

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

VOTER VERIFIED, INC.,

Plaintiff,

-vs-

Case No. 6:09-cv-1969-Orl-19KRS

**ELECTION SYSTEMS & SOFTWARE,
INC.,**

Defendant.

ORDER

This case comes before the court on the following:

1. Second Motion for Summary Judgment by Voter Verified, Inc. (Doc. No. 71, filed Apr. 28, 2010);
2. Memorandum in Opposition to Plaintiff's Second Motion for Summary Judgment and Cross Motion and Memorandum in Support for Summary Judgment of Non-Infringement and Patent Invalidity by Election Systems & Software, Inc. (Doc. No. 84, filed May 28, 2010);
3. Reply to Election Systems & Software, Inc.'s Memorandum in Opposition to Plaintiff's Second Motion for Summary Judgment by Voter Verified, Inc. (Doc. No. 91, filed June 11, 2010);
4. Response to Election Systems & Software, Inc.'s Cross Motion for Summary Judgment and Memorandum by Voter Verified, Inc. (Doc. No. 100, filed June 28, 2010); and
5. Reply in Support of the Cross Motion for Summary Judgment by Election Systems & Software, Inc. (Doc. No. 107, filed July 12, 2010).

Background

I. Procedural History

On November 19, 2009, Voter Verified, Inc. (“VVI”) filed the present action against Election Systems & Software Inc. (“ES&S”). (Doc. No. 1.) The Complaint, seeking both damages and injunctive relief, alleges that ES&S willfully infringed United States Patents Nos. 6,769,613 (“the ‘613 patent”) and RE40,449 (“the ‘449 patent”). (*Id.* at 8.) ES&S denies VVI’s allegations of infringement and seeks a declaratory judgment that: (1) the ‘613 and ‘449 patents are invalid pursuant to 35 U.S.C. §§ 101, 102, 103, and 112; (2) the ‘613 patent is invalid pursuant to 35 U.S.C. § 251; and (3) ES&S does not and has never infringed the ‘613 and ‘449 patents. (Doc. No. 17 at 7-8.)

On April 28, 2010, VVI filed the present Motion for Summary Judgment. (Doc. No. 71.) VVI argues that there are no genuine issues of material fact relating to the direct infringement of claim 49 of the ‘613 and ‘449 patents by the ES&S AutoMark Voter Assist Terminal (“AutoMark System”) and the ES&S iVotronic Real Time Audit Log System (“iVotronic RTAL System”) (collectively, the “Accused Systems”). (*Id.* at 2, 11.) VVI also moves for summary judgment concerning the validity of the asserted patents and the issue of intervening rights. (*Id.* at 16, 20-24.) On May 28, 2010, ES&S responded in opposition to VVI’s summary judgment motion and filed a Cross Motion for Summary Judgment contending that: (1) the ‘613 patent cannot be infringed because it was surrendered; (2) the Accused Systems do not infringe claims 49, 56, 85, 93, and 94 of the ‘449 patent; and (3) claims 49, 56, 85, 93, and 94 of the ‘449 patent are invalid as anticipated under 35 U.S.C. § 102. (Doc. No. 84.)

II. The Accused Systems

A. The AutoMark System

The AutoMark System is an electronic ballot marking device designed to machine-mark the voting selections for voters who are visually impaired, have a disability, or who are more comfortable using an alternative language. (Doc. No. 84-2 ¶ 3.) The AutoMark System includes: (1) a computer; (2) a scanner; (3) a touch screen display; (4) an audio output; (5) braille-embossed keys; and (6) a printer. (*Id.* ¶ 4.) A voter using the AutoMark System initiates the voting process by inserting a blank paper ballot into the ballot feed tray. (*Id.* ¶ 6.) The AutoMark System then scans the paper ballot and either displays the various selections on the touch screen or reads an “audio ballot.” (*Id.* ¶ 7.) The voter then makes his or her selections, and the AutoMark System prints the selections onto the paper ballot. (*Id.* ¶ 10.)

The AutoMark System may also be used to verify the accuracy of paper ballots. (*Id.* ¶ 13.) If the AutoMark System is used in this manner, the voter inserts a marked ballot into the ballot feed tray. (*Id.*) The AutoMark System then reads the markings on the inserted ballot and displays a “verification summary” of the votes. (*Id.*) If the voter wishes to make changes to the ballot, a new ballot must be requested, and the voting process must be repeated. (*Id.*)

B. The iVotronic RTAL System

The iVotronic RTAL System is a direct recording electronic system that uses a touch screen terminal to display ballots and to record votes. (Doc. No. 84-2 ¶ 16.) The iVotronic System includes: (1) a card reader; (2) a touchscreen; (3) an audio output; (4) memory for storing election ballots; and (5) a printer. (*Id.* ¶ 17.) A voter using the iVotronic RTAL System begins the voting process by inserting a personalized electronic ballot card into a terminal. (*Id.* ¶ 18.) A ballot then appears on the

touch screen, and the voter selects candidates by pressing the touch screen itself. (*Id.*) As the voter makes selections, the printer prints a continual hard copy log of each action taken by the voter. (*Id.* ¶ 21.) A voter can verify the candidates or issues he or she selected by reviewing the hard copy log. (*Id.*) When the voter has finished making his or her selections, the voter presses the red “Vote” button at the top of the screen, and the votes are saved to the permanent memory of the iVotronic RTAL System. (*Id.* ¶ 19.) At the end of the day, the electronic votes stored in the memory of each iVotronic RTAL System are transferred to the master electronic ballot card which is used to transmit the entire precinct’s election results via modem to election headquarters. (*Id.* ¶ 20.) Each iVotronic RTAL System also prints summary reports displaying the total number of votes in both a bar code and a human readable format. (*Id.* ¶ 22.) The hard copy logs are retained for audit purposes only. (*Id.* ¶ 23.)

III. The Asserted Patents

The patents at issue in the present case include the ‘613 and ‘449 patents (collectively, the “Asserted Patents”). The ‘613 patent issued on August 3, 2004. (Doc. 1-1 at 1.) On February 14, 2005, co-inventor Anthony Provitola filed a reissue application for the ‘613 patent. (*Id.* at 10.) On August 5, 2008, the ‘613 patent was surrendered to the United States Patent and Trademark Office (“PTO”) and reissued as the ‘449 patent. (*Id.*) VVI is the owner by assignment of both the ‘613 and ‘449 patents. (*Id.* at 30.)

The Asserted Patents involve a computer voting system that displays a ballot for voting and instructs voters to input their selections. A paper ballot is then printed, and the voter is prompted to review the printed ballot for accuracy. If the printed ballot does not reflect the voter’s intended selections, the voter is permitted to correct the error by repeating the voting process. When the voter

is satisfied with the accuracy of the printed ballot, the printed ballot is submitted for final tabulation by a tabulation machine. Alternatively, a ballot scanning machine may be used to determine the accuracy of the printed ballot.

IV. The Prior Art

The prior art relevant to the present summary judgment motions includes three articles published in *The Risk Digest* in 1986. (Doc. No. 84 at 21-23; Doc. No. 84-6.) The first article, posted by Tom Benson, describes an electronic voting system that allows a voter to review a printed ballot for accuracy before the vote is electronically confirmed (the “Benson Article”). (Doc. No. 84-6 at 12.) The second article, posted by Michael McLaughlin, describes a voting system wherein a voter receives a printed receipt displaying the names of the candidates the voter selected (the “McLaughlin Article”). (*Id.* at 11.) The voter can then review the printed receipt for accuracy and request a corrective procedure in the event of an error. (*Id.*) The third article, posted by Kurt Hyde, proposes a security standard for voting involving a voting booth that prints a paper ballot for voters to review (the “Hyde Article”). (*Id.* at 9.) The paper ballot is then retained by the voting system for use in auditing the accuracy of the voting system’s computer. (*Id.*)

The relevant prior art also includes Italian Patent No. 1234224, which was issued to Giorgio Strini on June 5, 1992 (the “Strini Patent”). (Doc. No. 84 at 22-23; Doc. No. 84-7 at 1.) The Strini Patent discloses an electronic voting system with a touch screen monitor. (Doc. No. 84-7 at 2.) The voting system is capable of electronically storing votes and printing paper ballots that can be read by an optical scanner. (*Id.*)

Standard of Review

A party is entitled to summary judgment “if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled judgment as a matter of law.” Fed. R. Civ. P. 56(c); *accord Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986); *Hickson Corp. v. N. Crossarm Co.*, 357 F.3d 1256, 1259 (11th Cir. 2004). An issue of fact is “material” under the applicable substantive law, if it might affect the outcome of the case. *Hickson Corp.*, 357 F.3d at 1259. An issue of fact is “genuine” if the record taken as a whole could lead a rational trier of fact to find for the nonmoving party. *Id.* at 1260. The court must decide “whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law.” *Id.*; *Anderson*, 477 U.S. at 251-52.

