

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

FICEP CORPORATION

*

Plaintiff

*

vs.

*

CIVIL ACTION NO. MJG-13-429

VOORTMAN USA CORP.

*

Defendant

*

* * * * *

MEMORANDUM AND ORDER RE: SUMMARY JUDGMENT

The Court has before it Voortman USA Corp.'s Motion for Summary Judgment that the Asserted Claims of U.S. Patent No. 7,974,719 are not Infringed and/or Invalid [ECF No. 80], Plaintiff's Motion for [partial] Summary Judgment [ECF No. 85], and the materials submitted relating thereto. The Court has held a hearing and has had the benefit of the arguments of counsel.

I. BACKGROUND

Ficep Corporation ("Ficep") and Voortman USA Corp. ("Voortman") are competitors that design, develop, and manufacture machines and systems for the steel construction and forging industries.

Ficep owns, by assignment, United States Patent No. 7,974,719¹ ("the '719 Patent"), entitled "Method and an apparatus for automatic manufacture of an object with multiple intersecting components." The claimed invention "relates to systems and methods for automatic manufacture of an object based on automatic transmission of a three-dimensional rendering of the object, such as a rendering from a CAD to an assembly line for manufacture." '719 Patent, col. 1:9-13.

In this case, Ficep sues Voortman for indirect infringement of the '719 Patent based on direct infringement by its customers. Complaint, ECF No. 1. Voortman counterclaims for a declaratory judgment of noninfringement and invalidity. Answer, ECF No. 19.

By the instant motions:

- Voortman seeks summary judgment based on no direct or induced infringement and invalidity under 35 U.S.C. §§ 102, 103 (anticipation, obviousness).
- Ficep seeks partial summary judgment establishing direct infringement by Voortman's customers and denying Voortman's invalidity claims.

II. SUMMARY JUDGMENT STANDARD

In a patent case, as in any other form of civil litigation, a motion for summary judgment shall be granted if the pleadings

¹ Filed June 6, 2007 with a priority date of June 9, 2006 and issued on July 5, 2011.

and supporting documents "show[] that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); Desper Prods., Inc. v. QSound Labs, Inc., 157 F.3d 1325, 1332 (Fed. Cir. 1998).

The well-established principles pertinent to summary judgment motions can be distilled to a simple statement: The Court may look at the evidence presented in regard to a motion for summary judgment through the non-movant's rose-colored glasses, but must view it realistically. After so doing, the essential question is whether a reasonable fact finder could return a verdict for the non-movant or whether the movant would, at trial, be entitled to judgment as a matter of law. See, e.g., Celotex Corp. v. Catrett, 477 U.S. 317, 322-323 (1986); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). Thus, in order to defeat a motion for summary judgment, "the party opposing the motion must present evidence of specific facts from which the finder of fact could reasonably find for him or her." Mackey v. Shalala, 43 F. Supp. 2d 559, 564 (D. Md. 1999) (emphasis added).

When evaluating a motion for summary judgment, the Court must bear in mind that the "[s]ummary judgment procedure is properly regarded not as a disfavored procedural shortcut, but

rather as an integral part of the Federal Rules as a whole, which are designed 'to secure the just, speedy and inexpensive determination of every action.'" Celotex, 477 U.S. at 327 (quoting Rule 1 of the Federal Rules of Civil Procedure).

"Cross motions for summary judgment 'do not automatically empower the court to dispense with the determination whether questions of material fact exist.'" Equal Rights Center v. Archstone Smith Trust, 603 F. Supp. 2d 814, 820 (D. Md. 2009) (quoting Lac Courte Oreilles Band of Lake Superior Chippewa Indians v. Voigt, 700 F.2d 341, 349 (7th Cir. 1983)). Rather, the court must examine each party's motion separately and determine whether summary judgment is appropriate as to each under the Rule 56 standard. Desmond v. PNGI Charles Town Gaming, L.L.C., 630 F.3d 351, 354 (4th Cir. 2011); Mingus Constructors, Inc. v. United States, 812 F.2d 1387, 1391 (Fed. Cir. 1987). The court may grant summary judgment in favor of one party, deny both motions, or grant in part and deny in part each of the parties' motions. See Rossignol v. Voorhaar, 316 F.3d 516, 523 (4th Cir. 2003).

III. DISCUSSION

The parties have extensively (if not excessively) briefed the instant motions. In view of the filings and the multiple

cross-references, the Court stated, at the commencement of the motion hearing, that the briefing had been read for background but that the parties' contentions had to be stated at the hearing.

Naturally, I have read through the materials that you have produced, and I will certainly in the course of the proceeding have various questions to ask of you.

I want it to be clear nobody is going to be inhibited from saying everything you want to say here, but I want you to understand that I'm going to be looking at the record of this proceeding as stating what your arguments are.

And I'm not going to go, after this hearing, go back rooting through the briefs to find what it is you're contending. I think you have to say what you're contending here so it's as clear as possible.

So don't omit anything that you want to have considered as being your contention.

Tr.² at 2-3.

A. The Invention

The invention at issue is a process to enable a user to start with a design model³ of an object in electronic format and

² All "Tr." references herein are to the transcript of the August 25, 2016 motion hearing.

³ Generally, a computer-aided design model includes design specifications related to the structure or device, which includes, for example, welding characteristics, names of parts and components, dimensional references for squaring, and so

manufacture the object without the possibility of human error in the process. In essence, a human being can utilize Computer Assisted Design ("CAD") software to create a design model of an object. Thereafter, the design proceeds through manufacturing automatically. It can be succinctly stated that the data has gone from the design model to the manufacturing machine "untouched by human hands."

