

**UNITED STATES DISTRICT COURT
MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION**

INDUSTRIAL ENGINEERING &
DEVELOPMENT, INC., *et al.*,

Plaintiffs,

v.

Case No. 8:12-cv-691-T-24-MAP

STATIC CONTROL COMPONENTS,
INC.,

Defendant.

_____ /

ORDER

This cause comes before the Court on Defendant Static Control Components, Inc.’s Motion for Partial Summary Judgment. (Dkt. 164) Plaintiffs Industrial Engineering & Development Inc., Innovative Cartridge Technologies, Inc., Cartridge Corporation of America, Inc., American Imaging Cartridge, LLC, and Universal Imaging Holdings, LLC oppose. (Dkt. 170) A hearing on Defendant’s motion was held on August 12, 2014.

I. BACKGROUND

A. Patents-in-Suit

Steven Miller is the inventor or co-inventor of Plaintiffs’ patents-in-suit—U.S. Patent No. 7,187,874 (the ‘874 patent), U.S. Patent No. 7,551,859 (the ‘859 patent), and U.S. Patent No. 7,356,279 (the ‘279 patent)—which claim inventions relating to chipped toner cartridges that can operate with printers made by different manufacturers or with different printers, which are made by a common Original Equipment Manufacturer (OEM) but have different features to prevent use of a competitor’s toner cartridges—*e.g.*, another manufacturer’s cartridges or a remanufacturer’s refilled or reused cartridge.

Plaintiffs' patents-in-suit issued from continuation and continuation-in-part applications of U.S. Patent No. 7,136,608 (the '608 patent), titled "Removable Toner Cartridge Universal Adapter," and U.S. Patent No. 7,286,774 (the '774 patent), titled "Universal Printer Chip." Miller filed the application for the '608 patent on December 19, 2003. The '608 patent teaches a printer cartridge containing a universal printer chip, which is adapted to fit within the cartridge-receiving cavity of multiple printer families or multiple printer models in a printer family. The '608 patent claims are directed to the structural features of such a printer cartridge.

On September 21, 2005, Miller and Herman Schnell filed a continuation-in-part application of the '608 patent which issued into the '774 patent. According to the '774 patent, an OEM will add electronic identification features to its printers and associated toner cartridges to ensure that its printers reject toner cartridges made by another manufacturer. OEM printers have software or firmware that controls the printer's operation and sends commands or requests (regarding various parameters, such as communication patterns, unique to the printer) to the OEM printer chip, which can lock out a non-OEM chipped cartridge. The '774 patent teaches methods incorporating a cartridge equipped with a microcontroller (*e.g.*, a chip) that emulates an OEM printer chip and transmits necessary data or authentication code to communicate with the printer.

On January 19, 2006, Miller filed a divisional application of the '608 patent, which issued into the '874 patent, titled "Toner Cartridge Having A Printer-Detecting Universal Printer Chip." The '874 patent claims are directed to the mechanical and electronic features of the claimed printer cartridge and its universal printer chip, which receives signals and is adapted to communicate the correct value for printer-cartridge interoperability with multiple printer families or printer brands.

On December 21, 2006, Miller and Schnell filed a continuation-in-part application of the '774 and '874 patents, which issued into the '859 patent, titled "Multiple Region Printer Chip."

Although similar to the ‘774 patent, the written description of the ‘859 patent specifically explains how an OEM may lock out non-OEM chipped cartridges based on geographic region. The ‘859 patent claims methods incorporating a cartridge equipped with a microcontroller that can transmit an authentication code to communicate with printers in multiple geographic regions.

On June 1, 2007, Miller filed a continuation application of the ‘774 patent, which issued into the ‘279 patent, titled “Universal Imaging Cartridge.”

B. Procedural History¹

The parties are competitors in the business of remanufactured printer components. In March 2007, Static and some of the Plaintiffs entered into a cross-licensing agreement as part of a settlement agreement resolving Static’s lawsuit against Miller (and entities related to Miller) in which Static alleged that Miller stole Static’s code for printer chips used in cartridges for Lexmark T520/522 and T620/622 printers. Pursuant to the cross-license agreement, Static was granted a non-exclusive, royalty-bearing license to practice certain technology that infringes on Plaintiffs’ ‘774 and ‘874 patents or patents issuing from continuation applications of those patents.

In March 2012, Plaintiffs initiated the instant lawsuit by filing a one-count complaint alleging that Static breached the cross-license agreement by failing to pay royalties owed on chips that infringed on Plaintiffs’ patents-in-suits (“the accused chips”). Static answered and asserted several affirmative defenses. Static’s second affirmative defense alleges that Plaintiffs’ patents-in-suit are “invalid for failure to satisfy one or more of the conditions of patentability specified in Parts II or III of Title 35 of the United States Code.” Following a *Markman* hearing, the Court issued an order construing several terms in the ‘874, ‘279, and ‘859 patents. (Dkt. 93)

¹ The litigation history and the procedural background of this case are detailed in the Court’s order granting in part and denying in part Plaintiffs’ motion for summary judgment. (Dkt. 243 at 2-5)

Static moves for summary judgment as to the invalidity of the following patent claims—claims 1 and 53 of the ‘874 patent, claim 10 of the ‘279 patent, and claim 28 of the ‘859 patent—based on anticipation under 35 U.S.C. § 102(b), lack of enablement under 35 U.S.C. § 112 ¶ 1, or indefiniteness under 35 U.S.C. § 112 ¶ 2.² Static contends it could not have breached its royalty obligations under the cross-license agreement because the patent claims are invalid.

II. LEGAL STANDARD

Summary judgment is appropriate “if the movant shows 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. The Court must draw all inferences from the evidence in the light most favorable to the non-movant and resolve all reasonable doubts in that party’s favor. *Porter v. Ray*, 461 F.3d 1315, 1320 (11th Cir. 2006) (citation omitted). The moving party bears the initial burden of showing the Court, by reference to materials on file, that there are no genuine issues of material fact that should be decided at trial. *See id.* When a moving party has discharged its burden, the non-moving party must then go beyond the pleadings and, by its own affidavits, or by depositions, answers to interrogatories, and admissions, designate specific facts showing there is a genuine issue for trial.