The party moving for summary judgment has the burden of proving that: (1) there is no genuine issue as to any material fact, and (2) it is entitled to judgment as a matter of law. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). In determining whether the moving party has satisfied its burden, the court considers all inferences drawn from the underlying facts in the light most favorable to the party opposing the motion and resolves all reasonable doubts against the moving party. *Anderson*, 477 U.S. at 255. The court may not weigh conflicting evidence or weigh the credibility of the parties. *Hairston v. Gainesville Sun Pub. Co.*, 9 F.3d 913, 919 (11th Cir. 1993). If a reasonable fact finder could draw more than one inference from the facts and that inference creates an issue of material fact, the court must not grant summary judgment. *Id.* On the other hand, summary judgment must be granted “against a party who fails to make a showing sufficient to establish the existence of an element essential to that party’s case, and on which the party will bear

the burden of proof at trial.” *Celotex Corp.*, 477 U.S. at 322. In addition, when a claimant fails to produce “anything more than a repetition of his conclusory allegations,” summary judgment for the movant is “not only proper but required.” *Morris v. Ross*, 663 F.2d 1032, 1034 (11th Cir. 1981).

Analysis

I. Prior Art

The parties presently dispute whether the Benson, McLaughlin, and Hyde Articles (collectively the “Risk Digest Articles”) qualify as prior art for the purpose of analyzing the validity of the Asserted Patents. ES&S argues that the contested references are printed publications within the meaning of 35 U.S.C. § 102 because they were available to those interested in the art and could be located by subject matter. (Doc. No. 107 at 9.) VVI maintains that the contested references do not qualify as printed publications under 35 U.S.C. § 102 because the references were not indexed in a manner that would allow the documents to be located by those interested in the art during the relevant time period. (Doc. No. 100 at 9-15.)

A patent is invalid as anticipated under 35 U.S.C. § 102 if the invention was described in a printed publication “more than one year prior to the date of application for patent in the United States.” 35 U.S.C. § 102(b). Whether an asserted anticipatory reference qualifies as a printed publication under § 102 is a question of law based on the underlying facts of each particular case. *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1332-33 (Fed. Cir. 2009). When no facts are in dispute, the question of whether a reference represents a printed publication is a question of law. *In re Klopfenstein*, 380 F.3d 1345, 1347 (Fed Cir. 2004) (citing *In re Cronyn*, 890 F.2d 1158, 1159 (Fed. Cir. 1989)).

In order to qualify as a printed publication, a reference “must have been sufficiently accessible to the public interested in the art.” *Id.* at 1349 (internal citation omitted). “Because there are many ways in which a reference may be disseminated to the interested public, ‘public accessibility’ has been called the touchstone in determining whether a reference constitutes a ‘printed publication’ under 35 U.S.C. § 102.” *In re Hall*, 781 F.2d 897, 898-99 (Fed. Cir. 1986). The public accessibility of a reference must be evaluated on a case-by-case basis in light of the “facts and circumstances surrounding the reference’s disclosure to members of the public.” *Klopfenstein*, 380 F.3d at 1350. A reference is publicly accessible if it was “disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, [could] locate it.” *Kyocera Wireless Corp. v. Int’l Trade Comm’n*, 545 F.3d 1340, 1350 (Fed. Cir. 2008) (internal quotation omitted).

Prior cases evaluating the public accessibility of archived references have considered whether the available research tools were “sufficient to permit an interested researcher to locate and examine the reference.” *In re Lister*, 583 F.3d 1307, 1311-12 (Fed. Cir. 2009) (listing cases). For example, in *Hall*, the Federal Circuit found that a dissertation indexed, cataloged, and shelved in the stacks of a university library was publicly accessible and therefore qualified as a printed publication within the meaning of 35 U.S.C. § 102. 781 F.2d at 899-90. In *Cronyn*, the thesis at issue was housed in a main campus library and a chemistry department library. 890 F.2d at 1161. Each library contained a collection of student theses and a corresponding set of index cards that listed the title and author for each thesis. *Id.* The index cards were filed alphabetically by the author’s last name and bore “no relationship to the subject of the student’s thesis.” *Id.* Although the index cards and the student theses were available for public examination, the Federal Circuit held that the thesis at issue was not

publicly accessible because it “had not been either cataloged or indexed in a meaningful way.” *Id.* More recently, the Federal Circuit addressed the public accessibility of a reference available online in the Westlaw and Dialog databases. *Lister*, 583 F.3d at 1315. Relying on undisputed evidence that users of the Westlaw and Dialog databases could perform keyword searches of document titles, the Federal Circuit determined that the reference was publicly accessible and therefore a printed publication within the meaning of 35 U.S.C. § 102. *Id.* at 1315-16.

While cataloging and indexing have played a significant role in cases involving library references, the Federal Circuit has explained that neither cataloging nor indexing is a necessary condition for a reference to be publicly accessible. *Klopfenstein*, 380 F.3d at 1348 (“[O]ur cases do not limit this court to finding something to be a printed publication only when there is distribution and/or indexing.”). Depending on the circumstances of the disclosure, a variety of factors may be useful in determining whether a reference was publicly accessible, including: (1) the length of time the reference was displayed; (2) the expertise of the intended audience; (3) whether there is a reasonable expectation that the displayed information will not be copied; and (4) the ease with which the material could be copied. *Id.* at 1350-51. In short, the court must consider all of the facts and circumstances surrounding the disclosure in order to determine if a reference is publicly accessible. *Bruckelmyer v. Grounds Heaters, Inc.*, 445 F.3d 1374, 1379 (Fed. Cir. 2006).

VVI contends that the Risk Digest Articles do not qualify as printed publications because there is no evidence demonstrating that the articles could have been located during the relevant time period through the use of search terms or keywords. (Doc. No. 100 at 12.) In response, ES&S maintains that the Risk Digest Articles could have been located using the search tool on The Risk Digest website. (Doc. No. 107 at 9.)

In order to qualify as prior art under 35 U.S.C. § 102(b), the Risk Digest Articles must have been sufficiently accessible to the public interested in the art prior to December 7, 1999.¹ The uncontested evidence in the record indicates that The Risk Digest began as a subscription mailing list in 1985 and was well known in the community of people interested in the risks associated with using computers. (Doc. No. 105 ¶¶ 5, 13.) In January of 1995, Lindsay Marshall became the website “maintainer” for The Risk Digest and created a website that made all of the issues, including archived issues of The Risk Digest, available to the public at large.² (*Id.* ¶¶ 5, 8-9.) As of September 20, 1995, the website included a search tool that allowed users to search both current and archived articles in The Risk Digest using keywords. (*Id.* ¶¶ 12, 20, 23.) The contested Risk Digest Articles could have been located using this search tool by entering the keywords: vote, voting, ballot, election, and/or voting booth. (*Id.* ¶¶ 20, 23.) In light of this undisputed evidence, the court finds that the available research tools were sufficient to permit an interested researcher to locate and examine the Risk Digest Articles prior to December 7, 1999. *See Lister*, 583 F.3d at 1312 (holding that a reference archived in an on-line database searchable by keyword qualified as printed publication). Accordingly, VVI’s Motion for Summary Judgment will be denied to the extent it seeks a finding that the Risk Digest Articles do not qualify as prior art for the purpose of evaluating the validity of the Asserted Patents.