The '719 Patent discloses a preferred embodiment and flow chart to practice the invention:

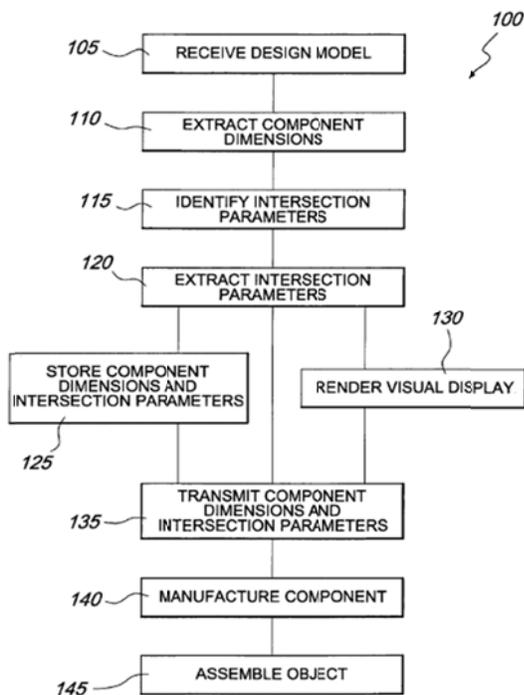


Fig. 1

forth. '719 Patent, col. 1:20-25.

Thus, the process can be described in terms of 6 steps:

1. Creating a design model. An individual uses CAD software,⁴ to create, in electronic format, a three-dimensional design model of a multi-component object.⁵
2. Receipt by Controller. The electronic file⁶ constituting the design model is transmitted⁷ to a device capable of processing a design model, referred to as a programmable logic controller ("PLC").
3. Storing the Design Model. The design model is stored in a database.
4. Extracting Dimensions and Parameters. A logic system within the PLC extracts the component dimensions from the design model and identifies and extracts intersection and manufacturing parameters.
5. Transmitting Dimensions and Parameters. The dimensions and the intersection and manufacturing parameters are transmitted⁸ to one or more manufacturing machines.
6. Manufacturing. The components are manufactured based on the transmitted dimensions and parameters.

1. Claim Construction

The Judge initially presiding over this case, Judge Quarles, construed 19 claim terms in a Memorandum Opinion [ECF No. 70] at 17-19. See Appendix A.

⁴ 3D modeling software, such as programs sold by Tekla and SDS/2, are typically used in the steel industry to create design models. Pl.'s Mot. 7, ECF No. 86.

⁵ At least two of the components intersect, and typically, there are component dimensions.

⁶ Or files.

⁷ Electronically or by using a removable digital storage device.

⁸ Electronically or by using a removable digital storage device.

The parties have demonstrated by their briefing and oral argument on the instant motions that there is an actual dispute requiring a construction of the term "programmable logic controller" and a modification of the construction of "design model."

"When the parties raise an actual dispute regarding the proper scope of [the asserted] claims, the court, not the jury, must resolve that dispute." O2 Micro Int'l v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed. Cir. 2008)(finding error in the district court's failure to resolve "a fundamental dispute regarding the scope of a claim term"); see also Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 835 (2015).

a. Programmable Logic Controller

Judge Quarles was not asked to, and did not, construe the term "programmable logic controller" ("PLC"), considering that the term was to be given its plain and ordinary meaning.

It is now apparent that the parties dispute the "plain and ordinary meaning" of the term. Hence, the Court finds it necessary to construe the term.

The '791 Patent specification states:

The programmable logic controller [] is implemented in order to control and monitor the manufacture of an object. Any device capable of processing a design model as

described herein may be considered as a programmable logic controller. In various embodiments, one or more logic devices or processors may be used.

'719 Patent, col. 5:32-37.

Voortman states that it provides customers two VACAM software programs, VACAM Office software and VACAM Machine software. Tr. 84. VACAM Machine software "has a component that is a programmable logic controller. It can control these machines that Voortman sells." Id. "It's the only VACAM application that can actually convert these signals into the other signals that tells the machine how to manufacture." Id. "The two programs are on different components, different computers, and they do different things." Id.

Ficep's position is, succinctly, that the programmable logic controller can be spread among more than one device.

[T]he programmable logic controller can be one or more processors. So you can have one processor here and a different processor there; and if they're together doing it, that's one or more processors that are the programmable logic controller.

Tr. 9.

Ficep does not contend, as Voortman asserts, that "for purposes of claim interpretation, a programmable logic controller doesn't need to control." Tr. 95.

Ficep's position is logical and consistent with the specification statement that "[i]n various embodiments, one or more logic devices or processors may be used." '719 Patent, col. 5:32-37. Ficep acknowledges that the programmable logic controller must control and must perform all the other claimed functions. However, the programmable logic controller need not be on one single device. "[Y]ou can have a computer at the machine. You can have a computer at the office. You can have a computer at two or three machines. One or more devices can constitute the programmable logic controller." Tr. 134.

The Court construes the term "programmable logic controller" to refer to:

A device that may comprise one or more logic devices or processors and is capable of processing a design model to control and monitor the manufacture of an object.

b. Design Model

The '719 Patent states that a "design model" includes design specifications related to the object to be manufactured. '719 Patent, col. 1:1-25.

