IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WISCONSIN

ULTRATEC, INC., and CAPTEL, INC.,

Plaintiffs,

v.

OPINION & ORDER

SORENSON COMMUNICATIONS, INC., and CAPTIONCALL, LLC,

14-cv-66-jdp

Defendants.

Plaintiffs accused defendants of infringing U.S. Patent No. 7,660,398 (the '398 patent), which relates to captioned telephone service for the deaf and hearing-impaired. Just before trial started on September 28, 2015, defendants stipulated to infringement, and the jury found the '398 patent not invalid and awarded damages to plaintiffs. The parties made the numerous post-trial filings typical of a patent case. The court granted defendants' motion for judgment as a matter of law that the '398 patent was invalid and that any infringement was not willful, and it denied defendants' motion for a new trial on damages. Dkt. 706. Plaintiffs' post-trial filings, predicated on the idea that they were prevailing parties, were denied as moot. Both sides appealed.

The Federal Circuit affirmed this court's denial of defendants' request for a new trial on damages and its determination that defendants' infringement was not willful. Dkt. 777-1. But the Federal Circuit reversed this court's determination that the patent was invalid. So plaintiffs ask to renew their post-trial motions and filings. Dkt. 779. Defendants agree that the court should now take up plaintiffs' motions, but they oppose them on the merits. Dkt. 783. In this opinion and order, the court decides plaintiffs' pending motions. The court will assume familiarity with the technology and background to the case, which is set out in the court's

decision on summary judgment, Dkt. 478, and elaborated in the court's decision on the post-trial motions, Dkt. 706.

A. Motion for a permanent injunction

Plaintiffs seek a permanent injunction, or in the alternative an ongoing royalty at a rate higher than that found by the jury. Dkt. 609. To get an injunction, plaintiffs must demonstrate that (1) they have suffered an irreparable injury; (2) remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) considering the balance of hardships between plaintiffs and defendants, a remedy in equity is warranted; and (4) the public interest would not be disserved by a permanent injunction. *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391 (2006). If a permanent injunction is not appropriate, the court may allow the parties to negotiate a license, or it may "step in to assess a reasonable royalty in light of the ongoing infringement." *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1315 (Fed. Cir. 2007).

1. Irreparable injury and an inadequate remedy at law

An irreparable injury is one that cannot be redressed by the available legal remedies, such as an award of money damages. The first two injunction factors tend to coalesce when the question is whether a prevailing party is entitled to permanent injunction at the close of a case. But, critically, any purported irreparable injury must have been caused by the infringement, rather than by lawful competition or other market factors. *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 639 (Fed. Cir. 2015).

Plaintiffs here assert essentially two forms of irreparable injury: loss of market share and reputational damage. Both of these have been recognized as irreparable harms because they have long-term effects that cannot readily be quantified, and they would not completely be

remedied by the payment of royalties on the infringing products actually sold. *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1345 (Fed. Cir. 2013).

The evidence at trial amply establishes that defendants gained market share during the period of infringement. Dkt. 611-25 (Tr. Ex. 1331). Defendants entered the market in 2011 with less than two percent market share in terms of call minutes, garnering more than 50 percent of call minutes the next year, and holding at least 40 percent through mid-2014. It does not matter that plaintiffs' call volume also grew in absolute terms during this time. *Douglas Dynamics*, 717 F.3d at 1344. The market for captioned calls was growing, so plaintiffs' call volume could have increased even while it lost market share to defendants.

The more difficult question is whether plaintiffs' lost market share was caused by defendants' infringement of the '398 patent. This court previously determined, in the opinion on defendants' motion for judgment as a matter of law, that "[p]laintiffs failed to demonstrate how their commercial success and licensing was attributable to the invention of the '398 patent." Dkt. 706 at 11. But this earlier determination is not conclusive here for two reasons. First, even in the earlier decision, the court held that the jury's implicit finding that secondary considerations supported the non-obviousness of the patent was supported by substantial evidence. *Id.* at 12. Second, the Federal Circuit's holding that the jury's finding that patent was not invalid is supported by substantial evidence also affects the analysis, even though the Federal Circuit did not expressly address the nexus between the '398 patent and either party's market success.