III. DISCUSSION

In its motion for summary judgment, Static argues that: (1) claim 53 of the ‘874 patent is anticipated, not enabled, and indefinite; (2) claim 1 of the ‘874 patent is indefinite; (3) claim 10 of the ‘279 patent is anticipated and not enabled; and (4) claim 28 of the ‘859 patent is anticipated. While Static’s argument regarding each asserted patent claim will be addressed separately, the Court first addresses a problem that is common to all of the patent claims that Static contends are invalid as anticipated.

² The statutory changes under the “America Invents Act” do not apply to this case.

A. Static's Burden of Proving Anticipation Under 35 U.S.C. § 102(b)

Static argues that all the asserted patent claims (except claim 1 of the '874 patent) are invalid as anticipated by several printer cartridges or chips made by Lexmark or Static. Plaintiffs argue that summary judgment as to anticipation must be denied because Static fails to provide clear and convincing evidence that all claim elements and limitations are disclosed in the prior art references.

Under 35 U.S.C. § 102(b), a person is not entitled to a patent where 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 date of the application for patent in the United States.” A patent claim is invalid under this section “when the same device or method, having all of the elements and limitations contained in the claims, is described in a single prior art reference.” *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 545 (Fed. Cir. 1998). Thus, “[t]o anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim.” *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). “Whether a patent is anticipated under section 102(b) is a question of fact.” *Green Edge Enterprises, LLC v. Rubber Mulch Etc., LLC*, 620 F.3d 1287, 1297 (Fed. Cir. 2010) (quoting *Schumer v. Lab. Computer Sys.*, 308 F.3d 1304, 1315 (Fed. Cir. 2002)).

Establishing invalidity by anticipation is “an especially heavy burden” for the patent’s challenger. *Koito Mfg. Co. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1151 (Fed. Cir. 2004) (quotation omitted). Because all issued patents are presumptively valid, “an alleged infringer who raises invalidity as an affirmative defense has the ultimate burden of persuasion to prove invalidity by clear and convincing evidence, as well as the initial burden of going forward with evidence to support its invalidity allegation.” *Titan Tire Corp. v. Case New Holland, Inc.*, 566 F.3d 1372,

1376 (Fed. Cir. 2009). The phrase “going forward with evidence” means presenting “both factual evidence and persuasive factual and legal argument.” *Id.* at n.4 (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1327 (Fed. Cir. 2008)).

As a general matter, Static’s summary judgment motion fails to provide clear and convincing evidence that all claim elements and limitations are disclosed in the prior art reference. For each allegedly invalid patent claim, Static does not analyze any of the claim elements. Nor does Static address—let alone provide clear and convincing evidence—whether the prior art discloses each claim element and limitation. And while Static may cite witness testimony regarding the functionality of a prior art reference, Static fails to connect such testimony to the elements and limitations of the asserted patent claim. Static cannot meet its burden at summary judgment by citing to factual evidence without presenting argument based on that evidence.

Although Plaintiffs’ response in opposition to summary judgment repeatedly points out Static’s failure to provide claim charts or otherwise engage in the basic element-by-element analysis,³ Static did not address those identified deficiencies at the August 12, 2014 hearing. Rather, Static suggested that Plaintiffs were attempting to place form over substance.

But well-established precedent conflicts with Static’s characterization, or dismissal, of its obligation as the movant seeking to invalidate Plaintiffs’ patents. For example, in *Schumer*, the district court granted the alleged infringer’s motion for summary judgment based on two declarations from the alleged infringer’s president, who purportedly participated in the

³ Plaintiffs also argue that Static cannot meet its burden because Static solely relies on inadmissible and uncorroborated testimony from Michael Shelby (Static’s corporate representative) and Benjamin Newman (Lexmark’s corporate representative) regarding the sale dates and functionality of each prior art reference. But the Court need not reach these arguments because, even if the Court considers such testimony, Static still fails to meet its initial burden of presenting factual and legal argument establishing that the prior art meets each element and limitation of each claim.

development of the anticipating prior art, regarding the date it was publicly available and its functions and capabilities. 308 F.3d at 1309. The Federal Circuit vacated the entry of summary judgment, finding that the declarant:

merely set[] forth his understanding of the operation and steps performed by the Seiko driver and describes what he considered to be known to one of ordinary skill. . . . He does not clearly describe the operative steps of the method recited in claim 13, nor how those operative steps are performed by the Seiko driver.

The burden of proving invalidity on summary judgment is high. We find that LCS failed to prove by clear and convincing evidence on summary judgment that the Seiko driver, even if it were prior art, disclosed “each and every limitation” of claim 13, as is required to prove anticipation.

Id. at 1316. Similarly, in *Koito*, the Federal Circuit made clear that entering prior art into evidence without a sufficient explanation of the claim elements will not suffice. 381 F.3d at 1151-52. There, the alleged infringer entered the prior art references into evidence but “failed to provide any testimony or other evidence that would demonstrate to the jury how that reference met the limitations of the claims.” *Id.* at 1151. Although expert testimony was provided, that testimony lumped all the prior art references together and was general and conclusory. *Id.* at 1152. Citing *Schumer*, the Federal Circuit reiterated “what is necessary to show anticipation” by prior art:

Typically, testimony concerning anticipation must be testimony from one skilled in the art and must identify each claim element, state the witnesses’ interpretation of the claim element, and explain in detail how each claim element is disclosed in the prior art reference. The testimony is insufficient if it is merely conclusory.

Id. (quoting *Schumer*, 308 F.3d at 1315-16). Moreover, the testimony must be clear. It is not “the task of the district court[] to attempt to interpret confusing or general testimony to determine whether a case of invalidity has been made out, particularly at the summary judgment stage.” *Schumer*, 308 F.3d at 1316; *see also Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 24 (Fed. Cir. 2012) (finding the expert’s testimony was insufficient because it “failed to articulate how the [prior art] anticipated the other claims’ specific elements”).