¹ Section 102(b) provides that “[a] person shall be entitled to a patent unless . . . the invention was patented or described in a printed publication in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States . . .” 35 U.S.C. § 102(b). The application for the ‘613 patent, to which the ‘449 patent claims priority, was filed on December 7, 2000. (Doc. No. 1-1.) Thus, in order to qualify as prior art in this case under 35 U.S.C. § 102(b), a reference must have been publicly accessible prior to December 7, 1999.

² The disputed Risk Digest Articles were included in Volume II, Issues 22 and 24 of The Risk Digest. (Doc. No. 105 ¶¶ 18-22.)

ES&S's Cross Motion for Summary Judgment will be granted to the extent it seeks a finding that the Risk Digest Articles qualify as prior art under 35 U.S.C. § 102(b).

II. The '613 patent

In the Complaint, VVI alleges that ES&S infringed the '613 patent. (Doc. No. 1 ¶ 35.) VVI moves for summary judgment on the validity and infringement of '613 patent. (Doc. No. 71 at 20-22.) In response, ES&S maintains that because the '613 patent was surrendered to the PTO as part of the reissue process, it cannot be infringed as a matter of law. (Doc. No. 84 at 4.)

Pursuant to 35 U.S.C. § 251, when a patent is “deemed wholly or partly inoperative or invalid by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Director shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent” Once a reissue patent has been granted, “the original patent cannot be infringed . . . for the original patent is surrendered.” *Seattle Box Co. v. Indus. Crating & Packing, Inc.*, 731 F.2d 818, 827 (Fed. Cir. 1984). Notwithstanding the surrender of the original patent to the PTO, 35 U.S.C. § 252 provides that “in so far as the claims of the original and reissued patents are *substantially identical*, such surrender shall not affect any action then pending or abate any cause of action then existing” 35 U.S.C. § 252 (emphasis added). In sum, the original patent must be surrendered to the PTO in order for the reissue patent to be granted, rendering the original patent unenforceable. Despite this surrender, a patent holder may still enforce a claim of the *reissued patent* against infringing activity that occurred before the reissue date if the asserted reissued claim is substantially identical to a claim in the original patent. *Bloom Eng'g Co., Inc. v. N. Am. Mfg.*, 129 F.3d 1247, 1250 (Fed. Cir. 1997). On the other hand, claims of the reissued patent that are not substantially identical to a claim in the

original patent cannot be asserted against infringing activity that occurred before the date of the reissue. *Id.*

Here, the original '613 patent issued on August 3, 2004. (Doc. No. 1-1 at 1.) On August 5, 2008, the '613 patent was surrendered to the PTO and reissued as the '449 patent. (*Id.* at 10.) As a result, ES&S cannot infringe the '613 patent. *See Seattle Box*, 731 F.2d at 827. While the claims of the reissued '449 patent that are substantially identical to the claims of the original patent are enforceable against ES&S for infringing activity that occurred before the reissue date, the original patent itself is rendered unenforceable by the reissue process. Furthermore, because the '613 patent was surrendered to the PTO, the court need not consider its validity. *See id.* (“The statute does not allow the claims of the original patent some other form of survival. The original claims are dead.”).

III. Invalidity

A. Anticipation

VVI seeks a finding on summary judgment that the claims of the '449 patent are not invalid as anticipated under 35 U.S.C. § 102. (Doc. No. 71 at 21-22.) In response, ES&S contends that claims 49, 56, 85, 93, and 94 of the '449 patent are invalid as anticipated under 35 U.S.C. § 102. (Doc. No. 84 at 19.)

A patent is invalid as anticipated if the invention “was described in a printed publication . . . before the invention thereof by the applicant for the patent.” 35 U.S.C. § 102(a). Thus, anticipation embodies the concept of novelty—if a “device or process has been previously invented (and disclosed to the public), then it is not new, and [] the claimed invention is anticipated by the prior invention.” *Net Moneyin, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). In order to establish anticipation, a party must demonstrate “that the four corners of a single prior art document describe

every element of the claimed invention.” *Xerox Corp. v. 3Com Corp.*, 458 F.3d 1310, 1322 (Fed. Cir. 2006) (internal citation and quotation omitted). Disclosure of each element independently, however, is insufficient to support a finding of anticipation. The Federal Circuit “has long held that anticipation requires the presence, in a single prior art disclosure, of all elements of a claimed invention *arranged as in the claim.*” *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008) (emphasis in original).

Despite the requirement that each element be described within the four corners of a document, a prior art reference that does not explicitly disclose each element of a claimed invention may still anticipate the claimed invention “if [the] missing characteristic is necessarily present, or inherent, in the [] reference.” *Schering Corp. v. Geneva Pharm., Inc.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003).

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure would be sufficient.

Cont’l Can Co. USA, Inc. v. Monsanto Co., 948 F.2d 1264, 1268 (Fed. Cir. 1991) (citation omitted) (emphasis in original). When the prior art reference is silent about the asserted inherent characteristics, extrinsic evidence may be used to fill the gaps by demonstrating that the “missing descriptive element is necessarily present in the thing described in the reference” *Id.*

A patent is presumed valid under 35 U.S.C. § 282, and a party challenging a patent’s validity bears the burden to prove the factual elements of invalidity by clear and convincing evidence.³ *Yoon*

³ The “clear and convincing” standard is an intermediate standard lying somewhere between the “beyond a reasonable doubt” and the “preponderance of the evidence” standards of proof. *Addington v. Texas*, 441 U.S. 418, 425 (1979). Although the exact definition is elusive, “clear and convincing evidence” has been described as evidence that “place[s] in the ultimate factfinder an
(continued...) ”

Ja Kim v. ConAgra Foods, Inc., 465 F.3d 1312, 1324 (Fed. Cir. 2006). In order to determine if the party asserting invalidity has met its statutory burden of proof, a court must consider an examiner’s decision on an original or reissue application. *Z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1354 (Fed. Cir. 2007). This “burden of proof is not reduced when prior art is presented to the court which was not presented to the PTO.” *Id.* (internal citation omitted). What a prior art reference discloses in an anticipation analysis is a factual determination that may be decided on a motion for summary judgment only if no material facts are disputed. *Novo Nordisk Pharm. v. Bio-Tech. Gen. Corp.*, 424 F.3d 1347, 1355 (Fed. Cir. 2005).

1. Claims 49, 85, and 93 of the ‘449 Patent and the Benson Article

ES&S maintains that the Benson Article, entitled “Computerized Voting,” discloses every element of claims 49, 85, and 93 of the ‘449 patent, rendering these claims invalid as anticipated. (Doc. No. 84 at 23.) In response, VVI maintains that the Benson Article fails to disclose a computer voting station programmed to meet the elements of the claims at issue. (Doc. No. 100 at 15.)

Claims 85 and 93 recite the element of “voting by a voter using a computer voting station programed to present an election ballot [and] accept input of votes from the voter according to the election ballot . . .” Claim 49 recites “voting by a vector using a computer voting station programed to present an election ballot [and] accept input of votes from the vector according to the election ballot . . .”⁴ Therefore, in order to anticipate these claims, the Benson Article must disclose a computer

³(...continued)

abiding conviction that the truth of its factual contentions are highly probable.” *Colorado v. New Mexico*, 467 U.S. 310, 316 (1984) (internal quotations omitted).

⁴ Claim 49 of the original ‘613 patent recites “voting by a *voter* using a computer voting station . . .” ‘613 Patent (emphasis added). Claim 49 of the reissued ‘449 patent recites “voting by a *vector* using a computer voting station . . .” ‘449 Patent (emphasis added). The parties do not
(continued...)

voting station programmed to present an election ballot and accept the input of votes. *See Novo Nordisk Pharms.*, 424 F.3d at 1354-55.

