

United States Court of Appeals for the Federal Circuit

IN RE: IPR LICENSING, INC.,
Appellant

2018-1805

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2014-00525, IPR2015-00074.

Decided: November 22, 2019

GABRIEL BELL, Latham & Watkins LLP, Washington, DC, argued for appellant. Also represented by RICHARD P. BRESS, MAXIMILIAN A. GRANT, JONATHAN M. STRANG; JULIE M. HOLLOWAY, San Francisco, CA.

Before NEWMAN, O'MALLEY, and TARANTO, *Circuit Judges*.
O'MALLEY, *Circuit Judge*.

This case returns to us after remand to the Patent Trial and Appeal Board (“the Board”). In the previous appeal, we affirmed the Board’s findings that claims 1–7, 14–16, 19–29, 36–38, and 41–44 of U.S. Patent 8,380,244 (“the ’244 patent”) were obvious based on prior art references cited in ground one of ZTE’s petition, the only one of three asserted grounds on which the Board instituted review. We remanded as to claim 8, however, because we found

insufficient record support for the Board’s determination that claim 8 is invalid as obvious. *See IPR Licensing, Inc. v. ZTE Corp.*, 685 F. App’x 933 (Fed. Cir. 2017). Importantly, we examined each piece of evidence cited in the Board’s order and concluded that the evidence to which the Board pointed failed—either individually or collectively—to support the conclusion that there would have been a motivation to combine the relevant prior art references. *Id.* Rather than reverse the Board’s judgment as to claim 8 as unsupported, we remanded because we could not be sure that the record was totally “devoid of any possible motivation to combine.” *Id.* at 940. On remand, the Board again found claim 8 unpatentable. *ZTE Corp. v. IPR Licensing, Inc.*, IPR2014-00525, 2018 WL 1224736, at *1 (P.T.A.B. Mar. 6, 2018) (the “*Remand Decision*”). In this appeal, Appellant IPR Licensing (“IPRL”) argues that the only additional evidence the Board cited in support of its conclusion on remand was not part of the record before the Board. We agree.

Because the Board’s decision remains unsupported, we reverse the Board’s finding of invalidity as to ground one and, because all other challenges to the Board’s final judgment of invalidity are waived, we vacate that judgment.

I. BACKGROUND

A. The ’244 Patent

The ’244 patent recognizes two types of wireless networks. The first is a wireless local area network, which allows a user to wirelessly connect a portable electronic device to an access point, *e.g.*, a router, that is in turn connected to a network. The second is a cellular network, in which geographic regions are divided into “cells” that each contain a “base station.” ’244 patent, col. 8, ll. 20–31. Users within a given cell connect their device to a cell’s base station, which is in turn connected to a network like the internet. Connecting to either type of network has

tradeoffs. For example, wireless local area networks have more limited range but they generally transmit data faster.

In addition to mentioning different types of networks, the '244 patent cites two relevant methods for allowing users to access the same network. *Id.* at col. 2, ll. 10–17 (“[T]he nature of the cellular radio spectrum is such that it is a medium that is expected to be shared.”). The first method, Time Division Multiple Access (“TDMA”), assigns each device a unique time slot during which the device may transmit data to the base station. The second method, Code Division Multiple Access (“CDMA”), assigns each device a unique code so that they can all transmit data at the same time.

The '244 patent claims a “subscriber unit,” *e.g.*, a mobile device, that can automatically select the best available wireless network and then connect to it. *Id.* at col. 2, ll. 63–67. In particular, the subscriber unit can connect to a wireless local area network, if one is in range, or connect to a cellular network if there is no nearby wireless local area network. *Id.*

Claim 8, which depends on claim 1, provides:

1. A subscriber unit comprising:

a cellular transceiver configured to communicate with a cellular wireless network via a plurality of assigned physical channels;

an IEEE 802.11 transceiver configured to communicate with an IEEE 802.11 wireless local area network; and

a processor configured to maintain a communication session with the cellular wireless network in an absence of the plurality of assigned physical channels while the IEEE 802.11 transceiver communicates packet data with the IEEE 802.11 wireless local area network.