In the claim construction process, Voortman stated that the claim term "design model of an object" should be construed as "an electronic file" containing all data needed to allow assembly of an object. Voortman Opening Brief [ECF No. 33] at

29. Ficep stated that "[t]here is no disagreement that the claimed 'design model' involves one or more electronic files to be employed with a computer." Ficep Opening Brief [ECF No. 34] at 13 (emphasis added). Neither party addressed the issue in its responsive brief.

Judge Quarles construed the term "design model of an object" as "the design model of an object in the form of an electronic file." Judge Quarles did not discuss his use of the words "an electronic file" and did not address the party's present dispute regarding the content of the design model.

Voortman does not now deny that, in terms of the number of files, the "design model" should be construed as Ficep contends. As stated by Voortman regarding the design model claim construction issue:

It's not the number of files that matters;
it's what's in the files that matter.

Tr. 107.

In regard to content, Voortman presents an issue best understood and considered in the context of infringement. That is, whether, when Voortman's customers extract and use the specifications of a single component from a design model of a multi-component object, they infringe.⁹ In other words, the

⁹ [Voortman]: We are saying that there's no evidence other than it's the CAD software that extracts the

design model of a multi-component object to be manufactured (e.g., a coffee mug) includes specifications of each separate component (the cylinder and the handle). That design model is not processed to result in a manufactured ultimate product (the coffee mug). Rather, the Voortman customer extracts from the design model the specifications for a single component (the cylinder) that includes what is necessary for the connection of the other component (the handle).

The Court does not find that the term, "design model" should be limited to an electronic file or files including the specifications of a single component of a multi-component object.

Voortman contends that during the prosecution of the '719 Patent, there was a disclaimer of an intention to include within

individual part files, not the Voortman customers, not the VACAM Machine software, not the VACAM Office software. Everything that the Voortman customers get, after the CAD system is used, are individual part files.

THE COURT: That's because that's what they want.

[Voortman]: That's exactly right. They don't -- they don't need and couldn't process -- in fact, the machine -- like, for example, the VACAM Office system could not process a multi-component design model. All it can process are individual part files.

Tr. 127.

the term "design model" a design model of an object having multiple individual components. Tr. 103.

Voortman asserts that during the prosecution of the '719 Patent, Ficep,¹⁰ in distinguishing the Jones¹¹ patent, "clearly disclaimed" a construction of "design model" that would include specifications of more than one component of a multi-component object to be manufactured. In this regard, Ficep said:

Jones does not disclose or suggest an automatic manufacturing system incorporating and utilizing a design model of an object having multiple individual components, wherein at least two of the individual components define an intersection at which the two components are in contact with one another. Concomitantly, Jones does not disclose or suggest an automatic manufacturing system with elements that identify and extract intersection parameters from a design model. The manufacturing system of Jones et al. is concerned exclusively with the manufacture of individual or separate components from respective design specifications of the individual components. In contrast to the present invention, there is nothing in the Jones reference that provides for a design model of an entire object having multiple components in contact with one another at one or more intersection points. Accordingly, the Jones system does not include componentry (such as a programmable logic controller) that identifies and extracts intersection information or parameters from a design model of an object

¹⁰ The Court is herein, as did Judge Quarles in his claim construction, referring to Ficep as the applicant for the '719 Patent.

¹¹ United States Patent No. 4,998,206.

having multiple components in contact with one another at one or more intersection points.

Def.'s Mot. Ex. C 9, ECF No. 82-3 (quoting Prosecution History for '719 Patent at VRTFCP0008494).

Ficep amended the independent claims to delete the phraseology "an object with multiple intersecting components" and to insert the language "the object has multiple individual components, at least two of the individual components defining an intersection at which the two components are in contact with one another." Def.'s Mot. Ex. B 26, ECF No. 82-2 (quoting Prosecution History at VRTFCP0008491).

The essence of the distinction between Jones and the '719 Patent lies in the requirement, in the Jones process, that, once the design model is done, a human operator must thereafter insert manufacturing specifications prior to manufacturing. In the '719 Patent process, once the design model is done, the specifications therein are extracted and, without the risk of human "contamination" of the data, manufacturing proceeds pursuant to the design model.

The Court concludes that the construction of the term "design model" should be stated as:

The design model of an object is in the format of one or more electronic files. In regard to a multi-component ultimate object, the design model may include the

specifications of one or more of the separate components of the multi-component ultimate object.

B. Infringement

A patent owner has the burden of establishing infringement by a preponderance of the evidence. Creative Compounds, LLC v. Starmark Labs., 651 F.3d 1303, 1314 (Fed. Cir. 2011)(citing SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1123 (Fed. Cir. 1985)).

In this case, Ficep accuses Voortman of indirect infringement by inducing or contributing to direct infringement by its customers. To establish its claim for indirect infringement, Ficep must prove direct infringement and intentional inducement. That is, that:

- Voortman's customers directly infringed, and
- Voortman intentionally acted to induce infringement and "knew or should have known [its] actions would induce actual infringements."

Eli Lilly & Co. v. Teva Parenteral Medicines, Inc., --- F.3d ---, No. 2015-2067, 2017 WL 117164, at *3 (Fed. Cir. Jan. 12, 2017).

1. Direct Infringement

To establish direct infringement by one or more of Voortman's customers, Ficep must either (1) prove that customers using the Voortman products necessarily infringe the '719 Patent or (2) prove that specific customers using the Voortman product in fact infringed. Toshiba Corp. v. Imation Corp., 681 F.3d 1358, 1364 (Fed. Cir. 2012) (citing ACCO Brands, Inc. v. ABA Locks Mfr. Co., 501 F.3d 1307, 1313 (Fed. Cir. 2007)).