Establishing that a prior art reference discloses each and every claim element and limitation is not a perfunctory exercise. Rather, it is an integral part of Static’s “very heavy burden” to provide clear and convincing evidence of invalidity by anticipation. In failing to do so, Static’s summary judgment motion as to anticipation fails in substance, not form. It is not the Court’s duty to make Static’s arguments and search the record for evidence supporting those arguments. Because Static has failed to meet its initial burden on summary judgment, its motion for summary judgment as to the issue of anticipation will be denied.

B. Claim 53 of ‘874 Patent

In its motion for summary judgment, Static argues that claim 53 of the ‘874 patent is invalid because it is anticipated, not enabled, and indefinite. Claim 53 discloses a cartridge that operates with multiple printer brands, and provides:

53. A toner cartridge adapted to fit within a toner cartridge-receiving cavity of a printer, comprising:
- a waste bin;
 - a hopper;
 - a circuit board disposed to engage an electrical communication means within the toner cartridge-receiving cavity of a printer belonging to a brand of printers;
 - a signal receiving means associated with said circuit board;
 - said signal receiving means associated with data for printer-cartridge interoperation with a plurality of printer brands;
 - said signal receiving means adapted to communicate the correct value for printer-cartridge interoperation to the printer.

‘874 Patent, col. 33, l. 30-col. 34, l. 9.

In its *Markman* order, the Court found that the “signal receiving means” should be construed as a means-plus-function limitation under 35 U.S.C. § 112 ¶ 6. (Dkt. 93) The Court held that the “printer controller electronics or universal printer chip” was the corresponding structure for the following two functions in claim 53: (1) receive a signal; and (2) communicate the correct value for printer-cartridge interoperation to the printer. Further, the Court construed “brand” to

mean “the name under which the printer is sold,” and “correct value” to mean “correct data.” The Court has since clarified that “correct value” means “data that facilitates printer-cartridge interoperation.” (Dkt. 243 at 21-24)

1. Anticipation under 35 U.S.C. § 102(b)

Static argues that claim 53 is invalid because it is anticipated by the following: (1) Lexmark T620 chipped cartridges; (2) Source Technologies ST9130 printer cartridges; and (3) Static’s chips for use in Lexmark T620 printer cartridges (“Static LT620 chips”). Static contends these constitute invalidating prior art because they allowed printer-cartridge interoperation with multiple brands of printers, and were sold before December 19, 2002.

Specifically, Static contends that the alleged prior art references allowed printer-cartridge interoperation with different brands of printers—the Lexmark T620, Source Technologies ST9130, and Unisys UDS 134 printers—and were prior to December 19, 2002. According to Lexmark’s corporate representative, Benjamin Newman, Lexmark manufactures laser printers and the toner cartridges that work in those printers and then sells those printers and cartridges under its own name (Lexmark) or under the names of other companies (*e.g.*, IBM, Unisys, Source Technologies). (Newman depo. 12-13⁴) Here, Lexmark manufactured a printer and the corresponding chipped cartridge, which were then sold under Lexmark’s name (Lexmark T620), Source Technologies’ name (Source Technologies ST9130), and Unisys’ name (Unisys UDS 134). (Newman depo. 42-43; Newman decl. ¶¶ 2, 26-29⁵) Newman also testified that the Lexmark T620 cartridge was first sold in June of 2001, and would work in the Lexmark T620, Source Technologies ST9130, and Unisys UDS 134 printers. (Newman depo. 42-44) Newman also

⁴ Newman Rule 30(b)(6) depo., Apr. 22, 2014, Dkt. 162 (filed under seal).

⁵ Newman decl., Jan. 31, 2014, Dkt. 161 (filed under seal).

testified that the Source Technologies ST9130 cartridge was first sold in 2001, and would work in the Lexmark T620 and Source Technologies ST9130 printers. (*Id.*) Further, according to Static’s corporate representative, Michael Shelby, the Static LT620 chips were introduced in May of 2002, and would work in the Lexmark T620, Source Technologies ST9130, and Unisys UDS 134 printers. (Shelby decl. ¶ 12⁶)

In response, Plaintiffs argue that Static fails to meet its burden of proving invalidity because Static: (1) fails to analyze every limitation of claim 53; (2) relies on inadmissible testimony from Shelby or Newman to prove the alleged prior art’s date of sale and functionality; (3) provides no corroborating evidence to support Shelby’s and Newman’s oral testimony. Further, Plaintiffs argue that the alleged prior art references—despite allowing printer-cartridge interoperability with Lexmark T620, Source Technologies ST9130, and Unisys UDS 134 printers—do not anticipate claim 53 because they share the same brand.

At the August 12, 2014 hearing, Static repeated its contention that the Lexmark T620, Source Technology ST 9130, and Unisys UDS134 all worked interchangeably. Static contended that the only way Plaintiffs could avoid anticipation is by arguing that Source Technology and Unisys are not different brands.

However, the Court agrees with Plaintiffs that Static has failed to meet its burden of showing anticipation by clear and convincing evidence. Static’s summary judgment motion fails to even address whether and how each element and limitation is disclosed in the alleged prior art reference. Although Static points to Newman’s testimony that the Lexmark T620 chipped cartridges “would work” in the Lexmark T620, Source Technologies ST9130 and Unisys UDS134 printers (and Shelby’s testimony that Static’s LT620 chips “would work” in those same printers),

⁶ Shelby decl., May 12, 2014, Dkt. 155.

