# United States Court of Appeals for the Federal Circuit

ALEXSAM, INC., Plaintiff-Cross Appellant,

v.

IDT CORPORATION,

Defendant-Appellant.

2012-1063, -1064

Appeals from the United States District Court for the Eastern District of Texas in No. 07-CV-0420, Magistrate Judge Charles Everingham.

Decided: May 20, 2013

TIMOTHY P. MALONEY, Fitch, Even, Tabin & Flannery, LLP, of Chicago, Illinois, argued for the plaintiff-cross appellant. With him on the brief were ALISON AUBRY RICHARDS and NICOLE L. LITTLE; and STEVEN C. SCHROER, of Boulder, Colorado.

GLEN E. SUMMERS, Bartlit Beck Herman Palenchar & Scott, LLP, of Denver, Colorado, argued for the defendant-appellant. With him on the brief were SEAN C. GRIMSLEY and DANIEL R. BRODY. Of counsel on the brief was STANLEY L. AMBERG, of Chappagua, New York.

Before DYK, MAYER, and MOORE, *Circuit Judges*.

Opinion for the Court filed by *Circuit Judge* DYK.

Dissenting opinion filed by *Circuit Judge* MAYER.

DYK, *Circuit Judge*.

Defendant IDT Corporation appeals from the judgment of the District Court for the Eastern District of Texas determining that certain of IDT's systems infringed claims 57 and 58 of U.S. Patent No. 6,000,608 ("the '608 patent"), and that these claims were not invalid. Plaintiff Alexsam, Inc. cross-appeals from the court's judgment determining that certain other systems were licensed under claims 57 and 58 of the '608 patent.

We affirm the judgment of no invalidity. We reverse the jury's finding of infringement with regard to IDT's Walgreens and EWI systems, but affirm the judgment of infringement with regard to IDT's miscellaneous systems based on the district court's discovery sanction. On the cross-appeal, we affirm the judgment of noninfringement with regard to IDT's SafeNet systems based on the license defense.

#### BACKGROUND

# I. The Claims

Alexsam owns the '608 patent, which discloses a system for activating and using "multifunction card[s]." These cards include prepaid phone cards, used to pay for long-distance telephone calls, and electronic gift certificate cards. Such cards are typically distributed to retailers and displayed in stores in an inactive state, in order to deter theft, and are activated and assigned a cash value at the retailer's check-out counter.

The claims at issue in this appeal are drawn to a system for activating multifunction cards using a point-of-sale ("POS") terminal, such as a cash register or a free-standing credit card reader. Claim 57 of the '608 patent recites:

# A multifunction card system comprising:

- a. at least one card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;
- b. a transaction processor receiving card activation data from an unmodified existing standard retail point-of-sale device, said card activation data including said unique identification number;
- c. a processing hub receiving directly or indirectly said activation data from said transaction processor; and
- d. said processing hub activating an account corresponding to the unique identification number, thereby permitting later access to said account.

'608 patent col. 18 ll. 35-49 (emphases added). Dependent claim 58 further requires that the card consist of "an electronic gift certificate card, a phone card," or another enumerated type of card. *Id.* at ll. 50-53.

The critical limitations for purposes of this appeal are the requirements that the card's number include a bank identification number ("BIN"), and that the activation make use of "an unmodified existing standard retail point-of-sale device." The district court defined a BIN as "a numeric code [that] identifies a card-issuing financial institution and that is sanctioned by the American Bankers Association." See J.A. 1328-29. The parties stipulated

that the unmodified POS device limitation requires the use of "[a] terminal for making purchases at a retail location of the type in use as of July 10, 1997 that has not been reprogrammed, customized, or otherwise altered with respect to its software or hardware for use in the card system." J.A. 1325.

# II. The Accused Systems

IDT is a telecommunications and financial services company whose products include both phone cards and prepaid gift cards. IDT's cards are sold through major retail chains such as Walgreens, as well as at smaller retailers. Like the cards disclosed in the '608 patent, IDT's cards must be activated at a POS terminal before they can be used. Alexsam's infringement contentions are premised on the allegation that IDT controls the systems by which its cards are activated.<sup>1</sup>

Four accused activation systems, or groups of systems, are at issue in this appeal. The first system was used to activate cards sold by Walgreens. In this system ("the Walgreens system"), card activation data travelled from the POS terminal to an intermediate host computer owned by Walgreens, and from there over a dedicated line to IDT's host computer.

The second accused system resembled the Walgreens system, except that it used an intermediate host computer owned by a third party named EWI in place of a retailer-owned host computer. This system ("the EWI system") was used to activate cards sold by various smaller retailers.

<sup>&</sup>lt;sup>1</sup> Because of our disposition of the other issues on appeal, we do not reach IDT's contention that a judgment of noninfringement is warranted because Alexsam failed to prove that IDT directs or controls each element of the claimed system.