The Benson Article does not explicitly disclose the use of a computer programmed in this manner. (Doc. No. 84-6 at 12.) Instead, the article refers to the use of an “electronic voting booth.” (*Id.*) Nonetheless, ES&S’s expert, Michael Shamos, contends that the disclosed phrase “‘electronic voting booth’ is a “computer voting station programmed to present an election ballot.” (Doc. No. 95-2 at 1.)

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 [to establish anticipation] if it is merely conclusory.” *Schumer v. Lab. Computer Sys., Inc.*, 308 F.3d 1304, 1315-16 (Fed. Cir. 2002) (internal citation omitted); *Tech-Search, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1372 (Fed. Cir. 2002) (“Mere denials or conclusory statements are insufficient.”). The Federal Circuit has made clear that “it is not the task of the district court to attempt to interpret [] general testimony to determine whether a case of invalidity has been made out, particularly at the summary judgment stage. Indeed, to accept [] generalized testimony as evidence of invalidity is improper.” *Id.* at 1316. Here, Shamos neither provides an interpretation of the programmed computer element nor explains how the Benson Article discloses the element. Instead, Shamos merely states, in a conclusory fashion, that the term “electronic voting station” discloses the programmed computer element. (Doc. No. 95-2 at 1.) The record contains no other evidence to

⁴(...continued)
contend that this amendment is relevant to the present motions.

support a finding that the Benson Article discloses this element, either expressly or inherently. ES&S therefore fails to establish by clear and convincing evidence that the Benson Article discloses the programmed computer limitation.

However, the evidence in the record is sufficient to create a genuine issue of material fact regarding whether the Benson Article inherently discloses the programmed computer element. Accordingly, the court declines to grant summary judgment on the issue of anticipation of claims 49, 85, and 93 of the '449 patent by the Benson Article.

2. Claim 94 and the Benson Article

ES&S maintains that claim 94 of the '449 patent is also anticipated by the Benson Article. (Doc. No. 84 at 23.) In response, VVI contends that the Benson Article fails to disclose a computer voting station programmed to meet the limitations of claim 94 and therefore does not anticipate claim 94 of the '449 patent. (Doc. No. 100 at 15.)

In order to anticipate claim 94 of the '449 patent, the Benson Article must disclose each and every limitation of the claim, either expressly or inherently. *Novo Nordisk Pharms.*, 424 F.3d at 1354-55. Claim 94 recites:

A self-verifying voting system comprising: one or more voting stations comprising:
. . . (c) one or more computer programs which operate in a computer to: present the election ballot for voting; accept input of the votes from the voter; store the votes of the voter in the computer; print the votes of the voter so that the votes of the voter are readable by the voter and comparable by the voter with the votes the voter input; accept input of the voter as to whether the printed votes are acceptable or unacceptable; and record the votes stored in the computer which are acceptable

Therefore, in order to anticipate claim 94, the Benson Article must disclose a computer program that operates to preform these enumerated tasks.

In an effort to support its claim that the Benson Article anticipates claim 94, ES&S represents that the “Benson [Article] recites ‘a menu-driven ballot on a *computer* screen.’” (Doc. No. 84 at 23) (emphasis added). However, the Benson Article does not refer to a *computer* screen. (Doc. No. 84-6.) Instead, it refers to “a menu-driven ballot on *the* screen.” (*Id.* at 12) (emphasis added). Next, ES&S refers the court to the declaration of Michael Shamos who opines that the Benson Article discloses each and every limitation of claim 94 of the ‘449 patent. (Doc. No. 95-2 at 6.) In support of this assertion, Shamos provides a claim chart wherein the only reference to the computer program element is a quote from the Benson Article with the terms “computer program” added by Shamos in parentheses after the phrase “electronic voting booth.”⁵ Shamos does not provide an interpretation of the computer program element, nor does he explain how the term “electronic voting booth” discloses a programmed computer. Instead, Shamos simply states, in a conclusory fashion, that the computer program element is disclosed in the Benson Article, presumably in the phrase “electronic voting booth.” (Doc. No. 95-2 at 6.) The record contains no other evidence supporting a finding that the Benson Article discloses the computer program element. ES&S therefore fails to establish by clear and convincing evidence that the Benson Article discloses the computer program limitation of claim 94, either expressly or inherently.

However, the evidence in the record is sufficient to create a genuine issue of material fact regarding whether the Benson Article inherently discloses the computer program element and therefore anticipates claim 94. Accordingly, the court declines to grant summary judgment on the issue of anticipation of claim 94 of the ‘449 patent by the Benson Article.

⁵ The claim chart provided by Shamos states: “[s]uppose an electronic voting booth [computer program], with a screen of some sort” (Doc. No. 95-2 at 6.)

3. Claim 56 and the Strini Patent

ES&S maintains that the Strini Patent anticipates claim 56 of the '449 patent. (Doc. No. 84 at 23.) In response, VVI contends that the Strini Patent does not disclose each and every limitation of claim 56. (Doc. No. 100 at 9.) The parties fail to address the issue of display of both general voting instructions and direction to the voter for operation of the system.

In order to anticipate claim 56, the Strini Patent must disclose each and every limitation of the claim, either expressly or inherently. *Novo Nordisk Pharms.*, 424 F.3d at 1354-55. Claim 56 recites “one or more voting stations comprising: (a) one or more computer programs which operate in a computer to display general voting instructions, at least one election ballot showing the candidates and/or issues to be voted on, and direction to the voter for operation of the system” Therefore, in order to anticipate claim 56, the Strini Patent must disclose a computer program that operates to display both general voting instructions and directions to the voter regarding the operation of the system. Despite this requirement, ES&S does not cite, and this court is unable to find, such a disclosure in the Strini Patent. While the Strini Patent repeatedly discloses the use of a touch screen to display parties, candidates, and preferences, it does not disclose the display of any type of instruction or direction. (Doc. No. 84-7.) Because there is no evidence in the record to support a finding that the Strini Patent discloses the display of instruction or direction, ES&S fails to create a genuine issue of material fact regarding whether the Strini Patent anticipates claim 56 of the '449 patent. Accordingly, VVI's Motion for Summary Judgment will be granted to the extent it seeks a finding that claim 56 is not invalid as anticipated under 35 U.S.C. § 102.

4. Claims 1-48, 50-55, 57-84, and 86-92

In the Complaint, VVI contends that ES&S infringes the '449 patent. (Doc. No. 1 ¶¶ 27-28, 32.) VVI seeks a finding on summary judgment that the claims of the '449 patent are not invalid as anticipated under 35 U.S.C. § 102. (Doc. No. 71 at 21-22.) In response, ES&S contends that claims 49, 56, 85, 93, and 94 of the '449 patent are invalid as anticipated under 35 U.S.C. § 102 by the disclosed prior art. (Doc. No. 84 at 20.)

A patent is presumed valid under 35 U.S.C. § 282, and ES&S bears the burden to prove the factual elements of invalidity under 35 U.S.C. § 102 by clear and convincing evidence. *Yoon Ja Kim*, 465 F.3d at 1324. Notwithstanding this burden, ES&S fails to provide any evidence supporting a finding that claims 1-48, 50-55, 57-84, and 86-92 of the '449 patent are invalid as anticipated under 35 U.S.C. § 102. Accordingly, summary judgment will be granted for VVI to the extent VVI seeks a finding that claims 1-48, 50-55, 57-84, and 86-92 of the '449 patent are not invalid as anticipated under 35 U.S.C. § 102.

B. Obviousness

VVI maintains that ES&S fails to create a genuine issue of material fact regarding the obviousness of the '449 patent under 35 U.S.C. § 103. (Doc. No. 71 at 21-22; Doc. No. 91 at 9.) ES&S contends that the asserted claims are invalid as obvious in light of various combinations of prior art references detailed in the expert report of Michael Shamos. (Doc. No. 84 at 23-24.) However, ES&S does not fully brief the issue of obviousness but instead requests permission to submit additional briefing on the issue if the court determines that claims 49, 56, 85, 93, and 94 of the '449 patent are not anticipated by the disclosed prior art. (*Id.*) Having determined that these claims are not anticipated by the disclosed prior art, the court will grant ES&S leave to file a supplemental

summary judgment motion addressing the issue of obviousness in accordance with the deadlines set forth in the Case Management and Scheduling Order. (Doc. No. 54.)