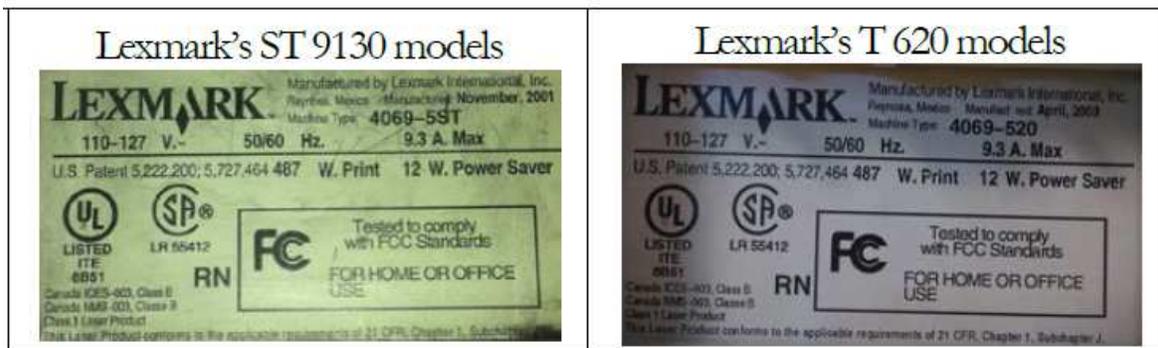
such testimony fails to address—let alone sufficiently explain—how each element of claim 53 is disclosed in the Lexmark T620 chipped cartridge, the Source Technologies ST9130 chipped cartridge (or Static’s LT620 chip). Because Static fails to put forth evidence and articulate how that evidence shows that the prior art references disclose every element of claim 53, Static has failed to meet its initial burden on summary judgment. Accordingly, Static’s motion for summary judgment as to whether claim 53 is invalid as anticipated is denied.

Plaintiffs’ Co-Brand Argument

Static’s summary judgment motion is denied for the above reasons; however, the Court wishes to address the parties’ arguments regarding “brand.” Although Newman testified that the Lexmark T620, Source Technology ST9130, and Unisys UDS 134 printers are sold under different names, Plaintiffs contend there is a genuine dispute as to whether those three printers are in fact different brands of printers. Plaintiffs cite to the following portion of the declaration of Schnell, Industrial’s employee and co-inventor of some of Plaintiffs’ patents-in-suit:

Functionally, all three printers are identical and accept the same brand identifier data. Each of these printers is commonly branded as a Lexmark printer. Each of these printers includes a Lexmark label on the printer housing[.]

(Schnell decl. ¶ 3⁷) Schnell’s declaration inserted the following pictures of the labeling included on the back of “Lexmark’s ST 9130” and “Lexmark’s T620” printers:



⁷ Schnell decl., May 27, 2014, Dkt. 170-1.

(*Id.*)⁸ Based on Schnell’s declaration, Plaintiffs assert that all three printers are “the same Lexmark printers, sold by Lexmark under the Lexmark brand, and include labeling that identifies Lexmark as the source of the printer.” (Dkt. 170 at 14) Plaintiffs conclude that “the three printers are commonly branded as Lexmark printers and would therefore operate using common brand identifier data.” (*Id.*)

Plaintiffs’ (and Schnell’s) conclusion—that the three printers are commonly branded as Lexmark printers—is premised on Schnell’s assertion that the printers are in fact “identical,” use the “same brand identifier data,” and include a “Lexmark label on the printer housing.” But even if those facts are true, it does not mean that the three printers share the same “brand,” which was construed by the Court to mean “the name under which the printer is sold.” (Dkt. 93 at 28) In other words, Plaintiffs fail to explain how Schnell’s factual assertions establish that all three printers are sold under the same name (*i.e.*, the Lexmark name).

Plaintiffs fail to provide evidence showing that, if the asserted facts are true—that the three printers are identical, accept the same brand identifier data, and include a Lexmark label—then the printers are sold under the Lexmark name. To start, Schnell’s assertion that all three printers are “identical” is vague. But more importantly, to the extent Plaintiffs contend that the printers must be sold under the same name because they are “identical,” their contention is unsupported by testimony or evidence. Further, Schnell’s assertion that the three printers use the same “brand identifier data” does not establish that they are sold under the same name. Put another way, there is no evidence that, if a printer accepts Lexmark brand identifier data, then that printer is sold under

⁸ Schnell’s declaration also inserted a picture regarding “Lexmark’s UDS 130” printer. However, the printer at issue is the Unisys UDS 134.

the Lexmark name.⁹ Similarly, there is no evidence that, if a printer has “labeling that identifies Lexmark as the source of the printer,” then the printer is sold under the Lexmark name.¹⁰

Moreover, the ‘874 patent itself describes these three printers as different brands of printers. The specification expressly provides that the 620 printer family includes printers sold under the “brand names Lexmark, Source Technologies, Toshiba, and IBM.” ‘874 patent, col. 24, ll. 44-64 (emphasis added). The specification also describes an embodiment where the cartridge can operate with printers in the 620 printer family, including the three printers at issue here: the Lexmark T620, Source Technology ST9130, and Unisys UDS134 printers. *See* ‘874 patent, col. 23, ll. 14-36. Thus, the ‘874 patent expressly describes the Lexmark T620 and Source Technology ST9130 printers as printers that are sold under different names (Lexmark and Source Technologies) but are in the same family (the 620 family). Similarly, although the Lexmark T620 and Unisys UDS 134 printers are sold under different names (Lexmark and Unisys), they are in the same family (the 620 family).

The record establishes that the Lexmark T620, Source Technology ST9130, and Unisys UDS 134 printers are sold under different names and therefore are different brands. Schnell’s declaration—Plaintiffs’ sole support for its contention that the three printers are all branded as Lexmark printers—fails to create a genuine dispute of material fact as to whether the Lexmark T620, Source Technology ST9130, and Unisys UDS 134 printers are different brands of printers.

⁹ In describing the three printers as using the same brand identifier data, Plaintiffs revisit their proposed claim construction of “brand.” The Court rejected this construction because the ‘874 patent does not support defining a printer’s “brand” based on its “brand identifier data.”

¹⁰ Moreover, Plaintiffs’ assertion that Lexmark is the “source of the printer” is vague. Specifically, it is not clear if Lexmark is the “source of the printer” because it is the manufacturer (which is undisputed) or because it is the name under which the printer is sold.

