

United States Court of Appeals
for the Federal Circuit

VOTER VERIFIED, INC.,
Plaintiff-Appellant,

v.

PREMIER ELECTION SOLUTIONS, INC.,
Defendant-Cross-Appellant,

AND

DIEBOLD INCORPORATED,
Defendant-Appellee.

2011-1553, 2012-1017

Appeals from the United States District Court for the
Middle District of Florida in Case No. 09-CV-1968, Senior
Judge Patricia C. Fawsett.

VOTER VERIFIED, INC.,
Plaintiff-Appellant,

v.

ELECTION SYSTEMS & SOFTWARE, INC.,
Defendant-Cross-Appellant.

2011-1559, 2012-1016

Appeals from the United States District Court for the Middle District of Florida in Case No. 09-CV-1969, Senior Judge Patricia C. Fawsett.

Decided: November 5, 2012

ANTHONY I. PROVITOLA, Attorney at Law, DeLand, Florida, argued for plaintiff-appellant.

ROBERT M. EVANS, JR., Senniger Powers LLP, of St. Louis, Missouri, argued for defendants-cross appellants and defendant-appellee. With him on the brief were MARC W. VANDER TUIG, and SARA WEILERT GILLETTE.

Before LOURIE, REYNA, and WALLACH, *Circuit Judges*.
LOURIE, *Circuit Judge*.

These consolidated appeals stem from two related patent infringement actions brought in the United States District Court for the Middle District of Florida by Voter Verified, Inc. (“Voter Verified”) against Premier Election Solutions, Inc. (“Premier”), Diebold, Inc. (“Diebold”), and Election Systems & Software, Inc. (“Election Systems”) (collectively, “Defendants”) in which Voter Verified alleged infringement of claims 1–94 of U.S. Reissue Patent RE40,449 (the “449 patent”).¹ As the respective appellate

¹ Voter Verified also alleged infringement of U.S. Patent 6,769,613 (the “613 patent”), which had been reissued as the ’449 patent. The district court held that the ’613 patent could not be infringed because it had been surrendered pursuant to 35 U.S.C. § 251 during reissue proceedings. That issue is not disputed on appeal.

briefs are virtually identical, we consider the cases together.

On summary judgment, the district court held claims 1–93 not infringed and invalidated claims 49 and 94, but the court also dismissed the Defendants' counterclaim that claims 85 and 93 are invalid and held that claims 1–48, 50–84, and 86–92 are not invalid.² *Voter Verified, Inc. v. Premier Election Solutions, Inc.*, No. 6:09-cv-1968 (M.D. Fla. Aug. 31, 2011) (Final Judgment), ECF No. 251; *Voter Verified, Inc. v. Election Sys. & Software, Inc.*, No. 6:09-cv-1969 (M.D. Fla. Sept. 1, 2011) (Final Judgment), ECF No. 197. On appeal, Voter Verified challenges a large number of the district court's rulings, including its judgments in favor of the Defendants on infringement and invalidity, while Premier and Election Systems cross-appeal as to the validity of the surviving claims of the '449 patent. For the reasons that follow, we *affirm*.

BACKGROUND

The '449 patent, assigned to Voter Verified, issued on August 5, 2008, and claims priority from an application filed on December 7, 2000. The patent discloses and claims automated systems and methods for voting in an election, featuring a self-verification procedure by which "machine and human error may be detected and corrected before the ballot is submitted by the voter for tabulation." '449 patent col. 3 ll. 9–11. Briefly, the voter enters a vote into an electronic voting station, which temporarily records the voter's input in digital storage and generates a corresponding printed ballot. That printed ballot is then

² The district court's holding that claims 1–48, 50–84, and 86–92 are not invalid did not apply to Diebold. Diebold's invalidity counterclaims were instead dismissed without prejudice in their entirety (*i.e.*, as to all of the surviving claims 1–48 and 50–93).

checked for accuracy, either by presentation to the voter for visual inspection or by a computerized scanning mechanism capable of comparing the face of the printed ballot with the vote data represented in the station's temporary storage. In either case, only ballots deemed consistent with the voter's intended or recorded input are accepted for final tabulation. *See id.* col. 2 ll. 22–40. Independent claims 1, 25, 56, and 94 recite such "self-verifying" voting systems, and independent claims 49, 85, and 93 recite closely related voting methods. For example, claims 1 and 49 read:

1. A self-verifying voting system comprising:
 - 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 issues to be voted on, and directions to the voter for operation of the system;
 - present the election ballot for voting and input of votes by the voter;
 - accept input of the votes from the voter;
 - print out the election ballot according to which the voter voted with the votes of the voter printed thereon, so that the votes of the voter are readable on said election ballot by the voter and readable by a tabulating machine;
 - record the votes in the computer; and
 - compare the votes read by a ballot scanning machine with the votes recorded in the computer;

- (b) a computer with at least one display device, at least one device to accept voting input from a voter, at least one data storage device, and sufficient memory to provide for the operation of said computer program in which said computer program runs;
- (c) a printer connected to said computer for printing the election ballot according to which the voter voted;
- (d) a ballot scanning means for reading the votes on the printed ballot printed according to the election ballot which the voter voted so that the votes shown on the printed ballot are compared by the computer program with the votes recorded in the computer for the voter;
- (e) means for connecting said ballot scanning means to said computer; and
 - a means for tabulating the printed ballots generated by said one or more voting stations.

Id. col. 6 ll. 18–52.

49. 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;
- (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.

Id. col. 9 ll. 34–52.

The Defendants produce and market automated voting systems. In November 2009, Voter Verified filed two nearly identical infringement complaints based on the '449 patent, one directed at Premier and Diebold, and the other targeting Election Systems. The Defendants denied infringement and sought declaratory judgments of invalidity on various grounds including anticipation, obviousness, and indefiniteness.

In a series of summary judgment orders, the district court held that the Defendants had not infringed claims 1–93. In addition, the court concluded that claim 94 was invalid as indefinite under 35 U.S.C. § 112, ¶ 2, and that claim 49 was invalid as obvious under 35 U.S.C. § 103 in view of an article (the “Benson article”) obtained from an online periodical concerned with computer safety and security, known as the Risks Digest. The district court entered summary judgment against Premier and Election Systems, however, on their invalidity counterclaims

regarding claims 1–48, 50–84, and 86–92, holding that they had “fail[ed] to present any argument or evidence regarding the invalidity of these claims” and therefore could not satisfy their burden of establishing invalidity by clear and convincing evidence. Finally, the district court dismissed without prejudice Diebold’s invalidity counter-claims as to claims 1–48 and 50–93, as well as Premier and Election Systems’ invalidity counterclaims regarding claims 85 and 93.

Voter Verified appeals on numerous grounds, including the judgments of noninfringement and invalidity, and both Premier and Election Systems cross-appeal regarding the validity of claims 1–48, 50–84, and 86–92. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review orders granting summary judgment *de novo*, applying the same standard as the district court under Fed. R. Civ. P. 56. *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1363–64 (Fed. Cir. 2001).

A. Invalidity

The district court held claims 49 and 94 of the ’449 patent invalid as obvious and indefinite, respectively. While no longer defending claim 94, Voter Verified argues that the district court’s invalidation of claim 49 was incorrect. Premier and Election Systems cross-appeal as to the validity of claims 1–48, 50–84, and 86–92.

1. Claim 49

Voter Verified challenges the district court’s invalidity determination regarding claim 49, and in particular its reliance on the Benson article as prior art. Voter Verified contends that a web-based reference like the Benson article must be “searchable by pertinent terms over the

internet” to qualify as a prior art “printed publication” as defined by 35 U.S.C. § 102(b), and Voter Verified argues further that the Defendants “provided no evidence of any indexing on any database” that would have allowed the interested public to locate the Risks Digest website, much less the Benson article contained therein. According to Voter Verified, the Benson article therefore should have been excluded from the district court’s obviousness analysis. The Defendants respond that the Benson article qualifies as prior art because it was posted on a public website well known to those interested in the art of voting technologies—the Risks Digest—and could be retrieved from that website by searching based on subject matter.

We conclude not only that the Benson article is a “printed publication” within the meaning of § 102(b), but also that it renders claim 49 obvious under § 103. When considering whether a given reference qualifies as a prior art “printed publication,” the key inquiry is whether the reference was made “sufficiently accessible to the public interested in the art” before the critical date. *In re Cronyn*, 890 F.2d 1158, 1160 (Fed. Cir. 1989) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1568 (Fed. Cir. 1988)). “Whether a reference is publicly accessible is determined on a case-by-case basis based on the ‘facts and circumstances surrounding the reference’s disclosure to members of the public.’” *In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009) (quoting *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004)). Public accessibility is a legal conclusion based on underlying factual determinations. *Cooper Cameron Corp. v. Kvaerner Oilfield Prods., Inc.*, 291 F.3d 1317, 1321 (Fed. Cir. 2002).