C. Invalidity - 35 U.S.C. § 101 and § 112

In its Counterclaim, ES&S alleges that the '449 patent is invalid under 35 U.S.C. § 101 and § 112. (Doc. No. 7 ¶ 8.) VVI moves for summary judgment on the issue of invalidity under 35 U.S.C. § 101 and § 112, arguing that ES&S fails to present sufficient evidence to create a genuine issue of material fact as to the invalidity of the '449 patent under either section. (Doc. No. 71 at 22-24.) ES&S provides no response in opposition to VVI's arguments regarding invalidity under 35 U.S.C. § 101, but it alleges that claim 94 of the '449 patent is invalid as indefinite under 35 U.S.C. § 112 ¶ 6. (Doc. No. 84 at 18.)

A patent is presumed valid, and ES&S bears the burden to prove the factual elements of invalidity under 35 U.S.C. § 101 and § 112 by clear and convincing evidence. *Libel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371, 1377 (Fed. Cir. 2007); *Arrhythmia Research Tech., Inc., v. Corazonix Corp.*, 958 F.2d 1053, 1056 (Fed. Cir. 1992); *see also Canon Computer Sys., Inc. v. Nu-Kote Intern., Inc.*, 134 F.3d 1085, 1088 (Fed. Cir. 1990) (“[W]here the challenger fails to identify any persuasive evidence of invalidity, the very existence of a patent satisfies the patentee’s burden on the validity issue.”). Notwithstanding this burden, ES&S fails to provide evidence supporting a finding that any claim of the '449 patent, aside from claim 94, is invalid under either 35 U.S.C. § 101 or § 112. Accordingly, summary judgment will be granted for VVI to the extent VVI seeks a finding that the claims of the '449 patent, excluding claim 94, are not invalid under either 35 U.S.C. § 101 or § 112. The validity of claim 94 will be addressed separately. *See infra* section IV.B.

IV. Infringement

VVI moves for summary judgment on the issue of the Accused Systems' infringement of claim 49 of the '449 patent. (Doc. No. 71 at 2, 10.) In response, ES&S moves for summary judgment on the issue of the Accused Systems' non-infringement of claims 49, 56, 85, 93, and 94. (Doc. No. 84 at 4.)

An infringement analysis involves two steps. First, the court must construe the claims, a question of law in which the scope and meaning of the asserted claims is defined. *Lacks Indus., Inc. v. McKechnie Vehicle Components USA, Inc.*, 322 F.3d 1335, 1341 (Fed. Cir. 2003). The claims as construed are then compared to the accused device. *Id.* This is a question of fact. *Insituform Techs., Inc. v. Cat. Contracting, Inc.*, 161 F.3d 688, 692 (Fed. Cir. 1998). To prevail, a plaintiff must establish by a preponderance of the evidence that the accused device infringes one or more claims of the patent either literally or under the doctrine of equivalents. *Amgen Inc. v. F. Hoffman-LA Roche Ltd.*, 580 F.3d 1340, 1374 (Fed. Cir. 2009).

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal citation omitted). Generally, claim terms take on their ordinary and accustomed meanings as understood by one of ordinary skill in the pertinent art at the time of filing. *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003). "The inquiry into how a person of ordinary skill in the art understands a claim term therefore provides an objective baseline from which to begin claim interpretation." *Phillips*, 415 F.3d at 1313.

In construing the meaning of claim terms, courts must first examine the patent's intrinsic evidence. *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Intrinsic

evidence includes the claim language, the specification, and the prosecution history. *Id.* The claims themselves provide substantial guidance as to the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. A term’s context in the asserted claim can be instructive, and courts presume a difference in meaning and scope when a patentee uses different phrases in separate claims. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.*

“[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of the disputed term.’” *Id.* (quoting *Vitronics*, 90 F.3d at 1582). A patentee may define his own terms in the specification, giving a claim term a different meaning than the term would otherwise possess, or a patentee may disclaim or disavow the claim scope otherwise included in the ordinary and accustomed meaning of the term. *Id.* at 1315. The specification may also assist in the construction of ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). The prosecution history is another tool used to supply the proper context for claim construction, as a patent applicant may define a term in the prosecution of the patent or otherwise limit the scope of a claim term. *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004).

In addition to consulting intrinsic evidence, the claim language, the specification, and the prosecution history, the court may also consult extrinsic evidence, including dictionaries, treatises, encyclopedias, and expert testimony. *Phillips*, 415 F.3d at 1324. Although extrinsic evidence can be useful, it is “less significant than the intrinsic record in determining the ‘legally operative meaning

of claim language.’” *Id.* at 1317 (quoting *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 358 F.3d 858, 862 (Fed. Cir. 2004). Extrinsic evidence is less reliable than intrinsic evidence and must not be “used to contradict the meaning that is unambiguous in light of the intrinsic evidence.” *Vitronics*, 90 F.3d at 1583-84.

Once the claim terms have been construed, the court compares the claims, as construed, to the accused device. *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1350-51 (Fed. Cir. 2001). “Direct infringement requires a finding that one or more claims of the patent read on the accused device, either literally or under the doctrine of equivalents.” *Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1310 (Fed. Cir. 2005) (internal citations omitted). To literally infringe a claim, “each and every limitation set forth in [the] claim must be found in an accused product, exactly.” *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir. 1995). “If any claim limitation is absent from the accused device, there is no literal infringement as a matter of law.” *Bayer AG v. Elan Pharm. Research Corp.*, 212 F.3d 1241, 1247 (Fed. Cir. 2000). “A finding of infringement under the doctrine of equivalents requires a showing that the difference between the claimed invention and the accused product or method was insubstantial or that the accused product or method performs substantially the same function in substantially the same way with substantially the same result as each claim limitation of the patented product or method.” *AquaTex Indus., Inc. v. Techniche Solutions, Chem. Co.*, 479 F.3d 1320, 1326 (Fed. Cir. 2007) (internal citations omitted). Equivalents are assessed on a limitation-by-limitation basis. *Id.*

A. Claims 49, 85, and 93

VVI maintains that there are no genuine issues of material fact relating to the Accused Systems’ infringement of claim 49 of the ‘449 patent. (Doc. No. 71 at 2, 10.) In response, ES&S

moves for a finding of non-infringement of claims 49, 85, and 93, arguing that because no single party performs or controls each step of the claimed methods, the claims cannot be infringed by ES&S. (Doc. No. 84 at 6.)

“Direct infringement requires a party to perform or use each and every step or element of a claimed method or product.” *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1380 (Fed. Cir. 2007) (citing *Warner-Jenkinson Co., Inc. v. Hilton Davis Corp.*, 520 U.S. 17, 20 (1997)). “When a party participates in or encourages infringement but does not directly infringe a patent, the normal recourse under the law is for the court to apply the standards for liability under indirect infringement.” *Id.* at 1379. A finding of indirect infringement requires, as a predicate, a finding that some party directly infringes and thus performs each step of the claimed method. *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004). Therefore, “[a]bsent direct infringement of the patent claims, there can be neither contributory infringement or inducement of infringement.” *Met-Coil Sys. Corp. v. Korners Unlimited, Inc.*, 803 F.2d 684, 687 (Fed. Cir. 1986).