The third accused system, known as "the SafeNet system," was also used to activate cards sold by various retailers. Instead of sending card activation data first to a host owned by the retailer or by EWI and then to IDT by way of a dedicated line, though, the SafeNet system sent activation data first to a bank computer, and then to IDT by way of a network maintained by MasterCard for use in credit card transactions.

The fourth system was actually a group of systems that are considered together for purposes of this appeal. This group ("the miscellaneous systems") included a system used at Sears stores to activate cards over the Sears network; a system used at 7-Eleven stores to activate cards over a network managed by InComm; and systems used at various stores to activate cards over networks managed by Blackhawk and PaySpot.

# III. The Litigation

In September 2007, Alexsam filed a complaint in the United States District Court for the Eastern District of Texas, accusing IDT of infringing, inter alia, claims 57 and 58 of the '608 patent.

In January 2011, following the close of discovery, Alexsam moved for sanctions pursuant to Rule 37 of the Federal Rules of Civil Procedure, alleging that IDT had failed to disclose information suggesting that the miscellaneous systems infringe Alexsam's patents, in violation of IDT's discovery obligations. Alexsam asked the court to deem these card products to be infringing "for purposes of the action." J.A. 7726.

Midway through trial, the court granted Alexsam's motion for sanctions regarding the miscellaneous systems. The court announced, outside the presence of the jury:

I find that [the court] had ordered the Defendant to fully and completely respond to the Plaintiff's interrogatories . . . , [and] that the Defendant

failed to do so. The Defendant also stated in its response to the Motion for Sanctions that [some of this information] had been [previously] disclosed. I find that that statement was false. To cure the prejudice to the Plaintiff and to prevent this conduct from occurring in the future, I am declaring or deeming established that the Blackhawk cards, the InComm cards, the PaySpot cards, and the Sears cards, [that is, the cards activated using the miscellaneous systems,] infringe the patents-insuit. The jury will be so instructed. They will also be instructed that the only issues they need to decide, with respect to those cards, relate to invalidity and damages.

J.A. 13,820. The court denied IDT's request either to lessen the sanction or to apply the determination of infringement after the jury's verdict in order to avoid prejudicing the jury's consideration of the remaining issues. At the close of trial, the court instructed the jury that "it has previously been determined that IDT's [miscellaneous systems] infringe the asserted claims of the '608 and '787 patents," and directed the jury to "limit [its] consideration to issues of invalidity and damages as to those [systems]." J.A. 14,827-28.<sup>2</sup>

The jury found for Alexsam on all remaining questions. Specifically, the jury found that the Walgreens,

The effect of the sanction was that the miscellaneous systems were adjudged to have infringed not only claims 57 and 58 of the '608 patent, the only two claims regarding which infringement contentions were presented to the jury, but also claim 60 of the '608 patent and claim 14 of a continuation patent, U.S. Patent No. 6,189,787 ("the '787 patent"), both of which the district court determined were not infringed by any of the other accused systems.

EWI, and SafeNet systems infringed claim 57 of the '608 patent; that the EWI and SafeNet systems infringed claim 58 of the '608 patent;<sup>3</sup> and that neither claim 57 nor claim 58 was invalid as anticipated or obvious. The jury awarded Alexsam \$9,065,476 in reasonable royalties.

Prior to trial, IDT had moved for partial summary judgment that the SafeNet system was covered by a licensing agreement between Alexsam and MasterCard, and the court had denied this motion.<sup>4</sup> After trial, the court granted IDT's motion for judgment of noninfringement with respect to the SafeNet systems, concluding on further consideration that this system was licensed under the terms of the Alexsam-MasterCard agreement. The court reduced the jury's award by the number of activations that took place over the SafeNet system multiplied by the royalty rate sought by Alexsam, entering judgment in the amount of \$8,712,293.75. The court also issued an order clarifying the basis for its sanction, and granted Alexsam's motion to sever its claim for future royalties into a new case.

IDT appeals the determinations of infringement and no invalidity. Alexsam cross-appeals the district court's license determination. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

<sup>&</sup>lt;sup>3</sup> The district court had determined that the Walgreens system did not infringe claim 58 as a matter of law.

<sup>&</sup>lt;sup>4</sup> The court granted IDT's motion to bar Alexsam from invoking the doctrine of equivalents with regard to the "unmodified existing standard retail point-of-sale device" limitation, however.

### DISCUSSION

# I. Infringement

# A. The Walgreens and EWI Systems

IDT argues that the district court erred in denying its motion for judgment of noninfringement with regard to the Walgreens and EWI systems because Alexsam failed to present substantial evidence that the Walgreens and EWI systems included "an unmodified existing standard retail point-of-sale device." See '608 patent, col. 18 ll. 41-44. We review de novo the denial of a motion for judgment as a matter of law ("JMOL"). Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc., 699 F.3d 1340, 1347 (Fed. Cir. 2012); Med. Care Am., Inc. v. Nat'l Union Fire Ins. Co., 341 F.3d 415, 420 (5th Cir. 2003).