2. Enablement under 35 U.S.C. § 112 ¶ 1

Static's entire argument in support of its contention that claim 53 is invalid for lack of enablement is as follows:

The Plaintiffs' test for whether a chip infringed these claims was to place the chip in two different printers, and if the printer came up 'ready', without user intervention, then the chip infringed. However, the '874 Patent specification states expressly: "Thus it is necessary for a user to identify the brand name of the printer after the family has been automatically identified in the manner disclosed above." Col 24, Lines 65-67. None of the accused Static Control chips^[11] . . . require the user to identify the brand. The patent merely discloses a user identifying the brand, and turning a switch to match the brand. This is the only method disclosed for working in more than one brand. (Stem Dep. at 154-56). Brand override data is not referenced, nor is any structure or code that might reference brand override data. If Claim 53 of the '874 patent or Claim 10 of the '279 covers the Static Control chips which work in more than one brand without the "necessary" user identification, then the specification does not enable the claims.

(Dkt. 164 at 20) Static's argument is that—to the extent its accused chips infringe claim 53—the specification does not enable the claims. Specifically, Static contends claim 53 only covers a chip that allows printer-cartridge interoperation in multiple printer brands after the user identifies the brand by manually selecting a brand selector switch on the cartridge. Static contends the accused chips do not infringe claim 53, because they allow printer-cartridge interoperation in multiple printer brands without the user first identifying the brand. However—if claim 53 covers a chip that allows printer-cartridge interoperation in multiple brands without the user identifying the brand—then Static argues that claim 53 is invalid because it is not enabled.

In response, Plaintiffs argue that Static fails to meet its burden of proving invalidity because Static: (1) offers no evidence of what one skilled in the art would understand; and (2) fails to address any of the *In re Wands*, 858 F.2d 731 (Fed. Cir. 1988) factors regarding enablement. Further, Plaintiffs contend Static's enablement argument rehashes its proposed claim construction

¹¹ These "accused Static Control chips" are the accused chips, which allegedly infringe Plaintiffs' patents-in-suit and are therefore royalty-bearing.

position that claim 53 must be limited to an embodiment where the user manipulates a brand selector switch to identify the printer brand, so that the signal receiving means knows the brand of the printer and can activate the printer. Reasserting their position that claim 53 does not require a brand selector switch, Plaintiffs contrast claim 53 with claim 38. According to Plaintiffs, claim 38—unlike claim 53—discloses a printer cartridge containing a “brand selector switch” (which the user manually operates to select the printer’s brand) associated with a “signal-generating means” (which sends the universal printer chip a signal that identifies the printer’s brand). ‘874 patent, col. 31, ll. 36-50. Plaintiffs contend claim 38—not claim 53—is an example of a claim that is directed to “*one* embodiment of the invention where brand is determined through a selector switch that sends a signal to a signal receiving means.” (Dkt. 170 at 17) Plaintiffs then contend that claim 53 is enabled:

The ‘874 Patent enables this claim through its disclosure of a cartridge circuit board in electrical communication with the printer, thereby allowing for communication of the brand data once a signal is received from the printer. *See e.g.*, ‘874 Patent, 23:56-58. The Patent clearly discloses data for a plurality of printers—a feature not previously known—which can be communicated in response to the printer signal, just as the data may be communicated in response to a signal from a selector switch.

(*Id.* at 17-18)

A claim must be enabled in that “[t]he specification shall contain a written description of the invention, and of the manner and process of making and using [the invention], in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the [invention].” 35 U.S.C. § 112 ¶ 1. The enablement requirement is satisfied when one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation at the time the patent application was filed. *AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1243-44 (Fed. Cir. 2003). “[T]he question of undue experimentation is a matter of degree.” *PPG Indus., Inc. v. Guardian*

Indus. Corp., 75 F.3d 1558, 1564 (Fed. Cir. 1996). “Factors to be considered in determining whether a disclosure would require undue experimentation include (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims.” *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Enablement is a legal conclusion based on underlying factual considerations. *See Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1365 (Fed. Cir. 1997). The party alleging invalidity bears the burden of proving by clear and convincing evidence that the claims are invalid for lack of enablement. *Ormco Corp. v. Align Tech., Inc.*, 498 F.3d 1307, 1318 (Fed. Cir. 2007).

The Court agrees with Plaintiffs that Static has failed to meet its burden in moving for summary judgment on this issue. Instead of providing analysis or argument supporting its argument that claim 53 is not enabled, Static’s motion focuses on a different issue—whether Static’s accused chips infringe Plaintiffs’ patents-in-suit. Static fails to address or cite to any evidence as to whether: (a) one skilled in the art could make and use claim 53, (b) without undue experimentation, (c) at the time the ‘874 patent was filed. *See, e.g., Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1380 (Fed. Cir. 2007) (“The specification’s reference that teaches away from an injector system with a disposable syringe without a pressure jacket, combined with the testimonial evidence that such a system could not have been produced at the time of filing, supports the district court’s conclusion that the specification fails to fulfill the enablement requirement.”) *Auto. Techs. Intern., Inc. v. BMW of N. Am., Inc.*, 501 F.3d 1274, 1284 (Fed. Cir. 2007) (“In determining that undue experimentation would have been required to make and use an electronic side impact sensor, the district court properly relied on testimony from Delphi’s

expert[,]” who “discussed at length how a ‘great deal of experimentation’ would have been necessary to make an electronic side impact sensor after reading the specification”). Static has failed to meet its burden of establishing that there is no genuine issue of material fact as to whether claim 53 is not enabled by the specification. Accordingly, Static’s motion for summary judgment as to whether claim 53 is invalid because it is not enabled is denied.

