

**United States Court of Appeals
for the Federal Circuit**

ATEN INTERNATIONAL CO., LTD.,
Plaintiff-Appellant

v.

**UNICLASS TECHNOLOGY CO., LTD.,
ELECTRONIC TECHNOLOGY CO., LTD., AIRLINK
101, PHOEBE MICRO, INC., BROADTECH
INTERNATIONAL CO., LTD., DBA LINKSKEY,
BLACK BOX CORPORATION, BLACK BOX
CORPORATION OF PENNSYLVANIA,**
Defendants-Appellees

2018-1606

Appeal from the United States District Court for the
Central District of California in No. 2:15-cv-04424-AG-
AJW, Judge Andrew J. Guilford.

Decided: August 6, 2019

LAURENCE M. SANDELL, Mei & Mark LLP, Washington,
DC, argued for plaintiff-appellant. Also represented by LEI
MEI.

JOSEPH PIA, Pia Anderson Moss Hoyt, Salt Lake City,
UT, argued for defendants-appellees. Also represented by
ROBERT AYCOCK.

Before MOORE, WALLACH, and TARANTO, *Circuit Judges*.

MOORE, *Circuit Judge*.

ATEN International Co., Ltd. (“ATEN”) appeals the United States District Court for the Central District of California’s denial of judgment as a matter of law (“JMOL”), which declined to overturn the jury’s findings that the asserted claims of U.S. Patent No. 8,589,141 are invalid as anticipated under 35 U.S.C. § 102 and not infringed; and that the asserted claims of U.S. Patent No. 7,640,289 are not infringed. For the reasons discussed below, we reverse as to invalidity and affirm as to noninfringement.

BACKGROUND

Uniclass Technology Co., Ltd. (“Uniclass”) and ATEN are involved in making and selling keyboard-video-mouse (“KVM”) switch systems that allow a user to control multiple computers from a single keyboard, video device, and mouse. ATEN sued Uniclass as well as Electronic Technology Co., Ltd.; Airlink 101; Phoebe Micro, Inc.; Broadtech International Co., Ltd. d/b/a Linkskey; Black Box Corporation; and Black Box Corporation of Pennsylvania (collectively, the “customer defendants”) alleging, as relevant here, infringement of claims 3, 8, and 10 of the ’141 patent and claims 1–20 of the ’289 patent. The ’141 patent is directed to technology for switching between computers that share a keyboard, monitor, and mouse through a KVM switch, such as a keyboard shortcut. ’141 patent at 2:51–61. Claim 3 depends from claims 1 and 2, and claim 8 depends from claim 1. Independent claim 1 recites:

1. A method for controlling a resource sharing apparatus coupling at least one input device to a plurality of hosts including a first host, the method comprising:

connecting the input device to the first host;

while the input device is connected to the first host, acquiring a first input signal from the input device and determining whether the first input signal comprises a standby indication of a switch command and wherein the standby indication is for indicating that connection between the input device and the first host can be changed; and

in response to a determination that the first input signal comprises the standby indication, disconnecting the input device from the first host without connecting the input device to any other host and starting emulating the input device to the first host; and

acquiring a second input signal from the input device, wherein the second input signal is not transferred to the hosts when it is inputted to the resource sharing apparatus.

The '289 patent is directed to technology for stringing together several KVM switches. '289 patent at 2:1–6. It provides that each KVM switch can detect whether it is a master or slave by, for example, detecting whether the port used to connect other KVM switches is occupied. *Id.* at 4:1–4. Independent claim 1 recites:

1. A computer switch comprising:
 - a set of peripheral device ports for connecting to a set of peripheral devices;
 - a first port;
 - a second port;

a control device coupled to the first port and the second port, the control device repeatedly detecting whether the first port is occupied to repeatedly determine a master or slave status of the computer switch, wherein

if the first port is occupied, the control device determines the computer switch to be a slave and provides data to a first external computer switch connected to the first port, and

if the first port is unoccupied, the control device determines the computer switch to be a master and controls a second external computer switch connected to the second port and obtains data from the second external computer switch; and

a plurality of computer connection ports coupled to the control device for connecting to and controlling a plurality of computers, wherein the plurality of computers are controlled by the set of peripheral devices if the computer switch is determined to be a master, and are controlled by the first external computer switch connected to the first port if the computer switch is determined to be a slave.

At trial, the jury found that Uniclass did not infringe the asserted claims of the '141 or '289 patents. It also found the asserted claims of the '141 patent were invalid as anticipated without specifying which reference was the basis for its finding. ATEN moved for JMOL, which the district court denied in the aspects relevant to this appeal.