If an accused device can be used in a non-infringing manner, the accused device does not necessarily infringe. ACCO, 501 F.3d at 1313; see also Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1275 (Fed. Cir. 2004) ("The mere sale of a product capable of substantial non-infringing uses does not constitute indirect infringement of a patent."). Ficep has not presented evidence adequate to prove that a customer using Voortman's products necessarily must infringe. Therefore, specific infringement must be proven.

To prove direct infringement by a customer, Ficep must prove that the customer used the Voortman product in a process by which each limitation of the claim asserted was met.¹² Akamai

¹² Or was met by virtue of the doctrine of equivalents ("DOE"). Warner-Jenkinson Co. v. Hilton Davis Co., 520 U.S. 17, 40 (1997).

Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020, 1022
(Fed. Cir. 2015).

A Voortman customer could be found to infringe even if some of the steps in the process were performed by another, if those steps are attributable¹³ to the customer. Id.

a. Proof of Direct Infringement

Ficep has presented evidence with respect to the alleged infringing process used by two Voortman customers, Haas Metal Engineering, Inc. ("HME") and Quality Iron Fabricators ("Quality Iron"). FICEP states that the "infringement analysis of claims 7-12 of the '719 patent is the same as for claims 1-6 in all relevant aspects," and that except for the "creating" and

¹³ An action would be attributable to a Voortman customer if:

- (1) It performs all the steps itself; or
- (2) It acts through an agent (applying traditional agency principles); or
- (3) It participates in a joint enterprise such that all can be charged with the acts of the others; or
- (4) It contracts with another to perform one or more steps of a claimed method; or
- (5) The "alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance."

Akamai, 797 F.3d at 1022-23 (citing Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 930 (2005) related to vicarious liability actions).

"storing" elements,¹⁴ the same analysis is applicable to Claim 14. Pl.'s Mot. 28-29, ECF No. 86. For present purposes the Court addresses herein only Claim 1.

The evidence of record establishes the absence of any genuine issue of material fact regarding HME's and Quality Iron's utilizing Voortman machines in a process that met all the limitations of Claim 1¹⁵ of the '719 Patent. The Court shall address each limitation in turn.

As discussed herein, Ficep is entitled to partial summary judgment establishing, for purposes of this case against Voortman,¹⁶ the alleged direct infringement by HME and Quality Iron.

i. Limitation 1 - Design Model Creation

creating, at a computing device, a **design model of an object** having multiple individual components, at least two of the individual components defining an intersection at which the two components are in contact with one another;

The Court's construction of "design model of an object" states:

¹⁴ I.e., there are no elements in claim 14 related to "creating" or "storing" a design model.

¹⁵ See Appendix B - Claim 1.

¹⁶ Since neither HME or Quality Iron is a party to the instant case, they would not necessarily be bound by this decision should they be sued for infringement by Ficep.

In regard to a multi-component ultimate object, the design model may include the specifications of one or more of the separate components of the multi-component ultimate object.

Voortman does not deny that these customers used a CAD program to create a design model in DSTV¹⁷ or other electronic files. Tr. 92. Therefore, both HME and Quality Iron¹⁸ used a process in which they created a design model meeting Limitation 1 in their manufacturing process.

ii. Limitation 2 - Receiving Design Model

receiving, at a programmable logic controller, the design model of the object;

Voortman offers software called VACAM with two distinct versions: VACAM Office Edition and VACAM Machine software. VACAM Machine, which Voortman supplies to its customers, includes the TwinCAT plugin component that has the ability to actually control a machine. It is run from a system directly connected to a manufacturing device. In contrast, Voortman does not provide all of its customers the VACAM Office Edition software,

¹⁷ "DSTV" ("Deutsche Stahlbau-Verband,") is a file format standard defined in Germany and now commonplace for manufacturing. The DSTV format describes cuts, holes, markings, and other operations to be performed on steel plates and members. Pl.'s Mot. Ex. G, Chipman Rpt. ¶ 40, ECF No. 86-5.

¹⁸ The fact that Quality Iron sometimes, or always, contracts out the function to a third party does not avoid infringement. Akamai, 797 F.3d at 1023.

which is installed on an end-user computer and does not contain a controller component within it. Def.s' Mot. 19-20, ECF No. 81.

Voortman's VACAM Office Edition and Machine Edition software have an import feature that is used to receive the design model in electronic files. The design model is received by the device containing the VACAM Office software, data is extracted and sent to the VACAM Machine software.

The Court has construed the term programmable logic controller to mean:

A device capable of processing a design model to control and monitor the manufacture of an object that may comprise one or more logic devices or processors.

Using this construction, the programmable logic controller in the process at issue consists of the VACAM Office and VACAM Machine software.

Thus, the design model is received at a programmable logic controller and Limitation 2 is met.

iii. Limitation 3 - Storing Design Model

storing, at a database unit, the design model received at the **programmable logic controller**;

Voortman did not, at the hearing, clarify a contention - if it was making one - that this limitation is not met.¹⁹ To the extent that Voortman contends that the model itself is not stored but only the data from the model, this is a distinction without a difference.

Thus, Limitation 3 is met.

iv. Limitation 4 - Extracting Dimensions

extracting from the design model a plurality of component **dimensions** defining a plurality of components of the object;

Voortman did not, at the hearing, clarify a contention - if it was making one - that this limitation is not met. The dimensions are in the DSTV files created using Tekla or SDS/2 and are exported and then read by the VACAM software. HME performs the step directly. Quality Iron receives the DSTV files from its detailers, who have used either Tekla or SDS/2 to extract the dimensions.