3. Indefiniteness under 35 U.S.C. § 112 ¶ 2

Static argues that claim 53 is invalid as indefinite under 35 U.S.C. § 112 ¶ 2 because there is no structure corresponding to the “signal receiving means” in the written description of the ‘874 patent. Although the ‘874 patent discloses a “printer controller electronics or universal printer chip” as the corresponding structure for performing the functions associated with the signal receiving means, Static contends this is insufficient because the specification fails to describe:

how the signal receiving means performs the recited functions of selecting the correct data, performing the correct handshake, or communicating the correct value. . . . [S]imply reciting universal printer chip, or electronic circuitry, and the function it is to perform, without more, does not meet the requirement for definiteness.

(Dkt. 164 at 23) Static argues this is indefinite because the specification merely describes the signal receiving means as a general purpose computer or microprocessor, and does not provide any algorithms or otherwise describe how the universal printer chip performs the recited functions.

In response, Plaintiffs argue that the structure for the signal receiving means is not an algorithm because “[t]he signal receiving means . . . does not claim an abstract function requiring uncommon programming or algorithms to implement the invention.” (Dkt. 170 at 19) Plaintiffs contend that “the structure disclosed is a standard electrical component that could hold data for multiple families and brands of printers,” and “[o]ne skilled in the art would be familiar with the structure and would only need to include data for multiple printer families and brands on the known structures.” (*Id.*)

The definiteness requirement provides that claims of a patent must “particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112 ¶ 2. For a means-plus function limitation¹² to satisfy the definiteness requirement, the written description of the patent must clearly link the structure that performs the recited function. *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007). Thus, “if a claim includes a means-plus-function limitation, failure to disclose adequate structure corresponding to the claimed function results in the claim being invalid for indefiniteness.” *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1338 (Fed. Cir. 2008). Further, “[w]hether the written description adequately sets forth structure corresponding to the claimed function must be considered from the perspective of a person skilled in the art.” *Id.* “The question is not whether one of skill in the art would be capable of implementing a structure to perform the function, but whether that person would understand the written description itself to disclose such a structure.” *Id.* “A determination of claim indefiniteness is a legal conclusion,” but “[t]o the extent there are any factual findings upon which a trial court’s indefiniteness conclusion depends, they must be proven by the challenger by clear and convincing evidence.” *Id.* (citation and quotation marks omitted).

Static’s indefiniteness argument relies on *Aristocrat Technologies Australia Pty Ltd. v. International Game Technology*, 521 F.3d 1328 (Fed. Cir. 2008). In *Aristocrat*, the patent claims at issue covered a slot machine with a “control means” to control displayed images, to define a set of predetermined arrangements for a given game depending on the player’s selections, and to pay

¹² Means-plus-function claim limitations “shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112 ¶ 6. During claim construction, the court must identify the claimed function and determine the corresponding structure disclosed in the specification.

a prize when a predetermined arrangement of symbols was displayed. 521 F.3d at 1330-32. The only disclosed structure for those recited functions was a standard microprocessor-based gaming machine with “appropriate programming.” *Id.* Finding that the specification did not disclose the algorithm by which the functions are performed, the Federal Circuit held that the claims were indefinite for lack of structure corresponding to the recited functions. *Id.* at 1332-37. The Federal Circuit explained that “in a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.” *Id.* at 1333 (citation and quotation marks omitted). Thus, merely disclosing a “general purpose computer or microprocessor” was not enough; the specification must also disclose the algorithm for performing the claimed functions. *Id.* at 1333-34.

However, the principles of *Aristocrat* do not always apply to means-plus-function limitations involving computer-implemented inventions. In the case of *In re Katz Interactive Call Processing Patent Litig.*, 639 F.3d 1303 (Fed. Cir. 2011), the Federal Circuit reversed the district court’s ruling that several claims were invalid under *Aristocrat* where the specification disclosed general purpose processors and did not disclose the algorithms used by those processors to perform the recited functions. The patents at issue in *Katz* related to interactive call processing systems, such as a telephonic interface system for acquiring data from a large group of callers. *Id.* at 1308. The patents asserted means-plus-function claims, which recited functions of “processing,” “receiving,” and “storing.” *Id.* at 1316. The Federal Circuit held that to the extent those functions could be performed by a general purpose processor without special programming, “it was not necessary to disclose more structure than the general purpose processor that performs those functions.” *Id.*; see also *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed.

Cir. 2012) (“[A] general-purpose computer is sufficient structure if the function of a term such as ‘means for processing’ requires no more than merely ‘processing,’ which any general-purpose computer may do without any special programming.”). *Aristocrat* applies to means-plus-function limitations reciting “specific functions that would need to be implemented by programming a general purpose computer to convert it into a special purpose computer capable of performing those specific functions;” but *Aristocrat* does not apply if the “functions can be achieved by any general purpose computer without special programming.” *Id.*; see also *Ergo*, 673 F.3d at 1365 (“If special programming is required for a general-purpose computer to perform the corresponding claimed function, then the default rule requiring disclosure of an algorithm applies. It is only in the rare circumstances where any general-purpose computer without any special programming can perform the function that an algorithm need not be disclosed.”).

Here, Static fails to provide, “by clear and convincing evidence, that the specification lacks disclosure of structure sufficient to be understood by one skilled in the art as being adequate to perform the recited function.” *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1377 (Fed. Cir. 2001). Static provides no evidence that a person of ordinary skill in the art would not understand the printer controller electronics or universal printer chip, as disclosed in the specification of the ‘874 patent, to be structure capable of performing the functions recited in claim 53.

Moreover, the printer controller electronics or universal printer chip is not a computer that must be specially programmed in order to receive signals and communicate data that facilitates printer-cartridge interoperation with multiple printer brands. Because the ‘874 patent does not require a special purpose computer specifically programmed to carry out the recited functions associated with the signal receiving means, *Aristocrat* does not apply and claim 53 is not indefinite for failing to disclose an algorithm for performing the signal receiving means’ recited functions.

Static therefore fails to meet its initial burden of proving that claim 53 is indefinite. Accordingly, Static’s motion for summary judgment as to whether claim 53 is invalid because it is indefinite is denied.