In order to carry its burden of proof on infringement of claim 57 (and thus of dependent claim 58) under the parties' stipulated claim construction, Alexsam needed to prove both that these systems made use of terminals "of the type in use as of July 10, 1997," and also that those terminals "ha[d] not been reprogrammed, customized, or otherwise altered with respect to [their] software . . . for use in the card system." J.A. 1325 (emphasis added).

Alexsam's main witness on infringement was Robert Baker, an expert on payment systems. Baker testified on two occasions, without elaboration, that the terminals used in IDT's card activations were "unmodified." See J.A. 13,797, 13,861. When asked by Alexsam's counsel to elaborate, Baker testified that "Walgreens' terminals are similar to or the same as terminals in use in July of 1997" with regard to their "basic functions"; that the terminals "are the same as terminals that existed in July of 1997 from the standpoint that they are able to read a standard . . . card"; and that "no modification was required" because IDT's system "requires the same capabilities as reading a standard credit card or debit card." J.A. 13,840, 13,847-48

(emphases added). He also testified that the terminals used to activate IDT's phone cards are "the same as terminals that existed in July of '97 with respect to the ability to read a magnetic stripe and send that information on to the next step without any modifications made to that terminal in that respect." J.A. 13,855-56.

At no point did Baker testify, except in the cursory manner described above, that no modifications were actually made to the terminals' software in order to allow them to activate IDT's cards. Indeed, Baker admitted on cross-examination that his testimony was limited to what was "required" in order to activate an IDT card, and that he had not expressed an opinion as to whether the actual POS terminals used in the IDT systems had been "reprogrammed, customized, or otherwise altered" in any way. See J.A. 13,901-03. He further testified that he had not spoken with IDT's retail or intermediary partners or with POS suppliers about the terminals used in Alexsam's systems. Finally, when pressed further, he admitted that he was "not an expert on terminals." J.A. 13,924.

Alexsam's other witness, Brent Hranicky, testified that no modifications were "necessary" to allow a standard POS terminal to read an IDT card, and that terminals in use in 1997 could perform "the same basic functions for use in a card system that are performed by point-of-sale devices today." See J.A. 13,685-87, 13,707-08. On cross-examination, however, Hranicky admitted that he was not an expert on the "specific feature functionality of the various terminals." See J.A. 13,715-16. Hranicky also admitted that POS terminals can receive software updates, but stated that he is not an expert on these updates, and that he did not "know for sure whether modifications have, in fact, been made for any reason to" the terminals. See J.A. 13,728-30.

We conclude that Alexsam failed to present substantial evidence that the terminals used in IDT's Walgreens

and EWI systems "ha[d] not been reprogrammed, customized, or otherwise altered with respect to [their] software . . . for use in the card system." See J.A. 1325. The district court therefore erred in denying Alexsam's motion for JMOL of noninfringement as to the Walgreens and EWI systems.

# B. The Miscellaneous Systems

The district court deemed the miscellaneous systems to have infringed Alexsam's patents as a sanction for IDT's failure to disclose the fact that certain of its card products contained BINs in their card numbers. A district court's decision to sanction a litigant under Rule 37 is reviewed for abuse of discretion. ClearValue, Inc. v. Pearl River Polymers, Inc., 560 F.3d 1291, 1304 (Fed. Cir. 2009); Chilcutt v. United States, 4 F.3d 1313, 1319-20 (5th Cir. 1993). Under Fifth Circuit law, which governs here, the propriety of severe sanctions such as dismissing a claim or entering default judgment depends on whether the discovery misconduct "result[ed] from wilfulness or bad faith"; "the deterrent value of Rule 37 cannot be substantially achieved by the use of less drastic sanctions"; "the other party's preparation for trial was substantially prejudiced"; and the misconduct was "plainly attributable to an attorney rather than a blameless client," or to "confusion or sincere misunderstanding of the court's orders." See Batson v. Neal Spelce Assocs., 765 F.2d 511, 514 (5th Cir. 1985); see also ClearValue, 560 F.3d at 1306.

For less severe sanctions, however, including deeming certain facts established for purposes of the litigation, the Fifth Circuit applies a less-rigorous standard, requiring only that the sanction be "[j]ust and [f]air," that it have a "substantial relationship" to the facts sought to be established by the discovery, and that it meet Rule 37's goals of punishment and deterrence. See Chilcutt, 4 F.3d at 1319-21 (citing Ins. Corp. of Ir. v. Compagnie des Bauxites de

Guinee, 456 U.S. 694 (1982) and Nat'l Hockey League v. Metro. Hockey Club, Inc., 427 U.S. 639 (1976)).