At trial, plaintiffs adduced evidence that the invention, which combined the two-line captioned phone with echo cancellation, had several benefits. (See, particularly, the testimony of Katie Kretschman, CapTel manager of quality and training, and Brenda Battat, former

director of the Hearing Loss Association of America.) Suppression of the voice of the assisted user increased the speed and accuracy of transcription because the relay operator could transcribe all the words that he or she heard. It also provided increased privacy because the relay operator would not hear what the assisted user said. The two-line configuration had other benefits, including allowing captions to be turned on or off as needed, and allowing access to 911 emergency services. The evidence at trial was unequivocal that the two-line captioned phone with echo cancellation was enormously popular.

But still, the '398 patent does not claim every two-line captioned phone that suppresses the voice of the assisted user for the relay operator. The '398 patent is limited to systems that use echo cancellation to suppress the voice of the assisted user. Defendants adduced evidence at trial that there are several alternative suppression methods, particularly the use of automatic volume control with warbling, which defendants contend to have adopted after the jury verdict.

Another pertinent consideration here is that defendants were aggressive and successful marketers. Plaintiffs complain that defendants' marketing techniques were unfair and illegitimate, but plaintiffs would not be entitled to an injunction if their loss of market shape was caused by defendants' aggressive marketing.

Plaintiffs do not have to show that defendants' infringement was the *sole* cause of their loss of market share. *Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1364 (Fed. Cir. 2013). "Consumer preferences are too complex—and the principles of equity are too flexible—for that to be the correct standard." *Id.* Plaintiffs must show only that there is some connection between the patented technology and demand for defendants' product. *Id.* Plaintiffs have made that showing here.

Again, there is no question that the combination of the two-line captioned phone with voice cancellation drove demand for both plaintiffs' and defendants' products. The question is whether there is a connection between that demand and the use of echo cancellation at the relay, which is the technology claimed in the '398 patent. Defendants are correct that the ultimate consumer does not realize what specific voice suppression technology is used, and thus the specific technology is not in itself a basis for consumer demand. But defendants not only adopted the technique of suppressing the voice of the assisted user (which is the source of the sought-after benefits) but they copied plaintiffs' specific technology for doing so. The voice suppression technology claimed in plaintiffs' '398 patent was effective and readily available. Defendants adopted it, thereby getting into the market more quickly than they could have had they taken time to develop their own technology. And it would be a reasonable inference that echo cancellation is the superior technology because defendants did not replace it with any other before the trial in this case. The court is satisfied that plaintiffs have established a sufficient nexus between defendants' infringement of the '398 patent and plaintiffs' own loss of market share.

Defendants also contend that any harm to plaintiffs is a purely monetary injury that could be redressed by royalties. Defendants argue that plaintiffs' business model relies exclusively on licensing its technology to major phone service providers (including AT&T, Sprint, and Hamilton), and that plaintiffs' revenue consists exclusively of licensing fees. Thus, the argument goes, plaintiffs cannot be irreparably harmed if defendants also use the patented technology and pay royalties for it.

Defendants are correct that a patent owner who freely grants unrestricted licenses cannot show that money damages would be an inadequate remedy. In such a case, the

defendant would simply share in market that the patent owner had already ceded to its licensees. It is also true that plaintiffs here have not refused to grant any licenses, so that they alone can exploit the patented technology. But a history of licensing does not, by itself, preclude a patent owner from showing that money damages would be inadequate. *Acumed LLC v. Stryker Corp.*, 551 F.3d 1323, 1328 (Fed. Cir. 2008). At the Federal Circuit explained:

While the fact that a patentee has previously chosen to license the patent may indicate that a reasonable royalty does compensate for an infringement, that is but one factor for the district court to consider. The fact of the grant of previous licenses, the identity of the past licensees, the experience in the market since the licenses were granted, and the identity of the new infringer all may affect the district court's discretionary decision concerning whether a reasonable royalty from an infringer constitutes damages adequate to compensate for the infringement.