C. Claim 1 of the ‘874 Patent

In its motion for summary judgment, Static argues that claim 1 of the ‘874 patent is invalid as being indefinite. Claim 1 is similar to claim 53—both cover a toner cartridge comprising, *inter alia*, a circuit board and a signal receiving means—except that claim 1 relates to the printer-cartridge interoperation with multiple printer families, not brands. Claim 1 discloses:

1. A toner cartridge adapted to fit within a toner cartridge-receiving cavity of a printer, comprising:
 - a waste bin;
 - a hopper;
 - a circuit board disposed to engage an electrical communication means within the toner cartridge-receiving cavity of a printer belonging to a family of printers;
 - a signal receiving means associated with said circuit board;
 - said signal receiving means associated with a data base of communication values for printer-cartridge interoperation with a plurality of printer families;
 - said signal receiving means adapted to identify an electrical signal to determine the family of the host printer from a plurality of families; and
 - said signal receiving means adapted to communicate the correct value for printer-cartridge interoperation to the printer.

‘874 Patent, col. 26, l. 64-col. 27, l. 14. In its *Markman* order, the Court found that the “signal receiving means” must perform the following functions: (1) receive a signal; (2) identify an electrical signal to determine the family of the host printer from a plurality of families; and (3) communicate the correct value for printer-cartridge interoperation to the printer. The Court found that the corresponding structure for those recited functions was the “printer controller electronics or universal printer chip.” Static argues that claim 1 of the ‘874 patent is invalid for indefiniteness for the same reasons as discussed in claim 53.

However, Static's argument fails for the reasons discussed with respect to claim 53. The universal printer chip is not a computer that is specially programmed to receive signals, identify an electrical signal to determine the family of the printer in which the cartridge is installed, and communicate data that facilitates printer-cartridge interoperability with multiple printer families. Thus, *Aristocrat* does not apply and claim 1 is not indefinite for failing to disclose an algorithm for performing the recited functions of the signal receiving means. Further, Static fails to cite any record evidence that a person of ordinary skill in the art would not understand the printer controller electronics or universal printer chip, as disclosed in the specification of the '874 patent, to be structure capable of performing the functions recited in claim 1. Accordingly, Static's motion for summary judgment as to whether claim 1 is invalid because it is indefinite is denied.

D. Claim 10 of '279 Patent

In its motion for summary judgment, Static argues that claim 10 of the '279 patent is anticipated and not enabled. Claim 10 of the '279 patent discloses a method for enabling printer-cartridge interoperability with different printer brands:

10. A method for enabling interoperability between an electro-photographic cartridge and an electro-photographic machine, said method comprising the steps of:

- providing an electro-photographic cartridge having a microcontroller disposed to electrically communicate with said electro-photographic machine;
- said microcontroller associated with data adapted to enable interoperability between an electro-photographic cartridge and an electro-photographic machine belonging to a plurality of electro-photographic machine brands; and
- communicating said data to said electro-photographic machine to enable interoperability between said electro-photographic cartridge and said electro-photographic machine.

'279 patent, col. 10, ll. 11-26. In its *Markman* order, the Court construed "brands" to mean "the name under which the printer is sold."

1. Anticipation under 35 U.S.C. § 102(b)

Static asserts that claim 10 of the '279 patent is anticipated by: (1) Lexmark T620 printer cartridges; (2) Source Technologies ST9130 printer cartridges; and (3) Static's LT620 chips. Static contends that the prior art references were sold before December 19, 2002, and allowed printer-cartridge interoperation with multiple brands of printers.

However, in its motion for summary judgment, Static combined its anticipation arguments regarding claim 53 of the '874 patent and claim 10 of the '279 patent, despite the fact that the '874 and '279 patents have different specifications. Static does not even discuss the '279 patent in its argument regarding anticipation.¹³ Further, as with claim 53, Static's neither provides evidence nor articulates how that evidence shows that the prior art references disclose each element and limitation of claim 10. Because Static has failed to meet its initial burden on summary judgment, Static's motion for summary judgment as to whether claim 10 is invalid as anticipated is denied.

2. Enablement under 35 U.S.C. § 112 ¶ 1

In its motion for summary judgment, Static's enablement arguments address claim 53 of the '874 patent, not claim 10 of the '279 patent. Static's motion fails to provide analysis and argument as to why claim 10 is not enabled. Accordingly, Static's motion for summary judgment as to whether claim 10 is invalid because it is not enabled is denied.

E. Claim 28 of the '859 Patent

In its motion for summary judgment, Static argues that claim 28 of the '859 patent is invalid as anticipated. The '859 patent, titled "Multiple Region Printer Chip," addresses the perceived

¹³ While Static asserts that the '874 and '279 patents define Lexmark T620, Source Technologies ST9130, and Unisys 134 as separate brands, Static only cites to the '874 patent. (Dkt. 164 at 19)

problem of manufacturers practicing “regional lockout” to prevent cartridges from being used in different geographic regions, and describes the general practice of regional lockout as follows:

Regional lockout is the programming practice, code, chip, or physical barrier used to prevent the playing of media designed for a device from the country where it is marketed on the version of the same device marketed in another country. It is a form of vendor lock-in control. Regional lockout usually uses manufacturer-specific hardware that is instructed to operate only with consumables designated for a particular region, and that region is then encoded onto the consumable.

Manufacturers utilize regional lockout to segment the world into different regions, and then only sell a particular region’s model (and, of course, region-encoded media) in that area.

‘859 patent, col. 1, ll. 38-49. The ‘859 patent explains that all printers have software or firmware that controls the operation of the printer and determines what commands are sent to the chipped cartridge, and that printers in different geographic regions are controlled by different firmware. The ‘859 patent discloses methods that use a microcontroller that allows a single cartridge to be used in multiple geographic regions.¹⁴ *Id.* at col. 1, ll. 58-60. Claim 28 provides:

28. A method of communicating an authentication code for a toner cartridge to a printer, comprising the steps of:
 providing a toner cartridge having a microcontroller in bidirectional communication with said printer when the cartridge is installed in the printer;
 providing an authentication code adapted for interoperation with printers in a plurality of geographic regions in association with the microcontroller;
 and
 transmitting the authentication code to the processor.