...

8. The subscriber unit of claim 1, wherein the cellular wireless network is a code division multiple access (CDMA) wireless network, and the cellular transceiver is a cellular code division multiple access (CDMA) transceiver.

Id. at col. 11, ll. 6–16, 39–42.

Two limitations recited in claim 8 are relevant to this appeal. First, claim 8 requires the subscriber unit to “maintain a communication session with the cellular wireless network in an absence of the plurality of assigned physical channels.” *Id.* The Board construed this phrase to mean “maintain a logical connection with the cellular wireless network when none of the plurality of physical channels are in use by the subscriber unit.” That construction was not disputed in the previous appeal. *IPR Licensing*, 685 F. App’x at 936 n.1. A logical connection means the device stores information about the cellular network even while the device is sending data over a wireless local area network. This allows the device to quickly re-establish an end-to-end connection over the cellular network if necessary. Claim 8 also requires the subscriber unit to communicate with a CDMA cellular wireless network via a CDMA transceiver.

B. Prior Art

1. Jawanda

U.S. Patent No. 6,243,581 (“Jawanda”) describes a “mobile computer terminal,” *e.g.*, a laptop, that connects to either wireless or cellular networks. J.A. 835 (col. 6, ll. 21–42). The terminal can automatically determine which of these connections has the higher bandwidth and then transmit data via the faster connection. *Id.* If the slower connection becomes the faster connection at any time, the terminal “seamlessly hand[s]-off” data transmission to the faster connection. *Id.* Jawanda’s specification also states

that “wireless signals can be transmitted according to any currently available or future wireless data protocol such as [CDMA] . . . or [General Packet Radio Service].” J.A. 834 (3:6–9).

2. GPRS and the PDP Context feature

The General Packet Radio Service Standards (“GPRS”) is a set of ten sections from the more general Global System for Mobile Communication Standard (“GSM”). Jawanda “discloses GPRS and CDMA as *alternative* protocols.” *IPR Licensing*, 685 F. App’x at 939. Among other things, the GPRS standards disclose a “Packet Data Protocol (PDP) Context feature.” *Id.* The PDP Context feature “preserves information about the cellular communication session between the mobile devi[c]e and base station.” *Remand Decision*, 2018 WL 1224736, at *5 (citing J.A. 995).

3. IEEE 802.11

The Institute of Electrical and Electronics Engineers 802.11 Standard (“IEEE 802.11”) is a protocol for transmitting data over wireless local area networks. *Id.*

4. UMTS

The Universal Mobile Telecommunications System Standards (“UMTS”) describes a version of the CDMA protocol that references the PDP Context feature. *Id.* at *7.

C. Procedural History

1. Related District Court Litigation

On January 2, 2013, IPRL brought an action against ZTE in the District of Delaware alleging infringement of the ’244 patent (among others). The jury found all asserted claims (including claim 8) of the ’244 patent infringed and not invalid. The district court, however, eventually stayed post-trial proceedings in that case pending completion of the IPR involved in this case.

2. The Board's First Decision

ZTE filed a petition for inter partes review challenging claims 1–8, 14–16, 19–29, 36–38, and 41–44 of the '244 patent on three grounds.¹ Ground one challenged all claims, based on a combination of Jawanda, GPRS, and IEEE 802.11. J.A. 305. Ground two challenged all claims, based on a combination of U.S. Patent No. 6,681,259 (“Lemiläinen”), GPRS, and IEEE 802.11. J.A. 314. Ground three challenged all claims, based on a combination of Lemiläinen and UMTS. J.A. 321.