ATEN timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review denials of JMOL under the law of the regional circuit. *TVIIM, LLC v. McAfee, Inc.*, 851 F.3d 1356, 1362 (Fed. Cir. 2017). The Ninth Circuit reviews a denial of JMOL de novo. *Harper v. City of Los Angeles*, 533 F.3d 1010, 1021 (9th Cir. 2008). JMOL is proper when the evidence permits only one reasonable conclusion which is contrary to the jury's verdict, but the jury's verdict must be upheld if it is supported by substantial evidence. *Id.* Anticipation and infringement are questions of fact that we review for substantial evidence. *Cordis Corp. v. Bos. Sci. Corp.*, 561 F.3d 1319, 1330, 1335 (Fed. Cir. 2009). Whether a reference is prior art is a question of law based on underlying factual questions. *TypeRight Keyboard Corp. v. Microsoft Corp.*, 374 F.3d 1151, 1157 (Fed. Cir. 2004). Whether a reference is publicly accessible is a question of fact. *In re NTP, Inc.*, 654 F.3d 1279, 1296 (Fed. Cir. 2011).

I

At trial, Uniclass asserted anticipation of the claims of the '141 patent based on two references (1) CS-1762, an earlier product by ATEN, and/or its user manual; and (2) Great Britain Patent No. 2,352,540 ("GB '540"). The jury found that the asserted claims of the '141 patent were invalid as anticipated, but there was no special verdict indicating whether one or both references formed the basis for the jury's decision. J.A. 9769. The district court denied ATEN's JMOL motion, upholding the jury's finding of anticipation based on the first theory, that the CS-1762 reference anticipated the asserted claims. It did not address the second theory. Because the jury's verdict of anticipation was not supported by substantial record evidence as to either reference, we reverse the denial of JMOL on anticipation.

A

To establish that an asserted reference is prior art under § 102(b), the patent challenger must prove, by clear and convincing evidence, that it predates the critical date. *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1578 (Fed. Cir. 1996).

The undisputed critical date for the '141 patent is July 24, 2006—one year prior to its filing date. J.A. 4; J.A. 24; J.A. 9302–9303 at 176:24–177:3. Uniclass' expert Mr. Dezmelyk relied on his testing of a 2009 CS-1762 specimen to meet certain limitations of claim 1 of the '141 patent. Uniclass argues the 2009 specimen qualifies as prior art because it uses firmware that was released in 2006 before the critical date of the '141 patent. *See* Appellee's Br. 20. But Mr. Dezmelyk testified merely that the firmware dated to 2006, without specifying a day or month. J.A. 9313 at 14–17 (“I then looked on the wayback machine to find when that firmware update came out and the last time it was changed, and that was in 2006. So this firmware is prior art firmware operating on this, the test hardware.”).

To establish that the CS-1762 qualifies as prior art, Uniclass was required to prove by clear and convincing evidence that the firmware existed prior to July 24, 2006. Merely establishing that the firmware existed in the same year as the critical date is insufficient. This deficiency was highlighted on cross-examination:

Q. Yes or no, you did not testify to a particular month in 2006?

A. No, I don't believe I mentioned that in my testimony.

Q. And you did not testify to a specific date in 2006?

A. I don't believe I testified to a particular day either.

J.A. 9338 at 18–22. Mr. Dezmelyk did not provide any additional date-related information, and Uniclass did not conduct re-direct examination on this issue.

With a critical date of July 24, 2006, testimony that the firmware running on the CS-1762 device existed in 2006 alone is not enough to support the jury’s finding that the firmware pre-dated the critical date and thus qualifies as prior art. We hold that the district court erred in denying JMOL because substantial evidence does not support the jury’s finding of anticipation based on the CS-1762 device.

B

A finding of anticipation requires clear and convincing evidence that “each and every element is found within a single prior art reference, arranged as claimed.” *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1294 (Fed. Cir. 2015). Testimony concerning anticipation must typically “explain in detail how each claim element is disclosed in the prior art reference. The testimony is insufficient if it is merely conclusory.” *Schumer v. Lab. Comput. Sys., Inc.*, 308 F.3d 1304, 1315–16 (Fed. Cir. 2002).

The jury verdict of anticipation cannot be upheld with regard to the GB ’540 reference. The asserted claims of the ’141 patent require “emulating the input device to the first host.” Uniclass’ expert Mr. Dezmelyk testified about the emulation described in GB ’540 in the context of other asserted patents and claim limitations. J.A. 9296 at 170:10–20 (regarding “emulating the console devices according to the industry standard”); J.A. 9301–9302 at 175:20–176:6 (describing that the reference “has USB device emulators in it”); J.A. 9285–9286 at 159:16–160:18 (describing the “USB host emulator”). But Uniclass offered no testimony explaining how this emulation described in GB ’540 meets claim 1’s requirement of “emulating . . . to the first host.” We also cannot identify any place in the three pages of GB ’540 provided in the joint appendix that would support Uniclass’ theory that GB ’540 discloses this limitation. J.A. 9789;

J.A. 9790; J.A. 9793. We see no record evidence that GB '540 discloses “emulating the input device to the first host.” To the extent that the jury finding of anticipation was based on the GB '540 reference, that finding lacks substantial evidence in this record.

The district court erred in its denial of JMOL because the jury’s finding of anticipation was not supported by substantial evidence as to either reference.