Id.

Plaintiffs' licensing strategy here does not negate the possibility of irreparable harm. Plaintiffs have granted only portfolio licenses with additional obligations, including technology cross-licenses and the requirement that licensees promote the CapTel brand exclusively. Plaintiffs have not simply ceded the market to its licensees. Rather, plaintiffs' strategy is to exploit the market through licensees who are obligated to promote plaintiffs' products, even if plaintiffs' revenue consists of licensing fees. A bare compulsory license to defendants, however, would not provide any promotional benefit to plaintiff. Under these circumstances, if defendants are able to erode the share of the market served by plaintiffs' licensees, it would erode plaintiffs' future business in a way that could not be fully calculated and would not be fully redressed by royalty payments.

Plaintiffs also assert that they would suffer several forms of reputational injury without an injunction. First, plaintiffs contend that their reputation would be tarnished because

customers would associate plaintiffs and their invention with defendants' lower quality of service. The court will assume that plaintiffs have sufficient evidence that defendants captioned telephone service is of lower quality, but plaintiffs have not explained how users of captioned telephones would associate plaintiffs or their invention with the inferior captioning services provided by defendants. The evidence suggests instead that users are not aware of the specific technologies that provide the functional benefits. The court concludes that this form of reputational injury is speculative.

Second, plaintiffs contend that a compulsory license to defendants would undermine their reputation as innovators who established the captioned telephone market in the first place. The court accepts that plaintiffs achieved a reputation as innovators with the two-line captioned phone with voice cancellation. But the court is not persuaded that this reputation would be undermined if the specific cancellation technology claimed in the '398 patent were licensed because end users are not aware of that technology.

Third, plaintiffs contend that a bare compulsory license of the '398 patent to defendants would harm their goodwill with their primary licensees. Plaintiffs' licensees take portfolio licenses with additional obligations, for which they pay prices substantially higher than the single-patent rate found by the jury. Plaintiffs did not adduce any direct evidence on this point (such as a declaration from a licensee). But plaintiffs make a plausible case that if its licensees could make a la carte choices from among the patents in their portfolio, their business model would be substantially undermined. So the court is persuaded that plaintiffs would indeed suffer reputational injury of this type.

The court is not persuaded that any of the licensing offers by plaintiffs to defendants undermine plaintiffs' assertion of irreparable harm. Those offers were either made in the

context of settlement discussions, or they were to be on terms similar to those offered to plaintiffs' other licensees. Offers made in the context of settlement discussions might be inadmissible under F.R.E. 408, and even if not inadmissible, they would not be very informative about the effect on plaintiffs' actual business model. A party may compromise its legitimate business interests, even to the point of enduring irreparable harm, to avoid protracted litigation.

Defendants argue that because they have voluntarily ceased using the infringing method, there is no chance of irreparable harm and plaintiffs' request for a permanent injunction is moot. But "[t]he fact that the defendant has stopped infringing is generally not a reason for denying an injunction against future infringement unless the evidence is very persuasive that further infringement will not take place." W.L. Gore & Assocs., Inc. v. Garlock, Inc., 842 F.2d 1275, 1281–82 (Fed. Cir. 1988), abrogated on other grounds by eBay Inc., 547 U.S. 388. The court is not persuaded that future infringement is so unlikely that an injunction is not warranted on that basis.

The bottom line is that plaintiffs have shown that without an injunction they would suffer continued loss of market share, which would result in the loss of future business that could not be readily quantified and thus would not be adequately remediated by money damages. Plaintiffs have also shown that a compulsory license to defendants of the '398 patent would erode goodwill with plaintiffs' current licensees, thus undermining their business model.