The Board instituted review on ground one and, citing redundancy, denied institution on grounds two and three. J.A. 378–79 (citing 37 C.F.R. § 42.108(a)). The Board then concluded that all challenged claims were obvious in view of Jawanda, GPRS, and IEEE 802.11. J.A. 635–68. With respect to claim 8, the Board found that Jawanda did not disclose establishing a logical connection between the device and a cellular network. J.A. 658. But the Board found that the PDP Context feature from GPRS did. J.A. 658–59. The Board then found that a person of ordinary skill would have been motivated to take the PDP Context feature from GPRS and apply it to the system described by Jawanda. J.A. 661–62. In doing so, the Board rejected IPRL's argument that a skilled artisan would not have been motivated to incorporate the PDP Context feature from GPRS—a TDMA system—into a CDMA system. According to the Board, this combination was obvious because Jawanda mentioned using CDMA. J.A. 666. The Board also noted that the PDP Context feature was eventually incorporated into the WCDMA, the Wideband

¹ ZTE filed its original petition on March 21, 2014. It then filed a corrected petition, which is the operative petition here, on May 19, 2014.

Code Division Multiple Access (a later version of CDMA).
Id.

3. The First Appeal

IPRL appealed the Board's first decision to this court. We affirmed the Board's conclusions as to all claims except claim 8. *IPR Licensing*, 685 F. App'x at 939–40.

With respect to claim 8, we concluded that “the Board’s analysis [was] wanting.” *Id.* at 939. As noted above, we found no evidentiary support for the Board’s conclusion that a POSITA would have applied the PDP Context feature from GPRS (relating to TDMA) in a CDMA system like the one described in claim 8. *Id.* at 939 (“[Jawanda] does not suggest that any aspects of the GPRS standard . . . should be incorporated into a CDMA standard.”). Indeed, we noted that the only evidence cited by the Board on this point was testimony that the PDP Context feature was *later* incorporated into CDMA systems. *Id.* We found that did not establish why a person of ordinary skill in the art “at the time of the invention” would have been motivated “to alter the standards with a reasonable expectation of success.” *Id.* at 939–40. We therefore vacated the Board’s findings as to claim 8 and remanded for the Board to assess whether there was substantial evidence to support the conclusion that one of skill in the art would have “a motivation to combine the PDP Context feature of the GPRS standards with the CDMA network referenced in Jawanda.” *Id.*

4. The Board’s Second Decision

The parties agreed that the scope of the remand was limited to ground one and claim 8. J.A. 5509 (9:7–10) (“We agree with counsel [for IPRL] that the question is the obviousness of claim 8 in ground one as originally presented in the petition.”); *see also* J.A. 5507. The Board subsequently ordered ZTE to submit a three page brief “limited to a numeric listing of citations to the previously

existing record, indicating where the evidence was originally introduced or argued in the Petition, concerning the motivation to combine the PDP Context feature of the GPRS standard . . . with a CDMA network as recited in claim 8.” J.A. 9013. ZTE never filed anything.

Despite no additional evidence or argument, the Board again found claim 8 obvious. *Remand Decision*, 2018 WL 1224736, at *1. The Board found that a person of ordinary skill “would have been aware of the problem of mobile devices frequently switching between networks and of solutions ‘to transparently maintain a communication session.’” *Id.* at *7. The Board based this conclusion on the fact that “the PDP context feature was desirable for addressing” this problem, even in CDMA systems, “because UMTS included a ‘PDP context’ feature, [and so] the use of that feature in a CDMA-based system was not only known, but recognized as beneficial.” *Id.* at *8. The Board also concluded, as it had before, that Jawanda taught using CDMA or GPRS and that a person of ordinary skill in the art would have looked to GPRS “for details about how to implement the cellular features taught in Jawanda.” *Id.* The citation to UMTS was the *only* additional evidentiary support the Board proffered to support its invalidity finding as to claim 8.

IPRL timely appealed the Board’s final decision. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

II. DISCUSSION

IPRL argues that the Board improperly relied on prior art, UMTS, that was not asserted in support of ground one—the only instituted ground. ZTE argues that, if we accept this argument, we should again remand this matter, this time so that the Board can consider the other grounds and evidence in the petition. We address each argument in turn.