Thus, Limitation 4 is met.

¹⁹ Voortman said at the hearing: "At the CAD software, information is extracted. So it's actually at that third-party software where the information is extracted that then eventually goes to the PLC. And it may be stored in between, but eventually it has to make its way to the programmable logic controller in order for there to be the ability for the machine to then manufacture. Tr. 88 (emphasis added).

v. Limitation 5 - Identifying Parameters

identifying a plurality of intersection and manufacturing **parameters** which define in part the intersection of the two components;

Voortman did not, at the hearing, clarify a contention - if it was making one - that this limitation is not met.

vi. Limitation 6 - Extract Parameters

extracting from the design model the intersection and manufacturing **parameters**;

Voortman did not, at the hearing, clarify a contention - if it was making one - that this limitation is not met.

vii. Limitation 7 - Transmitting Parameters

transmitting the intersection and manufacturing **parameters** and the component dimensions from the **programmable logic controller** to at least one manufacturing machine;

Voortman did not, at the hearing, clarify a contention - if it was making one - that this limitation is not met.

viii. Limitation 8 - Manufacture Components

manufacturing, by means of the at least one manufacturing machine, the **components based** at least partly **on** the **transmitted** component **dimensions and** the transmitted intersection and manufacturing **parameters**.

Voortman did not, at the hearing, clarify a contention - if it was making one - that this limitation is not met.

2. Inducement by Voortman

To establish the requisite inducement, Ficep must prove that Voortman had the specific intent to encourage its customers' infringement.²⁰

To establish specific intent, Ficep must prove that Voortman's actions induced infringing acts and that it "knew or should have known [its] actions would induce actual infringements." Eli Lilly, 2017 WL 117164, at *3.

If a party sells a component that has no "substantial noninfringing use," an inference may be drawn that the company intended to cause direct infringement by the purchaser of the component. Ricoh Co., Ltd. v. Quanta Computer Inc., 550 F.3d 1325, 1337 (Fed. Cir. 2008). However, "distribution of a component of a patented device will not violate the patent if it is suitable for use in other ways." Grokster, 545 U.S. at 915.

Ultimately, "[i]ntent is a factual determination particularly within the province of the trier of fact." Fuji Photo Film Co. v. Jazz Photo Corp., 394 F.3d 1368, 1378 (Fed.

²⁰ The Court notes that Ficep did not move for a summary judgment finding of indirect infringement by Voortman. However, Voortman seeks summary judgment based on no direct or induced infringement.

Cir. 2005) (declining to disturb jury's verdict because intent to induce infringement "is a factual determination.").

There are, beyond doubt, genuine issues of material fact in regard to Voortman's alleged inducement of infringement.

C. Invalidity

In general, a United States Patent is presumed valid, and the "burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." 35 U.S.C. § 282. An invalidity defense must be "proved by clear and convincing evidence." Microsoft Corp. v. i4i Ltd. P'ship, 564 U.S. 91, 95 (2011). A party may assert invalidity on several grounds, including anticipation by prior art and the obviousness of the invention. See 35 U.S.C. §§ 102, 103.

1. Anticipation

A patent is invalid if it was anticipated by prior art. Under 35 U.S.C. § 102(b),²¹ a patent application will not be approved if the invention "was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the

²¹ The 2006 version cited herein was in effect at the time of the application for the '719 Patent. It was subsequently amended by the Leahy-Smith America Invents Act ("AIA").

date of the application for a patent in the United States." To find that prior art anticipated a patent claim, "each and every limitation [must be] found either expressly or inherently in a single prior art reference." Celeritas Techs., Ltd. v. Rockwell Int'l Corp., 150 F.3d 1354, 1361 (Fed. Cir. 1998). "Although anticipation is a question of fact, it still may be decided on summary judgment if the record reveals no genuine dispute of material fact." Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1327 (Fed. Cir. 2001).

Voortman contends that the '719 Patent is invalid because it was anticipated by:

- The Tekla Reference
- The Mueller Prior Art
- The SDS/2 Prior Art
- Patent 6,318,029 ("the '029 Patent")

Both sides seek summary judgment with regard to anticipation contentions.²²

a. The Tekla Reference

Voortman contends that the 2005 Tekla System Manual (for version 11 of Tekla software) is a printed publication that

²² Voortman sought summary judgment that the Tekla Systems Manual anticipated the '719 Patent. Ficep's motion sought summary judgment in regard to all anticipation contentions.

anticipates the '719 Patent, which has a June 6, 2007 filing date.

Ficep contends that the manual was not prior art under 35 U.S.C. § 102(b).²³ The evidence establishes, however, the manual was, prior to June 6, 2007, on sale, in public use, and/or a printed publication within the meaning of § 102(b).

"When considering whether a given reference qualifies as a prior art printed publication, the key inquiry is whether the reference was made sufficiently accessible to the public interested in the art before the critical date." Voter Verified, Inc. v. Premier Election Sols., Inc., 698 F.3d 1374, 1380 (Fed. Cir. 2012)(citation omitted). Further, to qualify as a prior art "printed publication" under § 102, the evidence must show that the reference "has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it." Suffolk Techs., LLC v. AOL Inc., 752 F.3d 1358, 1364 (Fed. Cir. 2014)(citation omitted).