‘859 patent, col. 10, ll. 42-50. In its *Markman* order, the Court construed “microcontroller” to mean “any system, device or execution unit with added functionality capable of implementing the invention, and accordingly, must be capable of storing information, receiving signals originated

¹⁴ In one embodiment, “the microcontroller on the cartridge is associated with an authentication code that is operable in multiple regions.” *Id.* at col. 3, lines 8-10. This “universal authentication code is communicated regardless of the geographic region” of the printer. *Id.* at col. 3, ll. 12-13.

from an outside source, and transmitting signals to an outside source;” and “geographic region” to mean “a segment of the world as defined by a printer manufacturer.”

Static argues that claim 28 is anticipated by the following prior art: (1) Lexmark’s E230 chipped cartridges; (2) Static’s cartridge chips for use in Lexmark E230 printers; and (3) Lexmark’s E240, E330, E340, E120, and T640 chipped cartridges. Static contends the alleged prior art were sold before December 21, 2005, and allowed a cartridge to work in printers from multiple geographic regions.

Static asserts that the Lexmark E230 printer was the first Lexmark printer with firmware that checked for geographic regions. Specifically, Newman testified that: (1) the Lexmark E230 printers and associated chipped cartridges were first sold in June of 2004, and (2) at that time, the Lexmark E230 printers were “regionalized” in that they would look for “region data”—which is “data (in hexadecimal code) for the . . . regions in which the printer was sold: North America (01 00), Latin America (02 00), Asia Pacific (OC 00), Europe (30 00), Worldwide (FF FF)”—at the memory address locations 7E and 7F on the data maps of chipped cartridges. (Newman depo. at 50-53; Newman decl. at ¶¶ 33-37)

Newman also testified that, in June of 2004, the E230 cartridge chips contained “worldwide region data” (FF FF) in locations 7E and 7F, and the E230 printers “allowed E230 cartridge chips with either worldwide region data or specific region data” to operate regardless of the printer’s region.¹⁵ (Newman decl. ¶ 37) For example, an E230 printer that was “regionalized” for Europe would only allow a cartridge chip with worldwide data (FF FF) or Europe region data (30 00) to operate. (Newman depo. at 53)

¹⁵ Newman testified that later, in October 2005, Lexmark sold E230 printers with chipped cartridges that only contained region data, thus allowing the cartridge to operate only if the region data matched the geographic region of the printer. (Newman depo. 54)

Newman provided similar testimony for each of the prior art references sold by Lexmark. Specifically, Newman testified that, prior to December 21, 2005: (1) Lexmark sold the Lexmark E240, E330, E340, E120, and T640 printers and associated chipped cartridge; (2) each of those printers checked for geographic regions, but would allow cartridge chips with either worldwide data (FF FF) or region specific data to operate; and (3) the cartridge chips contained worldwide data (FF FF) in memory address 7E and 7F.

Static also cites to Shelby's declaration, which asserts that Static sold chips that allowed a cartridge to work in printers from multiple geographic regions before December 21, 2005:

Static Control first sold a chip for use on E230 and E330 chipped cartridges on April 15, 2005, which had worldwide data (FF FF) in locations 7E and 7F of the data map of the chips. After April of 2005, all of Static Control's chips for use on Lexmark printers either work worldwide or will only work in a single region, e.g. North America.

(Shelby decl. ¶ 9)

In response, Plaintiffs argue that Static fails to provide clear and convincing evidence that claim 28 is anticipated by the alleged prior art because: (1) Static relies on inadmissible testimony—and fails to provide corroborating evidence—to establish the dates and functionality of the alleged prior art; (2) Static has not shown that claim 28 is not entitled to the benefit of the September 27, 2005 application filing date for the '774 patent;¹⁶ and (3) the alleged prior art does not disclose each element of claim 28, because the printer firmware for the alleged prior art did not employ regional lockout, *i.e.*, consider geographic segments defined by a printer manufacturer.

Once again, Static has failed to meet its burden of showing anticipation by clear and convincing evidence. Static's summary judgment motion fails to analyze each element of claim

¹⁶ Although Plaintiffs appear to dispute claim 28's priority date—whether it is based on the December 21, 2006 filing date of the '859 patent or the earlier filing dates of the parent applications—in their motion for summary judgment, Plaintiffs' counsel indicated at the August 12, 2014 hearing that this issue “is really irrelevant.”

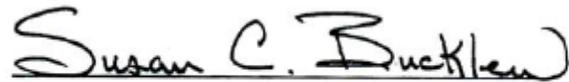
28, and articulate how the prior art references disclose each claim element and limitation. Even if the Court were to consider Newman's and Shelby's testimony—despite Plaintiffs' argument that doing so would be improper because the testimony is inadmissible and uncorroborated—summary judgment must still be denied. The declarations and deposition transcripts do not clearly describe the operative steps of claim 28 or how those steps are performed by a single prior art reference. And Static's motion fails to connect the facts purportedly established by such testimony to the claim 28's elements and limitations. Because Static has failed to meet its initial burden on summary judgment, its motion for summary judgment must be denied.

However, even if Static had met its initial burden of coming forward with evidence establishing anticipation, Plaintiffs submitted Schnell's declaration, in which he testifies based on his personal knowledge and experience, that the firmware on the Lexmark printers did not consider geographic regions before 2006. This creates a genuine issue of material fact as to whether the prior art references disclose each element of claim 28. Accordingly, Static's motion for summary judgment as to whether claim 28 is invalid as anticipated is denied.

IV. CONCLUSION

Accordingly, it is ORDERED AND ADJUDGED that Defendant Static Control Components, Inc.'s Motion for Partial Summary Judgment (Dkt. 164) is **DENIED**.

DONE AND ORDERED at Tampa, Florida, this 12th day of September, 2014.


SUSAN C. BUCKLEW
United States District Judge

Copies To: Counsel of Record