We conclude that the sanction imposed on IDT falls within the category of less-severe sanctions described in Chilcutt. As in Chilcutt, the court "deemed that the liability facts of the plaintiff['s] case [(in this case, infringement)] were established." while "allow[ing] [defendant] to present evidence of its affirmative defenses [(in this case, invalidity)] and requir[ing] the plaintiff to prove damages." Chilcutt, 4 F.3d at 1315, 1319. Therefore, we need only ask whether the sanction was just and fair, whether it bore a substantial relationship to the facts sought to be established by Alexsam, and whether it met Rule 37's goals of punishment and deterrence. See id. at 1319-21.

At the start of the litigation, the district court issued a discovery order requiring both parties to produce "a copy of all documents . . . relevant to the pleaded claims or defenses" by October 15, 2008. J.A. 170. This order obligated IDT to disclose which of its cards bore card numbers that included "a bank identification number approved by the American Banking Association for use in a banking network"—an element of each of the claims at issue. *See* '608 patent col. 18 ll. 36-39; U.S. Patent No. 6,189,787 col. 13 ll. 56-60.<sup>5</sup> IDT's production in response to this order was minimal, however, and did not include documents disclosing that the cards activated over the miscellaneous systems were encoded with BINs.

In March 2010, Alexsam served on IDT an interrogatory ("Interrogatory 6") requesting that IDT "identify the

<sup>&</sup>lt;sup>5</sup> As noted earlier, the district court defined a bank identification number, or "BIN," as "a numeric code [that] identifies a card-issuing financial institution and that is sanctioned by the American Bankers Association." *See* J.A. 1328-29.

BINs associated with" each "Accused Card." J.A. 7741. In May, Alexsam served another interrogatory ("Interrogatory 8"), requesting that "[f]or each Accused IDT Card product, [IDT] identify . . . the name of the card product [and] the BIN[(s)] associated with the card product." J.A. 7774 (emphasis added). The second request explicitly defined "Accused IDT Cards" as including "all" IDT gift, debit, phone, and multifunction cards, and third-party phone cards activated by IDT, whose "associated identification number[s] . . . include[] a BIN." See J.A. 7770-71 (emphasis added). IDT's responses to these interrogatories did not identify the cards that were activated over the miscellaneous systems as BIN-encoded.

In May and July 2010, Alexsam filed motions to compel complete responses to these interrogatories. Alexsam noted in particular that IDT had not provided "a complete list of names of its [BIN-encoded] products or associated BIN[s]," as required by Interrogatory 8. See J.A. 1339-40. While Alexsam pointed out that IDT had failed to provide BINs for several cards about which Alexsam had inquired by name, Alexsam did not specifically point out IDT's failure to disclose the cards activated over the miscellaneous system, because Alexsam was not aware at that time that these cards fell within the scope of IDT's obligation to disclose.

On August 12, the court granted Alexsam's motions to compel responses to Interrogatories 6 and 8, finding that IDT had "repeatedly failed to provide 'sufficient detail to enable [Alexsam] to locate and identify' the answers to [its] interrogatories." J.A. 6 (quoting Fed. R. Civ. P. 33(d)). The court also sanctioned IDT for violating its original discovery order by prohibiting IDT from producing business records in response to interrogatories, and requiring it instead to "provide written answers to each interrogatory 'separately and fully in writing under oath." J.A. 6-7 (quoting Fed. R. Civ. P. 33(b)(3)). Finally, the court warned IDT that it faced further sanctions "of increased

severity," including a possible striking of its defenses, if it failed to respond fully to Alexsam's interrogatories within twenty-one days. *See* J.A. 6-7, 2217.

On September 2, IDT told the court that it had "provided supplemental and complete responses to all interrogatories." See J.A. 2222. Nonetheless, four days later, IDT filed a fourth supplemental response to Interrogatory 6. This supplemental response did not mention the cards associated with the miscellaneous systems. IDT did not supplement its previous response to Interrogatory 8. On September 15, the court held another hearing, at which it warned of further sanctions if it developed that IDT had not complied fully with its discovery orders.

On November 10, Alexsam sent IDT a letter asking it to describe the encoding schemes used to assign card numbers to ten specific types of cards that IDT had not previously identified as bearing BINs, including the cards that were activated using the miscellaneous systems. IDT responded by directing Alexsam to a set of documents produced in the wake of the court's August 2010 order, which revealed that several of the cards included BINs in their card numbers. On December 20, the final day of discovery, an IDT witness produced documents revealing that several other cards also carried a BIN. The BINencoded cards disclosed on these two occasions were, collectively, the cards associated with the miscellaneous systems.

Following the close of discovery, Alexsam moved for sanctions pursuant to Rule 37, alleging that IDT had violated the court's discovery orders by failing to disclose these BIN-encoded cards in a timely manner. The court granted Alexsam's motion, sanctioning IDT by deeming the miscellaneous systems to have infringed Alexsam's patents.