²³ Ficep contends that Voortman did not offer any evidence of any alleged sale, offer for sale, or public use of the Tekla Prior Art until Voortman's expert's reply report. i.e., it was not in the invalidity contentions, not in the expert's opening report, and Ficep did not have an opportunity to respond. To the extent that Ficep may actually debate whether the manual is prior art, that contention - if relevant to an issue presented - is preserved.

The evidence establishes that the manual was, prior to June 6, 2007, delivered with the Tekla software, was accessible online, and could be requested by any member of the public. There is no doubt that someone skilled in the art would have been able to locate the manual by exercising reasonable diligence.

While the manual is prior art, the evidence is not sufficient to establish that it anticipates the '719 Patent. Voortman's expert combines the Modeling Manual for Tekla Structures Version 11, the Tekla System Manual, and a working copy of version 7.0 of the Tekla software, and collectively refers to them as "Tekla Prior Art." Def.'s Mot. Ex. A 32, ECF No. 82-1. Voortman does not offer evidence adequate to prove that the Tekla System Manual, as a single prior art reference, meets the limitations the elements of the '719 Patent claims.

The Court shall, therefore, grant Ficep partial summary judgment and deny Voortman summary judgment with regard to anticipation by the Tekla Reference.

b. The Mueller Prior Art

Voortman contends that what it calls the "Mueller Prior Art" anticipates the '719 Patent and constitutes a "public use" bar to its validity. Tr. 161.

Voortman's expert describes the "Mueller Prior Art" as the 1101 DZB Ficep CNC machine (installed in July 2005 for Ficep's Texas customer, Mueller) used with Mueller's AutoCAD system and Ficep's WinSteel software. Pl.'s Mot. Ex. X, Duffie Rpt. 22-32, ECF No. 86-17.

The parties dispute whether the Mueller Prior Art is, in fact, prior art. Voortman asserts that the Mueller system was prior art under the "public use" or "known or used by others" provisions of 35 U.S.C. § 102(b) more than one year prior to June 6, 2007, because it was offered to Mueller in May 2004 and installation was completed in July 2005. Ficep contends that it sold Mueller a CNC machine and the WinSteel software, and the process was developed by Mueller as a private company's process used in its own factory.

One sale or offer to sell of the prior art reference is sufficient to establish a statutory bar which renders the patent invalid. See Pfaff v. Wells Elecs., Inc., 525 U.S. 55 (1998); In re Caveney, 761 F.2d 671, 676 (Fed. Cir. 1985). A patent also may be invalid if anticipating prior art was "known or used by others in this country" before the date of invention. The term "used" means the complete invention was known to, used by, or otherwise accessible to, the public in this country. Carella v.

Starlight Archery and Pro Line Co., 804 F.2d 135, 139 (Fed. Cir. 1986).

"It does not take much to trigger the 'public use' statutory bar to a patent." National Research Dev. Corp. v. Varian Assocs., Inc., 822 F. Supp. 1121 (D.N.J. 1993), aff'd in part, rev'd in part, on other grounds, 17 F.3d 1444 (Fed. Cir. 1994). A use may be considered "public" even if only one person knew about and used the invention. Id. Once a prima facie case of public use before the critical date is established, the inventor (or patent owner) must come forward with clear and convincing evidence to counter that showing. Hycor Corp. v. Schlueter Co., 740 F.2d 1529, 1535 (Fed. Cir. 1984).

Voortman has established "public use" sufficient to satisfy that the Mueller system constitutes prior art.²⁴ However, Voortman has not produced evidence adequate to establish that the Mueller Prior Art constitutes, or includes, a single reference that meets all the limitations of the '719 Patent claims. Celeritas Techs., Ltd., 150 F.3d at 1361.

²⁴ For example, there is evidence that two representatives of another company, Excel, visited the Mueller facility around May 8, 2006 to view the Mueller system. Voortman offers email evidence to show that Ficep was trying to sell machines and software to Excel, the potential customer. Moreover, articles were written about the system, although they were published after the critical date.

The Court shall, therefore, deny Ficep partial summary judgment that the Mueller system does not constitute prior art, but shall grant Ficep partial summary judgment of no invalidity with regard to anticipation by the Mueller Prior Art.

c. The SDS/2 Prior Art

Voortman's expert describes the "SDS/2 Prior Art" as Version 6.130 of SDS/2, a CAD program around November 10, 2000, and various documents that describe the software program. Pl.'s Mot. Ex. X, Duffie Rpt. 34, ECF No. 86-17. SDS/2 automatically generated layout marks, which are pop-marks it refers to as "CNC marks," that facilitated assembly of components. Id. SDS/2 included a CNC module that generated hole, cut, and mark information that was used by controllers that controlled CNC machines. Id. at 35.

Ficep contends that there is no evidence that the SDS/2 Prior Art was actually publicly used, although it was in use at Tipton,²⁵ because the use was in its factory, it was confidential, and there's no evidence to corroborate the oral testimony by Tipton's employees regarding its use. However, Voortman has presented evidence sufficient to establish that it

²⁵ TSF Structures, Inc. or Tipton Structural Fabrication ("Tipton"). See Def.'s Mot. Ex. C, Duffie Reply Rpt. 41, ECF No. 82-3.

was publicly available for sale and in use in the steel fabrication industry more than one year prior to June 6, 2007.

Voortman does not, however, present evidence adequate to establish that the SDS/2 Prior Art constitutes, or includes, a single reference that meets all the limitations of the '719 Patent claims.