Notwithstanding the general requirement that a single party must perform each step of a patented method in order to establish infringement, liability cannot be avoided “simply by contracting out steps of a patented process to another entity.” *BMC Res.*, 498 F.3d at 1381. Instead, where the actions of multiple parties combine to perform the steps of a claimed method, the claim “is directly infringed if one party exercises ‘control or direction’ over the entire process such that every step is attributable to the controlling party, i.e. the ‘mastermind.’” *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1329 (Fed. Cir. 2008) (citing *BMC Res.*, 498 F.3d at 1380-81). The requisite level of control or direction over the act committed by a third party is established when “the law would traditionally hold the accused direct infringer vicariously liable for the acts committed by another

party.” *BMC Res.*, 498 F.3d at 1380. On the other hand, “arms-length cooperation will not give rise to direct infringement by any party.” *Id.*

In order to evaluate the alleged infringement of claims 49, 85, and 93, the court must first construe the asserted claims to determine which party performs the various method steps. ES&S argues that the steps in claims 49, 85, and 93, if performed at all, would be performed by multiple actors. (Doc. No. 84 at 5.) VVI concedes that the method steps at issue are not performed by a single actor, but it maintains that ES&S exerts sufficient control over the voters’ actions to establish a claim of direct infringement. (Doc. No. 100 at 3.) Neither of the litigants addresses the issue of determining which party performs the various steps of the claimed methods.

The terms of the claims themselves indicate that a voter performs steps (c), (d), and (e) of claim 49, steps (a), (c), and (d) of claim 85, and steps (a), (b), (c), and (d) of claim 93.⁶ In fact, these

⁶ Claim 49 recites:

A method of voting providing for self-verification of a ballot comprising the steps of:

- (a) voting by a vector using a computer voting station programmed to present an election ballot, accept input of votes from the vector according to the election ballot, temporarily store the votes of the voter;
- (b) printing of the votes of the voter from the votes temporarily stored in the computer for the voting station;
- (c) comparison by the voter of the printed votes with the votes temporarily stored in the computer for the voting station;
- (d) decision by the voter as to whether a printed ballot is acceptable or unacceptable;
- (e) inputting of information as to the acceptability of a printed ballot by the voter; and
- (f) submission of an acceptable printed ballot for tabulation.

Claim 85 recites:

A method of voting providing for self-verification of a ballot comprising the steps of:

- (a) voting by a voter using a computer voting station programmed to present an election ballot, accept input of votes from the voter according to the election ballot, temporarily store the votes of the voter;
- (b) printing of the votes of the voter from the votes temporarily stored in the computer for the voting station;

(continued...)

claims specifically state that the steps are to be performed “by the voter.”⁷ Accordingly, the court construes these claim elements as requiring performance by a voter.

On the other hand, step (b) of claims 49, 85, and 93 simply recites the method step of “printing of the votes of the voter.” There is no indication in either the claim language or the specification that the voter performs step (b), nor is there any indication that the voter is required to perform a specific step in order to initiate the printing of the votes. In addition, the parties do not contend that the voter performs every step of claims 49, 85, and 93. (Doc. No. 84 at 4-6; Doc. No. 100 at 2-4.) Instead, the specification repeatedly discloses that the claimed voting system automatically prints the votes after the voter inputs his or her votes into the voting program. *See, e.g.*, ‘449 Patent fig.3; col.3 ln.26-30; col.3 ln.64-67; col.5 ln.1-14. For example, the specification states that “[a] printed ballot *produced*

⁶(...continued)

- (c) comparison by the voter of the printed votes with the votes temporarily stored in the computer for the voting station;
- (d) decision by the voter as to whether a printed ballot is acceptable or unacceptable; and
- (e) submission of an acceptable printed ballot for tabulation.

Claim 93 recites:

A self-verifying voting method comprising the steps of:

- (a) voting by a voter using a computer voting station programmed to present an election ballot, accept input of votes from the voter according to the election ballot, store the votes of the voter;
- (b) printing of the votes of the voter from the votes temporarily stored in the computer for the voting station;
- (c) examination by the voter of the printed votes for correctness and comparison with the votes the voter input;
- (d) decision by the voter as to whether a printed ballot is acceptable or unacceptable; and
- (e) recording of the acceptable votes stored in the computer
- (f) submission of the acceptable printed votes; and
- (g) tabulation of the acceptable recorded and/or acceptable printed votes.

⁷ Mr. Provitola testified during his deposition that elements (c), (d), and (e) of claim 49, element (e) of claim 85, and elements (c), (d), and (f) of claim 93 are performed by a voter. (Doc. No. 81-1 at 5-10.)

by the computer voting station which shows the votes of a voter is then presented to the voter.” ‘449 Patent col.2 ln.26-29 (emphasis added). The specification also states that the “vote of the voter is [] presented to the voter in the form of a paper ballot, *printed by* the printer for that voting station, the paper ballot being *produced by* the printer in the printing process by the computer program” *Id.* col.5 ln.1-4 (emphasis added). Finally, the specification does not suggest that any party, other than a printer, is capable of performing the step of printing the votes of the voter. Accordingly, the court finds that step (b) in claims 49, 85, and 93 is performed by a printer.

Having determined that step (b) is performed by a printer, the court must next determine if ES&S, which has been shown to develop and market the Accused Systems, exercises sufficient control or direction over the steps performed by the voters such that each step of the asserted method claims is attributable to ES&S.⁸ The only evidence in the record directly indicating that ES&S controls the voters’ actions is the instruction the Accused Systems provide the voters regarding use of the Accused Systems. (Doc. No. 37.) However, in *Muniauction*, the Federal Circuit determined that instructing users on the use of an online auction method constituted insufficient evidence of control to establish any theory of infringement. 532 F.3d at 1330. Moreover, VVI has identified no legal theory under which ES&S might be held vicariously liable for the actions of the voters. Thus, even considering the evidence in the light most favorable to it, VVI fails to create a genuine issue of material fact concerning whether ES&S exercises sufficient control or direction over the actions of

⁸ The parties do not assert, and the court does not find, that the voters exercise sufficient direction or control over step (b) to establish direct infringement. As discussed previously, the specification does not indicate that the voter is required to perform any specific step, aside from voting, in order to initiate in the printing of the votes. Instead, the specification indicates that the claimed voting system prints the votes automatically after the voter inputs his or her vote into the voting program. Thus, the voter does not exercise sufficient direction or control over step (b) to render step (b) attributable to the voter.

the voters such that each step of the claimed methods is attributable to ES&S. Accordingly, ES&S's Cross Motion for Summary Judgment will be granted to the extent it seeks a finding that the Accused Systems do not infringe claims 49, 85, and 93 of the '449 patent.

B. Claims 56 and 94

Claim 56 of the '449 patent recites "a means for tabulating the printed ballots generated by said one or more voting stations." Claim 94 of the '449 patent similarly recites "a means for tabulating the acceptable votes of the voter recorded and/or printed in said one or more voting stations." ES&S contends that these quoted limitations are recited in a "means-plus-function" format and therefore should be construed to cover only those structures specifically disclosed in the specification as performing the recited function. (Doc. No. 84 at 15-16.) ES&S maintains that the disclosed structure for tabulating printed votes is an "electro-optical sensing device that can read filled-circles or other ballot selection markings, such as filled-ovals or filled rectangles." (*Id.* at 17.) ES&S further contends that the disclosed structure corresponding to the tabulating recorded votes function is a general purpose computer, rendering claim 94 invalid as indefinite. (*Id.* at 18.) VVI concedes that the contested limitations are "means-plus-function" limitations but argues that the scope of the limitation in claim 56 should be construed to include tabulation by hand. (Doc. No. 100 at 7-8.) VVI offers no response in opposition to ES&S's contention that claim 94 is invalid as indefinite. (*Id.*)

1. Means-Plus-Function Limitations

A "means-plus-function" limitation recites a function to be performed without reciting a specific structure for performing the function. Instead, the limitation recites a "means" for performing the stated function. *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1318 (Fed. Cir. 2003). Title 35 U.S.C. § 112, ¶ 6 requires that such "means" limitations "be construed to cover the

corresponding structure, material, or acts described in the specification and equivalents thereof” for performing the claimed function.⁹ 35 U.S.C. § 112, ¶ 6; *Lockheed Martin*, 324 F.3d at 1318. Use of the term “means” in a claim limitation creates a presumption that § 112, ¶ 6 has been invoked. *Kemco Sales, Inc. v. Control Papers Co., Inc.*, 203 F.3d 1352, 1361 (Fed. Cir. 2000). That presumption is overcome if the properly construed claim limitation recites a sufficient structure to perform the claimed function. *Id.* (internal citation omitted).