On review, we consider first whether the sanction was "[j]ust and [f]air." *Chilcutt*, 4 F.3d at 1321-24. As part of

this inquiry, the Fifth Circuit considers factors including (1) whether the sanctioned party was warned of the impending sanctions, (2) whether the party made "[e]mpty [p]romises" that it would "comply with its discovery obligations," (3) whether the claim being pursued through discovery was not so "frivolous" that the use of discovery amounted to "an abuse of judicial process," (4) whether the sanctioned party bore some degree of culpability, and (5) whether the court had previously sanctioned the same party. See id. Here, all five factors support the district court's sanction.

Regarding the first factor, IDT received ample warning on August 12, when the court informed it that "[f]urther non-compliance will result in sanctions of increased severity," up to and including "strik[ing IDT's] defenses." J.A. 7, 2217. As for "[e]mpty [p]romises," substantial evidence supports the court's finding that IDT not only "misled Alexsam through its [incomplete] discovery responses," but also "made false representations to the court concerning the extent to which it had disclosed its Blackhawk encoding scheme." J.A. 17. Regarding the third factor, Alexsam's claims were not frivolous, even though we conclude that Alexsam failed to present substantial evidence in support of its infringement claims. With respect to culpability, IDT argues that its failure to comply with the motions to compel was innocent because it was simply unaware that the numbers on the latedisclosed cards included BINs; IDT offers no reason why it could not have examined the encoding schemes at an earlier date, though, and determined that they included BINs.<sup>6</sup> Finally, IDT was previously sanctioned on August

<sup>&</sup>lt;sup>6</sup> To the extent that IDT asserts that it did not consider the six-digit numbers encoded on these cards to be BINs because only a number that is actually used to route a transaction over a banking network can be a BIN, this defense is foreclosed by the district court's claim construc-

12 for incomplete responses to the same interrogatories. The court's sanction was therefore just and fair.

In addition to considering the justice and fairness of the sanction, we consider whether it bore a "substantial relationship" to the facts sought to be established by Alexsam, and whether it met Rule 37's goals of punishment and deterrence. See Chilcutt, 4 F.3d at 1324-25. Alexsam sought to discover which cards bore BINs in order to establish that the systems associated with those cards infringed the patents in suit. The district court found that IDT's "failure to timely produce th[is] information . . . caused Alexsam severe prejudice in preparing its case for trial," J.A. 17, and as such, a sanction deeming the concealed systems to infringe clearly bore a "substantial relationship" to the attempted discovery.

Finally, while IDT argues that lesser sanctions such as an award of attorneys' fees would have been sufficient to meet the purposes of Rule 37, we see no abuse of discretion in the district court's sanction, especially in light of the failure of its earlier sanctions to secure compliance. We therefore affirm the district court's judgment deeming the miscellaneous systems to infringe as a sanction for IDT's discovery violations.<sup>7</sup>

tion order, entered on June 29, 2010, which defined a BIN simply as "a numeric code [that] identifies a card-issuing financial institution and that is sanctioned by the American Bankers Association." See J.A. 1328-29. The court had applied this same construction in an earlier litigation involving the same patent. See id.

<sup>7</sup> Because we reverse the jury's finding of infringement as to the Walgreens and EWI cards, we need not address IDT's contention that the way in which the court applied the sanction prejudiced the jury's consideration of those cards.

# C. The SafeNet System

Alexsam cross-appeals the district court's decision on JMOL that the SafeNet system was sublicensed under the terms of the agreement between Alexsam and Master-Card. We review a district court's interpretation of a contract de novo. *Rembrandt Data Techs., LP v. AOL, LLC*, 641 F.3d 1331, 1336 (Fed. Cir. 2011). We agree with the district court that the activations taking place over the SafeNet system were sublicensed under the plain language of the agreement, and therefore affirm the grant of JMOL.

The Alexsam-MasterCard agreement defined a "Licensed Transaction" as "each process of activating . . . an account or subaccount which is associated with a transaction that utilizes MasterCard's network . . . wherein data is transmitted between a [POS] Device and MasterCard's financial network ..., provided that such process is covered by one of the Licensed Patents." J.A. 12,755. The agreement further stipulated that "Licensed Transactions" include "the entire value chain and all parts of the transaction and may involve other parties including . . . processors [and] card vendors." Id. The contract provided that "[t]o the extent that these other parties participate in a Licensed Transaction, they will also be licensed under this Agreement," and specified that "[u]nless otherwise sublicensed as permitted hereunder, all Licensed Transactions shall be deemed sublicensed under an implied sublicense granted hereunder to all participating parties." J.A. 12,755-56 (emphasis added). MasterCard was obligated to report the total number of licensed transactions to Alexsam at the end of each month, and to pay a fee for each transaction.

The district court correctly found that under the plain terms of this agreement, any activation transaction covered by the patents in suit and taking place over the MasterCard network was automatically "deemed sublicensed," without regard to the intent of either Alexsam or MasterCard regarding that particular transaction. Because the license was not conditioned on the royalty payments, the fact that MasterCard refused to pay Alexsam royalties for IDT's SafeNet activations did not retroactively revoke the sublicense under which those transactions took place. This case is governed by *Tessera*, *Inc. v. International Trade Commission*, 646 F.3d 1357 (Fed. Cir. 2011),8 and there were no disputed issues of material fact to be submitted for determination by the jury.