A. Ground One and UMTS

Our review of final written decisions by the Board is rooted in “basic principles of administrative law.” *Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 992 (Fed. Cir. 2017). These principles impose important limits on our review of decisions by the Board. But they also impose important limits on the Board’s authority during inter partes reviews. For example, “the Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016); *see also Rovalma, S.A. v. Bohler-Edelstahl GmbH & Co. KG*, 856 F.3d 1019 (Fed. Cir. 2017). Whether the Board improperly relied on new arguments is reviewed *de novo*. *In re NuVasive, Inc.*, 841 F.3d 966, 970 (Fed. Cir. 2016).

According to the Board’s regulations, an issue upon which the Board does not institute review is not part of the ensuing inter partes review proceeding. *See, e.g., AIA Regulation Comments*, 77 Fed. Reg. 48,680 at 48,689 (“Any claim or issue not included in the authorization for review is not part of the review.”). The patent owner therefore has no opportunity to be heard on non-instituted grounds during trial. 37 C.F.R. § 42.120 (“A patent owner may file a response to the petition addressing any ground for unpatentability *not already denied*.” (emphasis added)); *see also Shaw Indus. Grp., Inc. v. Automated Creel Sys., Inc.*, 817 F.3d 1293 (Fed. Cir. 2016) (holding that petitioner could not have reasonably raised a reference during inter partes review where the Board denied institution on related ground). Nor does the patent owner have notice that the Board might rely on a non-instituted ground in its final written decision.

The Board therefore cannot rely on evidence relating solely to grounds on which it never instituted. To hold otherwise would allow the Board’s final written decision to rest on arguments that a patent owner has no ability to

rebut or anticipate. See *Magnum Oil*, 829 F.3d at 1381 (“[T]he Board must base its decision on arguments . . . to which the opposing party was given a chance to respond.”). But the Board did just that in relying on UMTS in its final written decision here.

The fact that UMTS was not part of this inter partes review is evident from the proceeding itself. ZTE’s petition does not mention UMTS in discussing ground one—the only ground on which the Board instituted review. IPRL’s response therefore never referenced it either. Nor did ZTE’s reply. Dr. Bims, ZTE’s expert, also confirmed that the Board’s review was *not* based on UMTS. J.A. 4778. (“[Q.] And Draft UMTS, the PTAB did not grant review based on that? [A.] That’s my understanding.”).

And yet, the Board referenced UMTS several times on remand when analyzing why claim 8 was unpatentable. For example, in addressing why a person of ordinary skill would have included the PDP Context feature in a CDMA system—the key issue on remand—the Board reasoned that “use of that feature in a CDMA-based system was not only known, but recognized as beneficial” based on the fact that “UMTS included a ‘PDP context’ feature.” *Remand Decision*, 2018 WL 1224736, at *8.

ZTE insists that the Board’s reliance on UMTS was proper because “[t]he Board addressed the Draft UMTS Standards only as evidence of whether one skilled in the art at the time of the invention would have known that the PDP Context of the GPRS Standards could also be used with CDMA.” Appellees’ Br. 34. But whether and when one skilled in the art would have known that, and what the implications of such knowledge might be, were the critical questions on remand. Not only had ZTE not relied on the UMTS standards in its petition, but when the Board specifically asked ZTE to point to any record evidence supporting the conclusion that there was a motivation to combine the prior art references cited in ground one, ZTE never

pointed to the Draft UMTS Standards; it pointed to nothing. J.A. 9013 (seeking evidence “concerning the motivation to combine the PDP Context feature of the GPRS standard . . . with a CDMA network”). The Board’s decision to rely on the Draft UMTS Standards to fill the gap in its evidentiary finding was, thus, erroneous.²

ZTE’s attempt to justify the Board’s analysis by claiming that the Board did not rely on matters outside of ground one is wrong. Appellees’ Br. 35 (“[W]ith one harmless exception, all of the Board’s citations to the petition and to Dr. Bims’ testimony were directed to either the overview sections or the specific arguments of Ground 1.”). The Board’s first reference to UMTS expressly cited ZTE’s arguments under *ground three*. *Remand Decision*, 2018 WL 1224736, at *7 (citing J.A. 731–32 (overview sections); J.A. 321 (argument as to ground three)). That is not harmless. And, while the Board’s analysis does, as it did before remand, cite sections of ZTE’s petition addressing ground one, UMTS is not mentioned in those sections.