2. Balance of hardships

The next issue is whether the balance of hardships favors the injunction. The court has reviewed the primary hardships to plaintiffs in the section above. So the court turns now to the hardship that an injunction would impose on defendants. The injunction would prohibit

defendants from using echo cancellation to suppress the voice of the assisted user. But it would not prevent defendants from offering a two-line captioned telephone that used some other technology to suppress the voice of the assisted user. If echo cancellation were the only available suppression technology, the injunction might well impose a severe hardship on defendants. But echo cancellation is not the only technology available.

At trial, defendants claimed to have eight non-infringing alternatives, at least one of which defendants' expert Dr. Shenoi testified could be ready for the market with minimal time and money. Defendants claim to have fully implemented one of them, automatic volume control with warbling, by December 3, 2015. Dkt. 628 (Declaration of Michael Holm, CaptionCall's vice president of engineering) ¶¶ 8–9. Defendants do not contend that this alternative is inferior or impractical in any way. So an injunction preventing them from using the method claimed in the '398 patent would not disrupt their captioned telephone service or impose any hardship on defendants at all.

3. Public interest

The public interest is generally served by granting an injunction against infringers. *Apple*, 809 F.3d at 647 ("[T]he public interest nearly always weighs in favor of protecting property rights in the absence of countervailing factors, especially when the patentee practices his inventions."). But this is a case involving a technology that provides an important public benefit, so the public interest in access to that technology is an important consideration. Defendants have a non-infringing alternative that they have already implemented, so an injunction would not deprive the public of defendants' captioned telephone service. An injunction would prevent infringement, thereby protecting the public's long-term interest in the protection of intellectual property rights.

4. Conclusion

After consideration of the facts of this case in light of the *eBay* factors, the court will grant plaintiffs a permanent injunction. So there is no need to consider plaintiffs' alternative request for an ongoing royalty at an enhanced rate.

B. Plaintiffs' motion to alter or amend the judgment

Plaintiffs move to alter or amend the judgment to account for infringement outside of the time period covered by the jury verdict and to award pre- and post-judgment interest. Dkt. 612. The court will grant plaintiffs' motion.

1. Supplemental damages

"District courts have discretion to award damages for periods of infringement not considered by the jury." *Whitserve, LLC v. Comput. Packages, Inc.*, 694 F.3d 10, 38 (Fed. Cir. 2012). Plaintiffs seek supplemental damages from the end of their damages expert's analysis on September 30, 2015, until the jury returned its verdict on October 7, 2015, and for any infringement thereafter.

The court is satisfied that plaintiffs have established a reasonable method of calculating the supplemental damages royalty base: 88 percent of defendants' conversation minutes during the period that defendants used echo cancellation to suppress the voice of the assisted user. The 88 percent proportion derives from plaintiffs' expert's spot-checking of defendants' calls. Although the court expressed some misgivings about the statistical validity of the spot-checking, Dkt. 706, at 15,the court accepted it as a reasonable basis for damages, a decision the Federal Circuit affirmed.

As for the period of supplemental damages, defendants contend that they began phasing out echo cancellation on November 6, 2015, and that as of December 3, 2015, all captioned

calls used the non-infringing alternative. Defendants provide no information about how many calls used the non-infringing alternative during the phase-out period, so the court will use December 3, 2015, as the date on which they ceased using echo cancellation. So plaintiffs are entitled to supplemental damages on 88 percent of defendants conversation minutes on captioned calls from October 1 through December 3, 2015. (As explained below, the court will give plaintiffs an opportunity to verify that defendants have actually ceased using echo cancellation, but barring any new information, this is the period for which plaintiffs are entitled to supplemental damages.)