# II. Validity

A patent claim is invalid if "the differences between the subject matter [of the claim] and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (2006). The party challenging the patent bears the burden of proving invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. \_\_, \_\_, 131 S. Ct. 2238, 2242 (2011). While obviousness is a question of

<sup>8</sup> See 646 F.3d at 1370 ("[T]here is nothing in any of the license agreements to even remotely suggest that the existence of a condition subsequent, namely, the payment of royalties, operates to convert . . . authorized sales into unauthorized sales . . . . That some licensees subsequently renege or fall behind on their royalty payments does not convert a once authorized sale into a non-authorized sale. Any subsequent non-payment of royalty obligations arising under the . . . Licenses would give rise to a dispute with [the patent owner's] licensees, not with its licensees' customers.").

<sup>&</sup>lt;sup>9</sup> IDT argues that because the parties stipulated that the jury should be instructed on a preponderance-of-the-evidence standard, we should apply that standard, as

law, it is based on several underlying questions of fact, including "the scope and content of the prior art" and the nature of any "differences between the prior art and the claims at issue." *Transocean*, 699 F.3d at 1347 (citing *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17-18 (1966)).

IDT argues first that claims 57 and 58 of the '608 patent would have been obvious in light of U.S. Patent No. 5,477,038 ("Levine"). Levine discloses a system for activating electronic travelers' check cards using "a terminal (which could be a telephone)." Levine col. 4 ll. 35-36. The parties dispute whether this disclosure satisfies the "unmodified existing standard retail point-of-sale device" limitation of the '608 patent. Levine teaches that the activation terminal must transmit not only the card's "serial number" and the amount of money to be loaded onto the card, but also certain "customer data," including "the customer's name and other identifying information." Levine col. 2 ll. 31-35; id. col. 4 ll. 31-36. At trial, Alexsam's witness testified that "a person of ordinary skill would clearly understand" that a standard, unmodified POS terminal cannot transmit such customer data. See J.A. 14,707; see also J.A. 14,711. IDT's own witness conceded as much, but suggested that Levine in fact discloses two embodiments, one of which uses a standard POS terminal and does not involve the transmission of the full set of data recited in the specification. In reviewing the jury's verdict of nonobviousness, "we must presume that the jury resolved all factual disputes in favor of the prevailing party." Transocean, 699 F.3d at 1347. We therefore presume that the jury rejected IDT's two-embodiment

well. We reject this argument. Courts are "not bound to accept, as controlling, stipulations as to questions of law." Estate of Sanford v. Comm'r, 308 U.S. 39, 51 (1939); Technicon Instruments Corp. v. Alpkem Corp., 866 F.2d 417, 421-22 (Fed. Cir. 1989).

theory, and concluded that Levine's reliance on additional "customer data" is incompatible with a disclosure of the use of an "unmodified existing standard retail point-of-sale device." <sup>10</sup>

In the alternative, IDT argues that claims 57 and 58 would have been obvious over a combination of Levine and either one of two other patents, both of which supposedly supply the missing element of a standard, unmodified POS terminal. Even if these references do disclose this element, IDT would still need to show that a person having ordinary skill in the art would have been motivated to combine one of these patents with Levine in order to achieve the claimed invention. See Wyers v. Master Lock Co., 616 F.3d 1231, 1238-40, 1243-45 (Fed. Cir. 2010). Even though IDT bore the burden of proving this fact by clear and convincing evidence, it did not introduce any expert testimony about whether a skilled artisan would have been motivated to combine the various references to achieve the claimed invention.

On appeal, IDT asserts that expert testimony was not necessary and that the introduction of the references themselves was sufficient. IDT cites our decision in *Wyers* for the proposition that "expert testimony is not required when the references and the invention are easily understandable." *See id.* at 1242; *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009). In *Wyers*, however, we also noted that "expert testimony

<sup>&</sup>lt;sup>10</sup> Because substantial evidence supports the jury's finding that Levine does not disclose this limitation, we necessarily reject IDT's argument that Levine anticipates these claims, as well. *See In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) ("Anticipation . . . requires that each and every element [of] the claim is found, either expressly or inherently described, in a single prior art reference." (quotation marks omitted)).

regarding matters beyond the comprehension of laypersons is sometimes essential,' particularly in cases involving complex technology." Wyers, 616 F.3d at 1240 n.5 (quoting Centricut, LLC v. Esab Grp., Inc., 390 F.3d 1361, 1369-70 (Fed. Cir. 2004)); see also Perfect Web, 587 F.3d at 1330 ("If the relevant technology were complex, the court might require expert opinions."); Proveris Sci. Corp. v. Innovasystems, Inc., 536 F.3d 1256, 1267 (Fed. Cir. 2008) (affirming the district court's requirement of expert testimony to prove invalidity where "th[e] subject matter [wa]s sufficiently complex to fall beyond the grasp of an ordinary layperson").