Voter Verified emphasizes indexing as a determinant of public accessibility in this case. To be sure, indexing is a relevant factor in determining accessibility of potential prior art, particularly library-based references. *See, e.g.*,

In re Hall, 781 F.2d 897 (Fed. Cir. 1986) (holding that a dissertation indexed in a university library catalog was a publicly accessible printed publication); *In re Bayer*, 568 F.2d 1357 (CCPA 1978) (holding that a thesis housed, but neither shelved nor catalogued, within a university library was not publicly accessible). But indexing is not “a necessary condition for a reference to be publicly accessible”; it is but one among many factors that may bear on public accessibility. *Lister*, 583 F.3d at 1312. Moreover, indexing is no more or less important in evaluating the public accessibility of online references than for those fixed in more traditional, tangible media. In both situations, the ultimate question is whether the reference was “available to the extent that persons interested and ordinarily skilled in the subject matter or art[,] exercising reasonable diligence, can locate it.” *SRI Int’l, Inc. v. Internet Sec. Sys., Inc.*, 511 F.3d 1186, 1194 (Fed. Cir. 2008) (quoting *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006)). Thus, while often relevant to public accessibility, evidence of indexing is not an absolute prerequisite to establishing online references like the Benson article as printed publications within the prior art.

Here, the evidence of record supports the district court’s conclusion that the Benson article was publicly accessible before the December 7, 1999, critical date—one year before the earliest priority date for the ’449 patent—and therefore qualified as prior art under § 102(b). The Benson article was posted to the Risks Digest by Tom Benson on March 4, 1986. At that time, the Risks Digest was distributed online via a subscription mailing list and also made available for download through an FTP site maintained by SRI International. Starting in January 1995, however, all content published in the Risks Digest (including the Benson article) became available worldwide

on the internet through the website <http://catless.ncl.ac.uk/Risks>. Furthermore, unrebutted testimony in the record indicated that (1) the Risks Digest was well known to the community interested in the risks of computer automation, including those concerned with electronic voting technologies, and by 1999 the Risks Digest contained more than 100 articles relating to electronic voting; (2) all submissions for publication in the Risks Digest are treated by the community as public disclosures; and (3) users can freely and easily copy Risks Digest content. In addition, since September 1995 the Risks Digest website has included a search tool that would have retrieved the Benson article in response to search terms such as “vote,” “voting,” “ballot,” and/or “election.” On the other hand, although commercial internet search engines were available by 1999, the record is devoid of evidence indicating whether or not the Risks Digest website had been indexed by any such services as of the critical date. The district court credited each of the preceding factual assertions, as it was entitled to do.

Given the record before us, we see no error in the district court’s factual findings or its conclusion that the Benson article constituted publicly available prior art relative to the ’449 patent. The Risks Digest website was undisputedly open to any internet user by the critical date. Whether or not the website itself had been indexed by 1999 (through search engines or otherwise), the uncontested evidence indicates that a person of ordinary skill interested in electronic voting would have been independently aware of the Risks Digest as a prominent forum for discussing such technologies. And upon accessing the Risks Digest website, such an interested researcher would have found the Benson article using that website’s own search functions and applying reasonable diligence. In short, the Benson article was publicly available by the

critical date and therefore qualifies as a prior art “printed publication” under § 102(b).

Having correctly confirmed the Benson article as prior art, the district court proceeded to hold claim 49 invalid as obvious in light of that reference. The court found “no differences between the claimed invention and the Benson article” based on its review of claim 49, the Benson article, and what it considered to be persuasive testimony offered by the Defendants’ expert. Voter Verified presented no contrary evidence and points to none on appeal.

In pertinent part, the Benson article discloses

an electronic voting booth, with a screen and some sort of simple keyboard. . . . The voter fills in his or her choices and has a chance to go back and correct errors. At that point, the voter pushes a button to confirm the ballot, and a printer prints card ballot, which it retains behind a transparent screen (it can be read but not altered). Voter scans the printed card and is asked whether it is accurate. At this point, if it is not, a REVISE or CANCEL button is pushed and the process starts over with nothing having been recorded (the card is shredded). When the screen and card match the voter’s intentions, a second CONFIRM button is pushed and the card is ejected, while the vote is electronically forwarded. The voter takes the card out of the booth and drops it in a ballot box.

Tom Benson, *Computerized Voting, Risks Digest* (Mar. 4, 1986, 4:27 PM) <http://catless.ncl.ac.uk/Risks/2.22.html#subj3.1>. While the disclosures in the Benson article are not identical with the language of claim 49, we agree with the district court that the Benson article would have made the voting method of claim 49 obvious to one of ordinary skill in the art of computerized voting technol-

ogy. Accordingly, the district court correctly held claim 49 invalid for obviousness.