The Court shall, therefore, grant Ficep partial summary judgment regarding no anticipation by the SDS/2 Prior Art, but the Court shall deny Ficep partial summary judgment that the SDS/2 Prior Art does not constitute prior art.

d. Patent 6,318,029 ("the '029 Patent")

Voortman's expert opines that the '029 Patent, issued on November 20, 2001, describes a system for manufacturing wall framing components used with a CAD program that defines dimensions and measurements of the frames and sends the identifying codes and data to a logic control unit that controls a machining tool. Pl.'s Mot. Ex. X, Duffie Rpt. 35, ECF No. 86-17.

The Court rejects Ficep's procedural objections regarding the '029 Patent.²⁶ In regard to the merits of the matter, there

²⁶ Ficep contends that the '029 Patent was not disclosed in Voortman's invalidity contentions under anticipation, so Voortman should be precluded from contending that the '029

are genuine issues of material fact with regard to anticipation of the '719 Patent by the '029 Patent. For example, whether the '029 Patent includes "intersection parameters" and whether it allows for the automatic identification of such parameters.

The Court shall, therefore, deny Ficep partial summary judgment with regard to no anticipation by the '029 Patent. Accordingly, Voortman may contend, at trial, that the '029 Patent anticipates the '719 Patent.

2. Obviousness

Obviousness is a question of law, based on underlying factual findings. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 427 (2007). "The underlying factual inquiries include: (1) the scope and content of the prior art, (2) the differences between the prior art and the claims at issue, (3) the level of ordinary skill in the art, and (4) any relevant secondary considerations, such as commercial success, long felt but unsolved needs, and the failure of others." Wyers v. Master Lock Co., 616 F.3d

Patent anticipates the '719 Patent. However, Voortman listed the '029 patent as prior art, and asserted that it was an additional reference rendering claims of the '719 patent obvious. As such, Ficep was on notice that Voortman viewed the '029 patent as prior art. Upon receipt of Ficep's definitions of various "plain and ordinary" terms, Voortman's expert opined (in his opening report) that based on Ficep's definitions, the '029 Patent anticipated the '719 Patent. Ficep was not prejudiced and had an opportunity to respond in its expert's rebuttal report.

1231, 1237 (Fed. Cir. 2010) (citing Graham v. John Deere Co., 383 U.S. 1, 17-18 (1966)).

An invention is obvious if it involves only improvements that would be considered readily apparent to someone skilled in the same area as the subject matter of the invention. 35 U.S.C. § 103. "[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." KSR, 550 U.S. at 418. Certainly, "[m]ost inventions arise from a combination of old elements and each element may often be found in the prior art." In re Kahn, 441 F.3d 977, 986 (Fed. Cir. 2006). "A reason for combining disparate prior art references is a critical component of an obviousness analysis; 'this analysis should be made explicit'." InTouch Techs., Inc. v. VGO Commc'ns, Inc., 751 F.3d 1327, 1351 (Fed. Cir. 2014) (quoting KSR, 550 U.S. at 418).

The obviousness inquiry requires a flexible approach that also includes a review of the secondary considerations of nonobviousness. Id. at 406, 415; see also Geo. M. Martin Co. v. All. Mach. Sys. Int'l LLC, 618 F.3d 1294, 1304 (Fed. Cir. 2010) ("Secondary considerations of non-obviousness must be considered when present."). Secondary considerations, however, "cannot overcome a strong prima facie case of obviousness." Wyers, 616 F.3d at 1246.

Voortman seeks summary judgment establishing that the '719 Patent is invalid by virtue of obviousness in light of:

- Tekla combined with Voortman's V550 machine and VACAM software,
- Tekla prior art combinations of manuals and software,
- Tekla in combination with the Mueller Prior Art.

Ficep seeks summary judgment establishing that the '719 Patent is not invalid by virtue of obviousness in light of the following combinations of prior art asserted by Voortman:

- The Tekla reference with publications,²⁷
- The SDS/2 reference with publications,²⁸
- The Tekla reference with V550 and VACAM.

In the present context, it is by no means certain which, if any, of the obviousness contentions actually will be presented by Voortman. Moreover, there is no doubt that there are genuine issues of material fact as to whether Voortman can prove obviousness by clear and convincing evidence as to any of the combinations that are subjects of the instant motions.

The Court does not foreclose the possibility that, in a future stage of the case, it will consider summary judgment, or

²⁷ Tekla combined with United States Patent Publ. No. 2003/0033104 ("the '104 Publication") or United States Patent Publ. No. 2005/0115375 ("the '375 Publication")

²⁸ SDS/2 combined with the '104 or '375 Publications.

judgment as a matter of law, in regard to some, or all, of the obviousness contentions.