In this case, the technology was complex and the prior-art references were not easily understandable without expert testimony. The claim that the technology is simple is belied by the fact that both sides believed it necessary to introduce extensive expert testimony regarding the content of the prior art. Expert testimony was required not only to explain what the prior-art references disclosed, but also to show that a person skilled in the art would have been motivated to combine them in order to achieve the claimed invention. IDT provided no such expert testimony.

Substantial evidence therefore supports the jury's finding that claims 57 and 58 are not invalid.

#### CONCLUSION

We affirm the jury's finding of no invalidity regarding claims 57 and 58 of the '608 patent, as well as the district court's judgments regarding the miscellaneous and SafeNet systems. We reverse the judgment of infringement regarding the Walgreens and EWI systems. We remand for the district court to recalculate Alexsam's damages accordingly.

# AFFIRMED-IN-PART, REVERSED-IN-PART, AND REMANDED

# Costs

Costs to neither party.

# United States Court of Appeals for the Federal Circuit

ALEXSAM, INC.,

Plaintiff-Cross Appellant,

v.

IDT CORPORATION,

Defendant-Appellant.

2012-1063, -1064

\_\_\_\_

Appeals from the United States District Court for the Eastern District of Texas in No. 07-CV-0420, Magistrate Judge Charles Everingham.

MAYER, Circuit Judge, dissenting.

I respectfully dissent. There can be no infringement of U.S. Patent No. 6,000,608 (the "608 patent") because it is invalid. Asserted claims 57 and 58 disclose nothing more than an abstract idea for making a business run more efficiently, thereby failing to meet the subject matter eligibility requirements set forth in 35 U.S.C. § 101.

Whether claims are directed to statutory subject matter is a "threshold" question, *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010), which must be addressed before this court can consider subordinate issues related to obviousness and infringement. *See Parker v. Flook*, 437 U.S. 584, 593 (1978) ("*Flook*") (emphasizing that "[t]he obligation to determine what type of discovery is sought to be patent-

ed" so as to determine whether it falls within the ambit of section 101 "must precede the determination of whether that discovery is, in fact, new or obvious" (emphasis added)); In re Comiskey, 554 F.3d 967, 973 (Fed. Cir. 2009) ("Only if the requirements of § 101 are satisfied is the inventor allowed to pass through to the other requirements for patentability, such as novelty under § 102 and . . . non-obviousness under § 103." (citations and internal quotation marks omitted)). The '608 patent falls outside the ambit of section 101 because it discloses no "inventive concept," Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1294 (2012) (citations and internal quotation marks omitted), that would even arguably confer subject matter eligibility.

The '608 patent is directed to a system for activating gift and pre-paid telephone cards at the time that they are purchased. In the past, retailers often installed dedicated "activation terminals" in their stores in order to activate such cards. Robert Dorf, the named inventor on the '608 patent, decided that the activation process could be made more efficient and less expensive if gift and pre-paid telephone cards could be activated using the point-of-sale terminals that are commonly used for processing credit card transactions. Thus, instead of activating a card by swiping it through a dedicated activation terminal, a store employee could simply swipe it through the terminal used for processing credit card transactions.

Significantly, the '608 patent makes clear that no new technology is required in order to allow standard point-of-sale devices to activate gift and pre-paid telephone cards. To the contrary, claim 57 recites that the cards can be activated using "unmodified existing standard retail point-of-sale device[s]." '608 patent col.18 ll.42-43 (emphasis added). During prosecution, Dorf asserted that his claimed system allowed cards to be activated using the "ubiquitous existing banking network" and that no "custom software" was required. J.A. 16981. Dorf empha-

sized that the "great benefit" of his system over the prior art was that existing point-of-sale devices could be used to activate cards with "no additional programming." *Id.* Accordingly, the trial court's claim construction—which was agreed to by all parties—requires use of a terminal "that has not been reprogrammed, customized, or otherwise altered with respect to its software or hardware for use in the card system." J.A. 14822.

This appeal thus presents the anomalous situation in which a patentee attempts to preserve the validity of his claims by arguing that they contain nothing new.\* Instead, the "great benefit," J.A. 16981, of the '608 patent is

At the time of Dorf's application, existing point-ofsale terminals were pre-programmed to read bank identification numbers ("BINS") associated with different cardissuing institutions. J.A. 13464-71; 14504. Dorf simply added BINS to gift and pre-paid telephone cards, thereby allowing them to be read by "unmodified existing standard retail point-of-sale device[s]." '608 patent col. 18 ll. 35-43; see J.A. 13466. The practice of encoding various types of cards with identification numbers for processing by banks and other card-issuing institutions was wellknown in the art at the time Dorf filed his application. See U.S. Patent No. 5,477,038 ("The card has a magnetic stripe with an encoded card number including a bank identification number (BIN) and an account number."); see also U.S. Patent No. 6,270,012 col. 5 ll. 10-15 (describing a debit card which functions as a prepaid telephone card and which contains a magnetic stripe that is swiped through "well-known magnetic stripe reading equipment . . . common in retail establishments for credit card transactions"). Indeed, Alexsam's expert, Robert Baker, conceded that every element of claims 57 and 58 was already in the prior art or "available in the industry" prior to the effective filing date of the '608 patent. J.A. 14738-42.

