes for stereolithography. Desotech asserts that the relevant question is whether stereolithography machine owners purchased the machines knowing that 3D would use RFID to consolidate a monopoly in the stereolithography resin market and exploit the captivity of its customers by limiting resin variety and to charge supracompetitive pricing. This argument is simply not borne out in the evidence presented. There is no evidence that 3D has sought to limit resin variety. Instead, the record shows that 3D will license resin for use in its Pro series machines if the resin

manufacturer submits the resin for qualification and licensing. There is also no evidence that 3D is charging supracompetitive pricing since another of Desotech's claims takes issue with 3D's value purchase agreements for resin with various customers. Therefore, this Court finds that Desotech has failed to present sufficient evidence of anticompetitive conduct in the resin aftermarket.

The failure to define the relevant market, by itself, prevents Desotech from prevailing on Counts I-V. Desotech also fails to present sufficient evidence "to exclude the possibility that [3D's] conduct was as consistent with competition as with illegal conduct." *See Mercatus Group LLP v. Lake Forest Hosp.*, 641 F.3d 834, 856 (7th Cir. 2011).

3D argues that the implementation of its RFID resin detection functionality and qualification of resins for use in Pro machines is procompetitive because it protects the purchasers' investment in resin by auto-tracking and detecting resin types, limiting resin selections, tracking the types of resin and amounts used over time in a particular machine, among other things. 3D also argues that its qualification testing process to screen resins for use in SLA systems also benefits customers because the testing process includes determining the Dp (the measurement of laser light interaction with the resin) and Ec (the amount of energy needed to transform the resin from a liquid to a solid) of each resin, which determines the parameters of the build process, the style files/software necessary to ensure that the machine works with the resin. It is undisputed that 3D also wanted to obtain a revenue stream from the material used on their equipment, specifically the resin. 3D contends it wanted to develop this revenue stream by providing a benefit to the customer.

Desotech argues that there is no benefit to the "lock-out" of resins that have not been approved by 3D for use on the machines. Desotech asserts, relying on Dr. MacKie-Mason's

report, that 3D could have offered its machines without the RFID “lock-out” and customers would have had the same benefits of the RFID because they could still track resin usage and performance statistics. However, even if the RFID alone offers certain benefits, that fact does not contradict 3D’s assertion that the testing and licensing of resins for use on the machines<sup>6</sup> increases automation on the Pro systems and allows it identify which resin in particular a customer is using and adjust system parameters accordingly. 3D asserts that in order for the RFID in a machine to perform these functions it must have the information provided by the testing process. Indeed, it makes no logical sense that the RFID functionality could perform any resin specific adjustments without having information about each type of resin. In *Allied Orthopedic Appliances, Inc. v. Tyco Health Care Group LP*, 592 F.3d 991 (9th Cir. 2010), the Ninth Circuit Court of Appeals found similar conduct to be procompetitive and affirmed summary judgment for the defendant despite the plaintiff’s evidence that Tyco’s new technology was not an improvement and not valued by customers, because Tyco intended to create a new product that was useful to customers while also increasing revenue for Tyco.

Additionally, Desotech’s arguments about the licensing fees are irrelevant since Desotech’s complaint makes no claim about the licensing fees. Moreover, 3D has tested and licensed two Desotech’s resins for use on the Pro machines and customers cannot purchase those resins from 3D since it is no longer a distributor for Desotech. Courts are consistently clear that competitors have no duty to assist each other. See *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370, 380 (7th Cir. 1986)(concluding that “monopolists are not required to help their competitors, but need only refrain from anticompetitive acts such as denial of access to essential facilities.”); *HDC Med., Inc. v. Minntech Corp.*, 474 F.3d 543, 549-50 (8th Cir. 2007)

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<sup>6</sup> It is this Court’s understanding that 3D does not sell all the resins it licenses, contrary to Desotech’s argument on p. 40 of its response brief.