The proper construction of a means-plus-function limitation involves two steps. First, the court must identify the claimed function. *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1324 (Fed. Cir. 2001) (citing *Kemco*, 208 F.3d at 1361). Once the function is established, the patent must be examined to identify the corresponding structure disclosed in the specification that performs the claimed function. *Lockheed Martin*, 249 F.3d at 1324. A structure is “corresponding only if the specification [] clearly associate[s] the structure with the performance of the function.” *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1113 (Fed. Cir. 2002) (internal citation omitted). A court “may not import structural limitations from the written description that are unnecessary to perform the claimed function.” *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001). Failure to disclose an adequate structure corresponding to the recited function “results in the claim being of indefinite scope, and thus invalid.” *Cardiac Pacemakers*, 296 F.3d at 1114; *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1376 (Fed. Cir. 2001).

⁹ Section 112, paragraph 6 states that “[a]n element in a claim for a combination may be expressed as means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112 ¶ 6.

Literal infringement of a means-plus-function claim limitation “requires that the relevant structure in the accused device performs the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification.” *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1099 (Fed. Cir. 2008) (citing *Applied Med. Res. Corp. v. U.S. Surgical Corp.*, 448 F.3d 1324, 1333 (Fed. Cir. 2006)). Once the relevant structure in the accused device has been identified, a party may prove it is equivalent to the disclosed structure by “showing that the two perform the identical function in substantially the same way, with substantially the same result.” *Kemco*, 208 F.3d at 1364. The party asserting infringement ultimately bears the burden of proof on this issue.

If the accused structure is not equivalent to the disclosed structure under a theory of literal infringement because it does not perform the identical function of the disclosed structure, it may nevertheless be an “equivalent” for purposes of establishing infringement under the doctrine of equivalents. *Id.* at 1364. Unlike literal infringement, the doctrine of equivalents does not require the accused structure to perform the identical function of the disclosed structure. Instead, infringement may be established under the doctrine of equivalents where the accused structure is found to perform substantially the same function as the disclosed structure. *Dawn Equip. Co. v. Ky. Farms Inc.*, 140 F.3d 1009, 1016 (Fed. Cir. 1998).

2. Claim 56

Claim 56 of the ‘449 patent recites “a means for tabulating the printed ballots generated by said one or more voting machines.” The use of the term “means” creates a presumption that the limitation should be construed as a means-plus-function limitation under § 112, ¶ 6. *See Kemco Sales*, 203 F.3d at 1361. This presumption is further supported by the fact that the limitation recites a

corresponding function but does not recite a definite structure for performing that function. *Id.* In fact, the claim language corresponding to the function fails to recite any structure for performing the means function. Furthermore, the parties do not dispute the construction of the limitation as a means-plus-function limitation. Accordingly, the court finds that the “means for tabulating the acceptable votes” limitation of claim 56 is a “means-plus-function” limitation under § 112, ¶ 6.

Having determined that the limitation falls under § 112, ¶ 6, the court must begin the construction of the limitation by identifying the function related to the means language. *See Telemac*, 247 F.3d at 1324. In accordance with the plain language of the claim, the function recited in claim 56 relating to the means language is “tabulating the printed ballots.” *See JW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1330 (Fed. Cir. 2005) (“A court may not adopt[] a function different from that explicitly recited in the claim.”).

In order to infringe claim 56 of the ‘449 patent either literally or under the doctrine of equivalents, a relevant structure in ES&S’s AutoMark System must perform either the identical function of tabulating printed ballots or a substantially similar function. *Welker Bearing*, 550 F.3d at 1099. The undisputed evidence in the record, however, demonstrates that no structure in the AutoMark System is capable of tabulating printed ballots. (Doc. No. 84-2 ¶¶ 11-12.) While the AutoMark System is capable of marking a single printed ballot or reading a single printed ballot for verification purposes, there is no evidence to establish that the AutoMark System is also capable of tabulating the paper ballots it marks or reads. (*Id.* ¶ 13.) Instead, a jurisdiction using the AutoMark System that wishes to tabulate the printed ballots would have to do so by hand or with the assistance

of a separate tabulation machine.¹⁰ (*Id.* ¶¶ 12-13.) Thus, the Automark System does not perform the identical function of the means-plus-function limitation of claim 56, nor does it perform a substantially similar function. Accordingly, ES&S’s Cross Motion for Summary Judgment will be granted to the extent it seeks a finding that the AutoMark System does not infringe claim 56 of the ‘449 patent, either literally or under the doctrine of equivalents.

With respect to the iVotronic RTAL System, the evidence in the record demonstrates that as the voter makes selections, the printer prints a continual hard-copy log of each action taken by the voter. (Doc. No. 84-2 ¶ 21.) These hard-copy logs are retained for audit purposes. (*Id.* ¶ 23.) At the end of the election, the iVotronic RTAL System also prints summary reports from its permanent memory that appear in both a bar code and a human readable format. (*Id.* ¶ 22.) There is no evidence in the record to establish that the iVotronic RTAL System includes a structure capable of tabulating either the hard-copy log or the summary reports. (*Id.* ¶ 23-24.) Instead, a jurisdiction using the iVotronic RTAL System that wishes to tabulate the hard-copy log would have to do so by hand.¹¹ (*Id.* ¶¶ 25, 26.) If the jurisdiction wishes to tabulate the summary reports, that jurisdiction would have to either use a separate bar code scanner or manually count the printed totals. (*Id.* ¶ 24.) Because the iVotronic RTAL System is incapable of tabulating the printed hard-copy log or the summary reports, it does not perform the identical function of the means-plus-function limitation of claim 56, tabulating the printed ballots, nor does it perform a substantially similar function. Accordingly, ES&S’s Cross

¹⁰ The AutoMark System erases a voter’s selection as soon as the ballot is marked. (Doc. No. 84-2 ¶¶ 11, 14.) As a result, the AutoMark System is also incapable of tabulating electronically stored votes.

¹¹ ES&S does not sell any product that can scan or otherwise tabulate the hard-copy log containing each individual voter’s selections. (Doc. No. 84-2 ¶ 26.) Steve Bolton, Vice President of Intellectual Property Management for ES&S, states in his declaration that he has “never seen or heard of a jurisdiction reviewing and counting the individual entries on the paper audit tape.” (*Id.* ¶ 25.)

Motion for Summary Judgment will be granted to the extent it seeks a finding that the iVotronic RTAL System does not infringe claim 56 of the '449 patent, either literally or under the doctrine of equivalents.

3. Claim 94

Claim 94 of the '449 patent recites “a means for tabulating the acceptable votes of the voter recorded and/or printed in said one or more voting stations.” The use of the term “means” creates a presumption that the limitation should be construed as a means-plus-function limitation under § 112, ¶ 6. *See Kemco Sales*, 203 F.3d at 1361. That the claim language recites a corresponding function but does not recite a structure for performing the function further supports a finding that the limitation falls under § 112, ¶ 6. *Id.* In addition, the parties do not dispute the construction of the limitation as a means-plus-function limitation. Accordingly, the court finds that the “means for tabulating the acceptable votes” limitation of claim 94 is a “means-plus-function” limitation under § 112, ¶ 6.

In order to construe the means-plus-function limitation of claim 94, the function of the limitation must first be established. *See Telemac*, 247 F.3d at 1324. The claim language recites a function of “tabulating the acceptable votes of the voter recorded and/or printed.” While neither the claim itself or the specification defines the term “recorded votes,” paragraph (c) of claim 94 recites “one or more computer programs which operate in a computer to . . . record the votes stored in the computer which are acceptable.” The means-plus-function limitation of tabulating the recorded votes follows limitation (c). In light of this claim language, the court finds the term “*the* acceptable votes of the voter recorded” in the means-plus-function limitation refers back to the acceptable votes stored in the computer described in paragraph (c). The function of the means-plus-function limitation in

claim 94 is therefore “tabulating the acceptable votes of the voters *stored in the computer* and/or the printed votes.”