that it discloses no new hardware or software, but instead relies on the use of unmodified existing terminals for activating gift and pre-paid telephone cards. In essence, the '608 patent discloses nothing more than the "abstract idea" that it is less expensive and more efficient to activate pre-paid cards on the point-of-sale devices used to process credit cards.

"[T]he patent system represents a carefully crafted bargain that encourages both the creation and the public disclosure of new and useful advances in technology, in return for an exclusive monopoly for a limited period of time." Pfaff v. Wells Elecs., Inc., 525 U.S. 55, 63 (1998). A patentee does not uphold his end of this bargain if he seeks broad monopoly rights over a fundamental concept or basic idea without a concomitant contribution to the existing body of scientific and technological knowledge. In Bilski, an application was rejected as patent ineligible because it did not "add" anything to the basic concept of hedging against economic risk. 130 S. Ct. at 3231 (emphasizing that the application applied the concept of hedging using "well-known random analysis techniques"). In Mayo, likewise, process claims were invalidated under section 101 because they simply described a law of nature and applied it using "well-understood, routine, [and] conventional" means. 132 S. Ct. at 1294. A similar analysis applies here. The asserted claims of the '608 patent fall outside section 101 because they simply describe the idea that it would be less expensive to use the terminals that are already present in retail locations to activate gift and pre-paid telephone cards, and then apply that idea using existing technology. See Bilski, 130 S. Ct. at 3230 ("[T]he prohibition against patenting abstract ideas 'cannot be circumvented by' . . . adding 'insignificant postsolution activity." (quoting Diamond v. Diehr, 450 U.S. 175, 191-92 (1981)); Flook, 437 U.S. at 590 (rejecting "[t]he notion that post-solution activity, no matter how

conventional or obvious in itself, can transform an unpatentable principle into a patentable process").

The analysis of subject matter eligibility under section 101 often turns on the extent to which a patentee seeks to preempt future use of a fundamental concept or basic idea. See Mayo, 132 S. Ct. at 1294 (concluding that claims failed to disclose statutory subject matter where "upholding the patents would risk disproportionately tying up the use of the underlying natural laws, inhibiting their use in the making of further discoveries"); Bilski, 130 S. Ct. at 3231 ("Allowing petitioners to patent risk hedging would preempt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea."). Here, the asserted claims disclose no new technology, and yet have the potential to wield enormous preemptive power.\*\* Alexsam, Inc. ("Alexsam") has filed suit against a wide array of merchants, seeking damages for infringement whenever a conventional or online retailer uses the existing banking network to process gift and other prepaid cards. See, e.g., Alexsam, Inc. v. Best Buy Stores L.P., No. 2:10CV93, 2012 U.S. Dist. LEXIS 49511, at \*8-9 (E.D. Tex. April 9, 2012) (describing Alexsam's claims against parties such as Barnes & Noble, Inc., The Gap, Inc., J.C. Penney Company, Inc., McDonald's Corporation, Best Buy Stores LP, and The Home Depot, U.S.A., Inc.). Alexsam's broad claims—which cover not only gift cards and prepaid telephone cards, but also customer "loyalty" cards and "medical information" cards—threaten to preempt some of the "basic tools" of modern commerce. Gottschalk v. Benson, 409 U.S. 63, 67 (1972) ("Phenomena

The '608 patent covers a broad range of point-of-sale devices, including a card swipe device, a cash register, and a computer terminal. '608 patent col.4 ll.28-35.

of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work."); see also Bilski, 130 S. Ct. at 3229 ("If a high enough bar is not set when considering [business method] patent applications . . ., patent examiners and courts could be flooded with claims that would put a chill on creative endeavor and dynamic change.").

The '608 patent, like the application seeking patent protection for a method of hedging against risk in *Bilski*, 130 S. Ct. at 3230-31, describes an idea for making business run more efficiently, but it does not disclose any technological advance sufficient to confer patent eligibility. Because the asserted claims "simply append[] conventional steps" to an otherwise abstract idea, they fall outside the ambit of section 101. *Mayo*, 132 S. Ct. at 1300 ("[S]imply appending conventional steps, specified at a high level of generality, to laws of nature, natural phenomena, and abstract ideas cannot make those laws, phenomena, and ideas patentable."); *see also Flook*, 437 U.S. at 594 (concluding that claims were barred by section 101 where they described an algorithm, but disclosed no "inventive concept in in its application").