(affirming summary judgment for the defendant and finding no anti-competitive conduct even though modifications to the defendant's dialyzer reprocessing machine rendered the plaintiff's reprocessing solution incompatible and were accompanied by warranty manipulations); *Oahu Gas Serv., Inc. v. Pac. Res., Inc.*, 838 F.2d 360, 368-69 (9th Cir. 1998) ("Where a monopolist's refusal to aid a competitor is based partially on a desire to restrict competition, we determine antitrust liability by asking whether there was a legitimate business justification for the monopolist's conduct."). Based on the foregoing, 3D is entitled to summary judgment in its favor on Counts I-V.

2. *Count VI: Illinois Uniform Deceptive Trade Practices Act*

3D argues that Desotech cannot prove its disparagement and confusion claims under the Illinois Uniform Deceptive Trade Practices Act ("UDTPA"), 815 ILCS 510/2, because it does not apply to past conduct and Desotech has not alleged any ongoing disparaging or confusing statements. 3D also argues that any claim Desotech may have for future disparagement or confusion must fail because the alleged statements are true and outside the scope of the UDTPA. 3D asserts that the challenged statements are that 3D has a policy that resins must be qualified for use in the Pro machines and Desotech has offered no evidence to contest the accuracy of that statement.

Desotech alleges that 3D engaged in deceptive trade practices in violation of the UDTPA, 815 ILCS 510/2(a): (2) by causing a likelihood of confusion or misunderstanding as to the qualification of resins available for use in its Viper Pro and iPro machines, by first telling customers that all resins would be available for use in a Viper Pro or iPro, and then allegedly refusing to tell customers how resins could be "approved" or "authorized" or "qualified" for use in those machines; (7) by willfully representing to customers that Desotech's Somos resins are of

a particular standard, quality, or grade, namely that they are not “authorized,” “approved,” “licensed” or “qualified” on the Viper Pro and iPro; (8) by willfully disparaging Desotech’s Somos resins to customers or to other resin suppliers when customers have repeatedly used Somos resins in their Viper Pro without any problems; and (12) by telling customers and resin suppliers that any resins could be used in the Viper Pro and later representing that resins from other resin suppliers, including Somos, are not “authorized,” “approved,” “licensed,” or “qualified” for use in the Viper Pro creating a likelihood of confusion and/or misunderstanding for purchasers of the Viper Pro and iPro. (Dkt. 231 at ¶¶ 140-143).

“In order to prevail in an action under this Act, a plaintiff need not prove competition between the parties or actual confusion or misunderstanding.” 815 ILCS 510/2(b). However, section 3 of UDPTA only provides for injunctive relief for ongoing or future practices. 815 ILCS 510/3. The allegations in the Third Amended Complaint specifically addressed to this count all refer to past conduct, i.e. that 3D told customers that Desotech’s resins were not “authorized,” “approved,” “licensed,” or “qualified” for use in the Pro series machines or first telling customers that resins would be available and later telling them those resins were not available for use on Pro machines, or for failing to articulate to customers the qualification standard. (Dkt. 231 at ¶¶ 140-143). At oral argument on this motion, Desotech’s counsel asserted that they would present additional evidence at trial to support the claim that these statements are ongoing or continuing. However, discovery is closed and summary judgment is the time to put forth evidence demonstrating a genuine issue of material fact.

Now Desotech argues that it is not the statements concerning the existence of 3D’s “qualification” policy that have been disparaging, but it is the “false, misleading, and pretextual *explanation* for the qualification policy that have been disparaging.” (Dkt. 371 at 70). A party

opposing summary judgment may not amend the allegations in its complaint through argument in its response brief. *Agnew v. Nat'l Collegiate Athletic Ass'n*, 683 F.3d 328, 348 (7th Cir. 2012) (quoting *Thomason v. Nachtrieb*, 888 F.2d 1202, 1205 (7th Cir. 1989)). Desotech's claim is that somehow 3D's policy implies that Desotech's resins are inferior, but that claim ignores that fact that Desotech could offer its resins for qualification and licensing in 3D's Pro machines and did not do so. Statements regarding a licensing and qualification policy are not actionable under the UDTPA. See *Conditioned Ocular Enhancement, Inc. v. Bonaventure*, 458 F.Supp.2d 704, 710 (N.D.Ill. 2006). In *Conditioned Ocular Enhancement, Inc. v. Bonaventure*, the court granted dismissal of a UDPTA claim where the statements at issue "involve[d] only a general statement that [plaintiff] does not have a license or authorization to use the patented system." *Id.*