2. Claims 1–48, 50–84, and 86–92

Premier and Election Systems argue in their cross-appeals that the district court erroneously granted summary judgment in favor of Voter Verified on the validity of claims 1–48, 50–84, and 86–92. Premier and Election Systems contend that because Voter Verified (1) was not actively asserting most of those claims and (2) had moved to terminate the case, the district court lacked jurisdiction to make its ruling on validity. We disagree.

The initial complaint in this case alleged infringement of every claim of the '449 patent, and while Voter Verified later pared back its infringement contentions, it did so with the caveat that discovery might dictate reintroducing “other claims in the patents in suit.” In addition, Premier and Election Systems kept any “unasserted” claims before the district court by maintaining their respective counter-claims that alleged invalidity of “[e]ach claim of the '449 patent.” When Voter Verified moved for summary judgment on those counterclaims, Premier and Election Systems never responded with viable arguments or evidence to support their invalidity contentions regarding claims 1–48, 50–84, and 86–92, despite multiple opportunities to do so.³

As the district court recognized, it was ultimately up to Premier and Election Systems to establish each of their invalidity counterclaims by clear and convincing evidence; yet they failed to mount a response to Voter Verified’s

³ The Defendants did offer anticipation arguments as to claim 56, but the district court rejected those arguments. Claims 1–48, 50–55, 57–84, or 86–92 were never addressed.

summary judgment motion on the claims now at issue. Furthermore, we fail to see how Voter Verified’s intervening motion to suspend or terminate the proceedings for appeal—a motion that was never granted—absolves Premier and Election Systems of that fundamental burden. Because Premier and Election Systems failed to adequately support their own counterclaims, the district court did not err by granting Voter Verified’s summary judgment motion that claims 1–48, 50–84, and 86–92 were not proven invalid.

B. Noninfringement

Voter Verified next challenges the district court’s judgment that the Defendants do not infringe claims 1–93 of the ’449 patent. Voter Verified has not substantively disputed that judgment on appeal as it applies to claims 56–84, and we therefore deem any challenge regarding those claims waived. We address the remaining claims as set forth below and affirm the judgment of noninfringement.

1. Claims 1–48

Independent claims 1 and 25 claim “self-verifying voting system[s],” and each requires, *inter alia*, “a ballot scanning means” that allows the claimed system to read a printed ballot for comparison to the voter’s input as recorded by the voting station computer. The district court construed “ballot scanning means” pursuant to 35 U.S.C. § 112, ¶ 6, and held that the accused systems lacked any “ballot scanning machine” or equivalent corresponding structure capable of carrying out the claimed function of reading votes on a printed ballot.

On appeal, Voter Verified agrees with the district court’s claim construction analysis and concedes that the accused systems lack any ballot scanning device. What

the district court failed to appreciate, according to Voter Verified, is that the '449 patent sets forth the *voter* as an “alternative and equivalent” structure for carrying out the claimed ballot scanning function. Voter Verified asserts that “[c]omparison by the voter of the printed votes . . . with those displayed as recorded on the [accused systems] occurs with the voter’s visual examination of each to ascertain any differences between them,” thus infringing claims 1 and 25 literally or at least under the doctrine of equivalents.

The district court rejected Voter Verified’s argument, and so do we. It is well established that “a human being cannot constitute a ‘means’” within the scope of § 112, ¶ 6, *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1300 (Fed. Cir. 2005), which in itself would suffice to dispose of Voter Verified’s infringement theory. But even assuming that a human voter could be considered a permissible structure, claims 1 and 25 further require that the printed ballot and electronically stored vote be “compared *by the computer program*” and that the scanning means be “connect[ed]” to the computer. '449 patent col. 6 ll. 46–50, col. 8 ll. 24–28 (emphasis added). Voter Verified has not credibly explained, and the specification does not address, how a human could be connected to a computer, much less in a manner that would effect a computerized analysis upon his or her examination of a printed ballot.

Accordingly, the Defendants were entitled to summary judgment of noninfringement regarding claims 1 and 25 because none of the accused products includes a ballot scanning device or its equivalent. Furthermore, because they do not infringe those independent claims, the Defendants also cannot infringe associated dependent claims 2–24 and 26–48 as a matter of law. *Wahpeton*

Canvas Co. v. Frontier, Inc., 870 F.2d 1546, 1552 n.9 (Fed. Cir. 1989).