IV. CONCLUSION

For the foregoing reasons:

1. Voortman USA Corp.'s Motion for Summary Judgment that the Asserted Claims of U.S. Patent No. 7,974,719 are not Infringed and/or Invalid [ECF No. 80] is DENIED.
2. Plaintiff's Motion for Summary Judgment [ECF No. 85] is GRANTED IN PART and DENIED IN PART.
 - a. Ficep is granted partial summary judgment establishing direct infringement of Claim 1 of the '719 Patent by Haas Metal Engineering, Inc. and Quality Iron Fabricators.
 - b. Ficep is denied partial summary judgment establishing direct infringement of Claim 1 of the '719 Patent by any other Voortman customers.
 - c. Ficep is granted partial summary judgment denying Voortman's claims of invalidity by virtue of anticipation by:
 - i. The Tekla reference.
 - ii. The Mueller prior art.
 - iii. The SDS/2 prior art.
 - d. Ficep is denied partial summary judgment regarding Voortman's claims of invalidity by virtue of anticipation by United States Patent No. 6,318,029.
 - e. Ficep is denied partial summary judgment regarding Voortman's claims of invalidity by virtue of obviousness based on the combination of:

- i. The Tekla reference with United States Patent Publ. No. 2003/0033104 or United States Patent Publ. No. 2005/0115375.
 - ii. The SDS/2 reference with United States Patent United States Patent Publ. No. 2003/0033104 or United States Patent Publ. No. 2005/0115375.
 - iii. The Tekla reference with Voortman's V550 Machine and VACAM Software.
3. Voortman may, by February 20, 2017, file a motion seeking partial summary judgment with regard to direct infringement by its customers other than Haas Metal Engineering, Inc. and Quality Iron Fabricators.
4. Ficep shall arrange a case planning telephone conference to be held by February 24, 2017. The agenda shall include scheduling of the case for trial.

SO ORDERED, on Friday, February 3, 2017.

/s/
Marvin J. Garbis
United States District Judge

Appendix A

Am. Claim Construction, ECF No. 70:

Claim Language	Court's Construction
Preamble	
1. "automatic manufacture of an object"	No change; plain and ordinary meaning
Claim 1	
2. "design model of an object"	"design model of an object, in the form of an electronic file"
3. "receiving, at a programmable logic controller, the design model of the object"	No change; plain and ordinary meaning
4. "extracting from the design model a plurality of component dimensions defining a plurality of components of the object"	No change; plain and ordinary meaning
5. "identifying a plurality of intersection and manufacturing parameters which define in part the intersection of the two components"	"identifying a plurality of intersection and manufacturing parameters which define in part the intersection of the two components and the manufacturing to be performed"
6. "extracting from the design model the intersection and manufacturing parameters"	No change; plain and ordinary meaning
7. "transmitting the intersection and manufacturing parameters and the component dimensions from the programmable logic controller to at least one manufacturing machine"	No change; plain and ordinary meaning

Claim Language	Court's Construction
8. "manufacturing, by means of the at least one manufacturing machine, the components based at least partly on the transmitted component dimensions and the transmitted intersection and manufacturing parameters"	No change; plain and ordinary meaning
Claims 7 and 14	
9. "a receiver associated with the programmable logic controller for receiving the design model of the object"	No change; plain and ordinary meaning
10. "a processor which is associated with the programmable logic controller and extracts from the design model a plurality of dimensions of components which define a plurality of components of the object"	"a processor which is associated with the programmable logic controller and extracts, without human intervention, from the design model a plurality of dimensions of components which define a plurality of components of the object"
11. "wherein the processor identifies a plurality of intersection parameters which define the intersection of the two components"	"wherein the processor associated with the programmable logic controller identifies, without human intervention, a plurality of intersection parameters which define the intersection of the two components"
12. "wherein the processor extracts from the design model the intersection parameters"	"wherein the processor associated with the programmable logic controller extracts, without human intervention, from the design model the intersection parameters"

Claim Language	Court's Construction
13. "a transmitter associated with the processor for transmitting the intersection and machining parameters and the component dimensions from the programmable logic controller to the at least one manufacturing machine"	No change; plain and ordinary meaning
14. "wherein the at least one manufacturing machine manufactures the components based at least in part on the transmitted component dimensions and on the transmitted intersection and manufacturing parameters"	No change; plain and ordinary meaning
15. "computer-readable code for extracting from the design model a plurality of component dimensions which define a plurality of components of the object"	No change; plain and ordinary meaning
16. "computer-readable code for identifying a plurality of intersection parameters which define the intersection of the two components"	No change; plain and ordinary meaning
17. "computer-readable code for extracting from the design model the intersection and manufacturing parameters"	No change; plain and ordinary meaning

Claim Language	Court's Construction
<p>18. "computer-readable code for transmitting the intersection and manufacturing parameters and the component dimensions from the programmable logic controller to at least one manufacturing machine"</p>	<p>No change; plain and ordinary meaning</p>
<p>19. "computer-readable code for manufacturing, by means of the at least one manufacturing machine, the components based at least in part on the transmitted component dimensions and on the transmitted parameters."</p>	<p>No change; plain and ordinary meaning</p>

Appendix B

Independent Claim 1 of the '719 Patent claims:

A method for automatic manufacture of an object, the method comprising the steps of:

[1] **creating**, at a computing device, a **design model of an object** having multiple individual components, at least two of the individual components defining an intersection at which the two components are in contact with one another;

[2] **receiving**, at a programmable logic controller, the **design model of the object**;

[3] **storing**, at a database unit, the design model received at the **programmable logic controller**;

[4] **extracting** from the design model a plurality of component **dimensions** defining a plurality of components of the object;

[5] **identifying** a plurality of intersection and manufacturing **parameters** which define in part the intersection of the two components;

[6] **extracting** from the design model the intersection and manufacturing **parameters**;

[7] **transmitting** the intersection and manufacturing **parameters** and the component dimensions from the **programmable logic controller** to at least one manufacturing machine;

[8] and **manufacturing**, by means of the at least one manufacturing machine, the **components based** at least partly **on** the **transmitted** component **dimensions and** the transmitted intersection and manufacturing **parameters**.

'719 patent, col. 7:48-8:8 (emphasis added).