Having determined the function, the corresponding structure described in the specification must be identified. The specification of the ‘449 patent discloses “a computer program for directing the voting process for the voter and for vote counting.” ‘449 Patent col.2 ln.14-16. The specification also states that “the vote data which was temporarily stored in the voting station computer is finally stored for processing by the computer program.” ‘449 Patent col.5 ln.33-36. The specification does not disclose any other structure corresponding to the function of tabulating the acceptable votes of the voters stored in the computer. Accordingly, the court finds that the structure corresponding to the function of tabulating the acceptable votes of the voters stored in the computer is a computer program.

In cases involving a computer-implemented invention in which the inventor has invoked means-plus-function claiming, the Federal Circuit consistently requires that the structure disclosed in the specification be more specific “than simply a general purpose computer or microprocessor.” *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). The point of this requirement is to limit the scope of the claim to the structure and its equivalents and thus avoid purely functional claiming. *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1211 (Fed. Cir. 2003) (“If the specification is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee . . . is attempting to claim a [function] unbounded by any reference to structure in the specification.”). Because “general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to the corresponding structure that performs the function,” as required by § 112 ¶ 2. *Aristocrat*,

521 F.3d at 1333. Therefore, in a means-plus-function claim where the disclosed structure is a general purpose computer programmed to carry out a particular function, the claim is invalid as indefinite if the specification fails to disclose an algorithm for performing the claimed function. *Net Moneyin*, 545 F.3d at 1367 (citing *Aristocrat*, 512 F.3d at 1334); *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999).

In the present case, the only structure disclosed in the specification of the '449 patent that corresponds to the function of tabulating the acceptable votes of the voter stored in the computer is a general purpose computer. Thus, in order to avoid a finding of invalidity for indefiniteness, the specification must also disclose an algorithm for performing the claimed function, "regardless of [the algorithm's] simplicity." *Net Moneyin*, 545 F.3d at 1367. Because the specification fails to disclose such an algorithm or any class of algorithms for performing the claimed function of tabulating votes stored in the computer, claim 94 of the '449 patent fails to disclose a sufficient structure corresponding to the claimed function, rendering the claim invalid as indefinite. *See Aristocrat*, 513 F.3d at 1338. Accordingly, ES&S's Cross Motion for Summary Judgment will be granted to the extent ES&S seeks a finding that claim 94 is invalid.

V. Intervening Rights

ES&S asserts that "VVI's claims are barred by the doctrine of intervening rights." (Doc. No. 17 ¶ 49.) VVI moves for summary judgment on the issue of intervening rights, arguing that because claim 49 of the reissued '449 patent is substantially identical to claim 49 of the '613 patent and infringed by the Accused Systems, ES&S has not acquired intervening rights. (Doc. No. 71 at 16-18.) In response, ES&S maintains that because it does not infringe any claim of the reissued '449 patent

that is substantially identical to a claim of the '613 patent, including claim 49, it is entitled to absolute intervening rights. (Doc. No. 84 at 25.)

The affirmative defense of intervening rights protects parties who are accused of infringing patent claims set forth in a broadened reissue patent when the alleged infringement occurred before the reissue patent was granted. *BIC Leisure Prods., Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1220 (Fed. Cir. 1993). The first sentence of 35 U.S.C. § 252 defines absolute intervening rights:

A reissued patent shall not abridge or affect the right of any person or that person's successors in business who, prior to the grant of a reissue, made, purchased, offered to sell, or used within the United States, or imported into the United States, anything patented by the reissued patent, to continue the use of, to offer to sell, or to sell to others to be used, offered for sale, used, or imported unless the making, using, offering for sale, or selling of such thing infringes a valid claim of the reissued patent which was in the original patent.

35 U.S.C. § 252. Thus, in order to receive protection against infringement under a theory of absolute intervening rights, the accused party must establish: (1) that a tangible article or product was in existence before the reissue date; and (2) that the product did not infringe any claim of the original patent. *Shockley v. Arcan, Inc.*, 248 F.3d 1349, 1359 (Fed. Cir. 2001).

In the present case, the parties agree that claim 49 of the reissued '449 patent is substantially identical to claim 49 of the original '613 patent. However, ES&S has been found not to infringe claim 49 of the '449 patent, and VVI has yet to establish that ES&S infringes any other valid claim of the '449 patent that is substantially identical to a claim of the original '613 patent. Because ES&S has not been found to infringe a valid claim of the reissued patent that is substantially identical to a claim in the original patent, ES&S is not barred, at this point in the litigation, from receiving protection under a theory of absolute intervening rights. Accordingly, VVI's Motion for Summary Judgment

will be denied at this juncture to the extent it seeks a finding that ES&S is not entitled to assert intervening rights.

VI. Rule 26 Disclosures

VVI maintains that ES&S failed to disclose the Strini Patent (Doc. No. 84-7) and the affidavit of Christopher Butler (“Butler Affidavit”) (Doc. No. 84-6) in accordance with Federal Rule of Civil Procedure 26 and should therefore be prohibited from using these documents in support of the Cross-Motion for Summary Judgment. (Doc. No. 100 at 8-9.) ES&S contends that while the Strini Patent and Butler Affidavit were not disclosed to VVI in its initial Rule 26 disclosure, these documents were disclosed to VVI on CDs of documents sent to VVI prior to the filing of the Cross-Motion for Summary Judgment. (Doc. No. 107 at 7.) Copies of the letters sent to VVI along with the CDs indicate that the CDs included copies of the contested documents and were mailed prior to the filing date of the Cross Motion for Summary Judgment. There is no evidence in the record supporting a contrary finding. Accordingly, the court declines to preclude ES&S from relying on the Butler Affidavit and the Strini Patent in support of the Cross Motion for Summary Judgment.

Conclusion

Based on the foregoing, the Second Motion for Summary by Voter Verified, Inc. (Doc. No. 71, filed Apr. 28, 2010) is **GRANTED in part** and **DENIED in part** as follows:

1. The Motion is **GRANTED** to the extent VVI seeks a finding that the claims of the ‘449 patent are not invalid under 35 U.S.C. § 101;

2. The Motion is **GRANTED** to the extent VVI seeks a finding that the claims of the '449 patent, other than claim 94, are not invalid under 35 U.S.C. § 112;
3. The Motion is **GRANTED** to the extent VVI seeks a finding that claims 1-48, 50-84, and 86-92 of the '449 patent are not invalid as anticipated under 35 U.S.C. § 102.
3. The Motion is **DENIED** in all other respects.

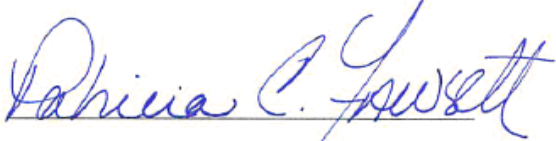
The Cross-Motion for Summary Judgment of Non-Infringement and Patent Invalidity by Election Systems & Software, Inc. (Doc. No. 84, filed May 28, 2010) is **GRANTED in part** and **DENIED in part** as follows:

1. The Motion is **GRANTED** to the extent ES&S seeks a finding that the '613 patent was surrendered to the PTO during the reissue process and therefore cannot be infringed by ES&S;
2. The Motion is **GRANTED** to the extent ES&S seeks leave to file a supplemental summary judgment motion addressing the issue of obviousness;
3. The Motion is **GRANTED** to the extent ES&S seeks a finding that the Accused Systems do not infringe claims 49, 56, 85, and 93 of the '449 patent;
4. The Motion is **GRANTED** to the extent ES&S seeks a finding that claim 94 of the '449 patent is invalid under 35 U.S.C. § 112;
5. The Motion is **GRANTED** to the extent ES&S seeks a finding that the Risk Digest Articles qualify as prior art for the purpose of analyzing the validity of the '449 patent under 35 U.S.C. § 102; and
6. The Motion is **DENIED** in all other respects.

DONE and **ORDERED** in Orlando, Florida on September 29, 2010.

Copies furnished to:

Counsel of Record
Unrepresented Parties


PATRICIA C. FAWSETT, JUDGE
UNITED STATES DISTRICT COURT