2. Claims 49–55 and 85–93

Independent claims 49, 85, and 93 recite methods for voting, each explicitly requiring that several of the claimed steps must be performed “by the voter.” For example, claims 49, 85, and 93 each require an essentially identical step in which the voter decides whether a printed ballot is an acceptable or unacceptable representation of his or her intended vote.⁴ Recognizing that infringement of claims 49, 85, and 93 would thus require multiple actors, the district court looked to our decisions in *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373 (Fed. Cir. 2007) and *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008) and held that, even if a voter performed every step required by the claimed methods, Voter Verified had not presented sufficient evidence of control or direction to attribute any of those actions to the Defendants. Consequently, the court granted summary judgment of noninfringement in favor of the Defendants.

On appeal, Voter Verified contends that “it is axiomatic that all entities who conduct elections must necessarily be in control of their election process,” suggesting that it follows that “the computer program of the [accused system] controls all of the voter’s actions . . . to complete the process of voting.”

⁴ The claims read: “decision by the voter as to whether a printed ballot is acceptable or unacceptable” (claims 49 and 85); “decision by the voter as to whether the printed votes are acceptable or unacceptable” (claim 93). ’449 patent col. 9 ll. 47–48, col. 11 ll. 64–65, col. 12 ll. 35–36.

As we held in *BMC* and *Muniauction*, liability for direct infringement of a method claim requires that one party either performs every step of the claimed method or exerts “direction or control” over any such steps performed by others. See *Muniauction*, 532 F.3d at 1329 (“Where the actions of multiple parties combine to perform every step of a claimed method, the claim is directly infringed only if one party exercises ‘control or direction’ over the entire process” (citing *BMC*, 498 F.3d at 1380–81)). That is far from the case before us. Notwithstanding Voter Verified’s conclusory arguments that the Defendants necessarily “control[] all of the voter’s actions,” the record shows, at most, that the Defendants provide instructions on how to use their systems. But the fact that an accused infringer “controls access to its system and instructs [others] on its use is not sufficient to incur liability for direct infringement.” *Id.* at 1330.

The district court thus correctly concluded that Voter Verified failed to create a genuine issue of material fact regarding whether the Defendants exercised the requisite control or direction over voters to directly infringe claims 49, 85, and 93. As such, claims 50–55 and 86–92, which depend from claims 49 and 85, also were not directly infringed for at least the same reasons.⁵

⁵ Under *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301 (Fed. Cir. 2012) (en banc), the fact that no single entity performs all of the steps in a patented method does not resolve the issue of indirect infringement. Voter Verified did not argue its claims of indirect infringement on appeal, however, and such claims were thus waived.

C. Remaining Issues

Finally, Voter Verified has disputed no fewer than seventeen⁶ of the district court's discretionary rulings on various motions, including procedural and discovery issues, asserting that "there is hardly a single ruling in this case in favor of the Defendants that is not marred by an abuse of discretion. . . . Such an abuse of discretion has now attained the dimension of bias favoring the Defendants or their counsel." A claim of seventeen procedural errors by a district court seems unlikely at best; however, we take such allegations seriously. We have therefore carefully considered the record before us, and we conclude that Voter Verified's contentions are wholly without merit. We perceive no error in any of the contested or-

⁶ Specifically, the disputed rulings include: (1) declining to grant summary judgment that claims 1, 25, and 49 were infringed; (2) declining to grant summary judgment that claims 49, 85, and 93 are not invalid; (3) allowing the Defendants to introduce the Risks Digest references, including the Benson article; (4-6) allowing the Defendants to introduce three disputed expert declarations; (7) allegedly deciding summary judgment motions out of order in violation of the court's own case management procedures; (8) granting leave for the Defendants to file a disputed summary judgment motion; (9-11) declining to grant summary judgment in favor of Voter Verified on several of the Defendants' affirmative defenses after the cases had been decided on other grounds; (12) failing to enter a default judgment against Diebold for filing its answer two days late; (13) refusing to allow discovery into the Defendants' alleged improper influence over the clerk of court; (14) preventing discovery as to whether Diebold had sufficient good cause for answering out of time; (15) preventing discovery into Diebold's subjective intent for filing its answer out of time; (16) declining to consider evidence regarding the dates of various electronic court filings; and (17) failing to compel unqualified compliance with Voter Verified's far-reaching discovery requests.

ders, much less anything approaching an abuse of the district court's considerable discretion in such matters.

CONCLUSION

We have considered each of the parties' remaining arguments and find them unpersuasive. In view of the foregoing, the judgment of the district court is *affirmed*.

AFFIRMED