The court is not persuaded that the royalty rate for these calls should be enhanced above the 3 cents per minute found by the jury. The jury verdict is predicated on the parties' *Georgia Pacific* analyses, which assume that the patent is both valid and infringed. And the court will not revisit its determination that defendants' pre-verdict infringement was not willful. (The Federal Circuit held that plaintiffs had waived their challenge to the court's willfulness analysis under *In re Seagate Tech., LLC*, 497 F.3d 1360 (Fed. Cir. 2007), because they did not ask the court to reconsider the question under *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016).) Defendants adopted the non-infringing alternative reasonably promptly after the verdict, so the court will not enhance the royalty rate for any use of the patented technology through December 3, 2015. The court will enhance the royalty rate to 9 cents for any infringement after May 18, 2018, the date of the Federal Circuit decision, because any infringement after that date would be unequivocally willful. (If supplemental discovery reveals any infringement between December 3, 2015, and May 18, 2018, the court will consider further argument about what rate should apply.)

2. Pre- and post-judgment interest

"As a rule, 'prejudgment interest should be awarded under [35 U.S.C. § 284] absent some justification for withholding such an award." Whitserve, 694 F.3d at 36 (quoting Gen. Motors Corp. v. Devex Corp., 461 U.S. 648, 657 (1983)). Defendants argue that plaintiffs are not entitled to pre-judgment interest because they delayed in suing for infringement. Although plaintiffs were aware of potential patent litigation with defendants in 2011, defendants adduce no evidence to show that plaintiffs were then aware of defendants' use of echo cancellation, which is to say the infringement of the '398 patent. Shortly after plaintiffs learned of defendants' use of echo cancellation, they attempted to amend their complaint in a pending patent infringement suit (Case No. 13-cv-346) to add a claim for infringement of the '398 patent. And shortly after the motion for leave to amend the complaint was denied, plaintiffs filed this suit. The court sees no unwarranted delay; plaintiffs are entitled to pre-judgment interest.

The next question is the interest rate. Although the rate for post-judgment interest is set by statute, the rate for pre-judgment interest is left to the discretion of the court. *Gorenstein Enterprises, Inc. v. Quality Care-USA, Inc.*, 874 F.2d 431, 437 (7th Cir. 1989); *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 807 F.2d 964, 969 (Fed. Cir. 1986). Many different approaches to setting the rate have been approved by the courts and upheld on appeal. 7 Donald D. Chisum, *Chisum on Patents* § 20.03[4][a][v] (Matthew Bender). In *Gorenstein*, the Seventh Circuit approved the prime rate as a reasonable expedient, but suggested that it would be more precise to use the rate the infringer would have to pay for unsecured debt. 874 F.2d at 437. The rationale for this approach is that patent owner has, in effect, made an involvuntary unsecured loan to the infringer in the amount of the reasonable royalty, and thus the appropriate rate is

one that reflects the risk of non-payment by the infringer. *Matter of Mahurkar Double Lumen Hemodialysis Catheter Patent Litig.*, 831 F. Supp. 1354, 1394 (N.D. Ill. 1993), *affd sub nom. In re Mahurkar Double Lumen Hemodialysis Catheter Patent Litig.*, 71 F.3d 1573 (Fed. Cir. 1995). Other reasonable approaches would be to look to the rate that the patent owner would have had to pay to borrow the money, or the rate the patent owner would have received for investing the money. Any of these rates would approximate the time-value of the delayed payment of the reasonable royalty.

In this case the court is persuaded that *Gorenstein* approach is warranted. Because the rate of pre-judgment interest is not a matter unique to patent law, it seems appropriate to follow Seventh Circuit guidance. And, more important, the defendants' bankruptcy during the pendency of this litigation demonstrates a significant risk of non-payment. Accordingly, the court will accept the rate proposed by plaintiffs' damages experts, 6 percent, which is the lowest interest rate the defendant Sorenson paid for unsecured debt between 2011 and 2014. Prejudgment interest will be compounded quarterly as both sides propose.

Post-judgment interest is governed by 28 U.S.C. § 1961, which sets the rate at "the weekly average 1-year constant maturity Treasury yield" for the week before judgment. Judgment was entered on October 15, 2015; the rate for the previous week is .27 percent. Pursuant to the statute, post-judgment interest will be computed daily to the date of payment, compounded annually.