II

On appeal, ATEN challenges the district court’s denial of JMOL as to infringement of the '141 and '289 patents. ATEN argued in its motion for JMOL that the evidence compels a finding of infringement, but the jury was confused due to Uniclass’ expert Mr. Dezmelyk’s testimony on the scope of the claim terms. *E.g.*, J.A. 8–12; J.A. 7937–7938. The district court denied the motion, holding ATEN waived any right to contest Mr. Dezmelyk’s claim construction testimony because it failed “to raise concerns regarding the proper construction of claim terms at trial itself.” J.A. 10.

The record below indicates that Mr. Dezmelyk offered trial testimony regarding the construction of the terms “disconnecting” and “connecting” in the '141 patent. At the claim construction stage, the district court gave the term “disconnecting the input device from the first host without connecting the input device to any other host and starting emulating the input device to the first host” its plain and ordinary meaning. ATEN did not object, nor did it proffer a different construction. In fact, it was ATEN who urged the court to adopt the plain and ordinary meaning. At trial, Mr. Dezmelyk opined that the accused devices “never connect the input device to the host computer” based on his interpretation of the plain and ordinary meaning of the term “connected” as requiring a direct communication pathway. J.A. 9237 at 15–16; *see also* J.A. 9240 at 16–18; J.A. 9241 at 15–21. To inform his interpretation, Mr.

Dezmelyk testified about the import of the prosecution history. J.A. 9242 at 13–23 (“I look at the prosecution history to understand what ATEN . . . was telling the patent office In this case one of the statements they made to the examiner was the applicant’s invention . . . has a fundamental difference in comparison to the teaching of [a reference] with regard to the concepts of connected and disconnected between the input device and the host devices.”). According to ATEN, this expert was testifying as to the proper claim construction to be given to these terms.

The record also indicates that Mr. Dezmelyk offered trial testimony regarding the meaning of “detecting whether the first port is occupied” in the ’289 patent. Mr. Dezmelyk opined that he believed “the ordinary meaning of the phrase, that is what an engineer would think when they read this patent, what was meant by that phrase when he says detecting the first port is occupied, is detecting if a cable was plugged into the port.” J.A. 9223 at 1–5; *see also* J.A. 9223 at 17–18; J.A. 9221 at 20–24. To inform his interpretation, Mr. Dezmelyk again referred to the prosecution history. J.A. 9228 at 7–12 (“[T]he connector is occupied in the [reference], but notice there is no discussion of messages In fact, . . . the [reference] does meet the messages test. So it has to be a determination based on the connector itself actually having a plug in it.”); *see also* J.A. 9226 at 13–14.

Mr. Dezmelyk’s testimony on both patents amounts to claim construction testimony before the jury. ATEN did not object to any of this testimony during the trial, nor did ATEN move for the district court to resolve these claim construction disputes. The only objection to the expert’s testimony came after the close of evidence when ATEN orally moved for a “post-testifying *Daubert* on Mr. Dezmelyk’s testimony on invalidity with respect to anything that

required an ATEN claim construction.”¹ J.A. 9357–9358 at 231:23–232:1 (*italics added*). ATEN now argues its objection regarding invalidity should be broadened to apply to claim construction for infringement purposes. We do not agree. Even if ATEN’s oral motion was timely, we agree with the district court that ATEN did not object to Mr. Dezmelyk’s claim construction testimony with respect to infringement. J.A. 9–10. By failing to object, ATEN has waived any challenge to the jury’s finding of infringement based on this testimony.

It is beyond dispute that claim construction issues are to be decided by the court. It is thus improper for an expert witness to testify before the jury regarding claim construction. *CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1172 (Fed. Cir. 2005). In *CytoLogix*, the parties agreed to present expert witness testimony regarding claim construction to the jury and counsel argued conflicting claim constructions to the jury. *Id.* We noted the district court should have refused to allow such testimony, despite the agreement of the parties, because the risk of confusing the jury was high. *Id.* But here, as in *CytoLogix*, “there is no ground for reversal since there was no objection to the expert testimony as to claim construction.” *Id.* at 1173. We do not fault the district court here for allowing claim construction to go to the jury. It is the parties’ obligation to raise a dispute regarding the proper scope of claims to the court. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“When the parties present a fundamental dispute regarding the

¹ ATEN also filed a motion for JMOL on the final day of trial that briefly discussed the term “occupied” of the ’289 patent. J.A. 7937. ATEN did not raise this issue at the hearing. J.A. 10–11. We agree with the district court that ATEN failed to preserve its claim construction challenge via this motion. J.A. 11.

scope of a claim term, it is the court's duty to resolve it."). We therefore affirm the district court's denial of JMOL as to noninfringement.

CONCLUSION

For the reasons discussed above, we reverse as to invalidity and affirm as to noninfringement. Because we affirm as to noninfringement, we need not reach lost profits.

AFFIRMED-IN-PART, REVERSED-IN-PART

COSTS

No costs.