Moreover, the UDPTA only applies to statements that are false, and Desotech fails to present evidence creating a genuine issue of material fact that any of the alleged statements are false. See *Fedders Corp. v. Elite Classics*, 279 F.Supp.2d 965, 972 (S.D.Ill. 2003). The undisputed facts show that 3D required licensing of resins for use in the Pro series machines after it enabled RFID and, in order to obtain a license, a resin had to be submitted to 3D for analysis and qualification to develop the appropriate build styles. Desotech did not submit its resin to 3D for licensing, apart from two that were already licensed by 3D. Accordingly, this Court finds that Desotech has presented insufficient evidence to support its allegations that the statements made by 3D were false, let alone disparaging, or ongoing. 3D is entitled to summary judgment on Count VI.

### 3. *Count VII: Tortious Interference with Prospective Economic Advantage*

The tort of interference with prospective economic advantage has four elements: (1) the plaintiff must have a reasonable expectancy of a valid business relationship with a third party; (2) the defendant must know of the prospective business relationship; (3) defendant must

intentionally interfere with the prospective business relationship such that the prospective business relationship never materializes; and (4) the interference must damage the plaintiff. *See Schuler v. Abbott Lab.*, 265 Ill. App. 3d 991, 998 (1st Dist. 1993); *Fellhauer v. City of Geneva*, 142 Ill. 2d 495, 511 (1991).

3D argues that it is entitled to summary judgment on Desotech's claim that it intentionally interfered with any reasonable expectancy Desotech may have had for a valid business relationship with a third party. 3D asserts that it qualifies resins for use in the Pro machines and designed the RFID functionality in order to provide benefits to customers. 3D further argues that any injury to Desotech is incidental and it is shielded by the "privilege of competition" because the record demonstrates that 3D intended, at least in part, to further its business and preserve its reputation. *See Polytechnic Data Corp. v. Xerox Corp.*, 362 F. Supp. 1, 10 (N.D.Ill. 1973).

Desotech alleges that it is continually trying to expand its business and customer base with valid business relationships and/or expectancies of such with purchasers of resins for stereolithography machines, including Express Pattern. Desotech alleges that 3D has interfered, causing a termination of the relationships and/or expectancies by conditioning the sale of its stereolithography machines on the purchase of its own resins and by changing which resins could be used on its machines, and therefore 3D has unlawfully forced customers who would otherwise have purchased their resin from Desotech to purchase their resin from 3D instead.

"The privilege to engage in business and to compete allows one to divert business from one's competitors generally as well as from one's particular competitors provided one's intent is, at least in part, to further one's business and is not solely motivated by spite or ill will." *Miller v. Lockport Realty Group, Inc.*, 377 Ill. App. 3d 369, 377 (1st Dist. 2007) (quoting *Soderlund*

*Brothers, Inc. v. Carrier Corp.*, 278 Ill. App. 3d 606, 615 (1st Dist. 1995)). The undisputed evidence shows that 3D sought to make a profit by increasing the sales of resins that it distributes. The record demonstrates that implementing the RFID on its Pro series machines was one way in which 3D sought to increase revenue, yet the record also shows that 3D intended to provide its customers with potentially useful functionality. Whether some customers wanted the RFID is irrelevant, the record clearly shows that 3D was not motivated *solely* by spite or ill will. Thus, 3D is entitled to summary judgment on Count VII.

**Conclusion**

Based on the foregoing analysis, this Court grants summary judgment in favor of 3D Systems on Counts I-VII.

IT IS SO ORDERED.

Date: January 31, 2013.

Entered:   
Sharon Johnson Coleman