C. Accounting and post-judgment discovery

Plaintiffs also seek an accounting of defendants' call minutes after September 30, 2015. Defendants agree to provide an accounting of call minutes through December 3, 2015, which they say is the last day they used the infringing method.

Plaintiffs aren't satisfied because they suspect the defendants of further infringement, despite the declaration stating that they ceased use of echo cancellation on December 3, 2015. Dkt. 628. The court agrees. Defendants' declaration, made December 14, 2015, is out of date. The court granted defendants' motion for judgment as a matter of law on September 30, 2016, and the Federal Circuit reversed that part of the court's decision on May 18, 2018, so the verdict was not in effect for a year and a half. Even though plaintiffs don't have any evidence that defendants have reverted to the infringing method, they are entitled to a reasonable opportunity to verify that defendants have remained true to their word.

The court will grant plaintiffs' request for limited post-trial discovery. Dkt. 779. Defendants must, within 14 days, produce to plaintiffs:

- 1. Documents sufficient to ascertain what methods defendants have used since September 30, 2015, to prevent call assistants from transcribing the words of the assisted user, including any methods purportedly used in place of the infringing method, and date ranges for each method; and
- 2. Documents sufficient to show the number of minutes used with each method from September 30, 2015 to the date of this order.

Within 14 days of producing these documents, defendants must submit to a deposition under Rule 30(b)(6) of no more than three hours on these topics.

This discovery should provide plaintiffs the information needed to submit an updated damages report consistent with this opinion. The parties are encouraged to stipulate to updated damages. If the parties cannot reach agreement, they may submit competing proposals with a brief and supporting evidence. The stipulation, or the competing proposals, are due by October 15, 2018.

D. Costs

The award of costs to defendants, Dkt. 755, will be vacated. Plaintiffs are entitled to costs because they are now the prevailing parties.

The court sustains defendants' objections to plaintiffs' costs related to travel and lodging. Dkt. 603. The court is satisfied that plaintiffs have not sought inappropriate recovery for depositions unrelated to the matters on which they prevailed. Although this court has previously awarded lodging costs in excess of the GSA per diem, plaintiffs do dispute defendants' assertion that costs for lodging are statutorily limited to the GSA rate. The court will not award costs for first- or business-class travel, so it will reduce the airfare claimed for Battat by two-thirds. Accordingly, the clerk is directed to tax costs in favor of plaintiffs in the amount of \$173,771.08.

ORDER

IT IS ORDERED that:

- 1. Plaintiffs Ultratec, Inc. and CapTel, Inc.'s motion to renew post-trial motions, vacate the award of costs to defendants, and allow limited discovery, Dkt. 779, is GRANTED.
- 2. The award of costs to defendants Sorenson Communications, Inc., and CaptionCall, LLC, Dkt. 755, is VACATED.
- 3. Plaintiffs' bill of costs, Dkt. 591, is sustained in part; the clerk of court is directed to tax costs to plaintiffs' in the amount of \$173,771.08.
- 4. Plaintiffs' motion for a permanent injunction, Dkt. 609, is GRANTED. Plaintiffs have until September 14 to submit a proposed injunction; defendants have until September 21 to file any objections to the proposed injunction.
- 5. Plaintiffs' motion to alter or amend judgment to account for infringement outside of the time period covered by the jury verdict and to award pre- and post-judgment interest, Dkt. 612, is GRANTED.

- 6. By October 15, 2018, plaintiffs must submit their request for supplemental damages, and their calculation of pre-judgment interest. If the parties cannot agree on these amounts, defendants must submit their objections to plaintiffs' proposal on October 22, 2018.
- 7. The court's September 30, 2016 order, Dkt. 706, is VACATED in part, consistent with the mandate of the Federal Circuit and this opinion.

Entered August 31, 2018.

BY THE COURT:		
/s/		
JAMES D. PETERSON District Judge		