Apart from UMTS, the Board’s decision is supported by the same faulty reasoning we rejected in the previous appeal. *Compare, e.g., Remand Decision*, 2018 WL 1224736, at *7 (“Petitioner demonstrates convincingly the inclusion of the PDP context feature in a CDMA-based standard in arguing that the same PDP context feature disclosed in the GPRS Standards is also included in the [WCDMA]

² IPRL claims that, even if the Draft UMTS Standards had been cited in ground one, the standards do not fill the evidentiary void we found in the Board’s judgment. The fact that our decision is based on an error in the Board’s process should not be read as an endorsement of its conclusions on the merits. We express no opinion on the merits of the Board’s reliance on the Draft Standards or its conclusions about what those standards might have taught one of skill in the art.

standard.” (internal quotation marks and brackets omitted)), *with IPR Licensing*, 685 F. App’x at 939–940 (“While [testimony about WCDMA] may establish that, at some point, there was a reason to combine the PDP Context feature with CDMA protocols, it does not provide that reason or show why the references cited or the knowledge of one of skill in the art at the time of the invention would motivate a skilled artisan to alter the standards with a reasonable expectation of success.”). We therefore conclude that reversal as to the portion of the judgment on ground one that addresses claim 8 is appropriate. *Cf. In re Power Integrations, Inc.*, 884 F.3d 1370, 1379 (Fed. Cir. 2018) (reversing because “[t]he board has had two opportunities” to justify its position and “failed”).

B. Remaining Grounds

Although reversal as to ground one is warranted, ZTE argues that the matter should be remanded as to the two non-instituted grounds under SAS. IPRL contends, however, that we lack jurisdiction to remand here because ZTE failed to file a cross-appeal. Alternatively, IPRL argues that, even if we *could* excuse ZTE’s failure we should not do so.

1. Jurisdiction

According to IPRL, ZTE’s failure to file a cross-appeal deprives us of jurisdiction to remand as to non-instituted grounds. Setting aside whether a cross-appeal was even required, we disagree that the cross-appeal rule should be treated as a jurisdictional requirement.

It is well-established that the filing deadline for a notice of appeal is jurisdictional. For example, in *Bowles v. Russell*, 551 U.S. 205 (2007), a habeas petitioner failed to file his appeal within the 30-day time limit established by 28 U.S.C. § 2107(a) and Fed. R. App. Proc. 4(a)(1)(A). The Supreme Court held that this failure created a jurisdictional defect. *Bowles*, 551 U.S. at 208. In doing so,

however, the Supreme Court carefully distinguished “between court-promulgated rules and limits enacted by Congress.” *Id.* at 211–12. The latter are jurisdictional, because they are established by Congress, but the former are not. *Id.* at 212.

The Supreme Court again emphasized this distinction, between court-made rules and statutory rules, in *Hamer v. Neighborhood Hous. Servs. of Chicago*, 138 S. Ct. 13 (2017). There, the petitioner sought and received a sixty-day extension to file a notice of appeal from the district court under Fed. R. App. Proc. 4(a)(5)(C). *Hamer*, 138 S. Ct. at 18. The problem for the petitioner was that Rule 4(a)(5)(C) limits extensions to thirty days. The Court of Appeals therefore concluded, acting *sua sponte*, that Rule 4(a)(5)(C) imposed a *jurisdictional* deadline that the district court could not extend. *Id.* It therefore dismissed the case as untimely filed. *Id.* But the Supreme Court disagreed, concluding that Rule 4(a)(5)(C) is not jurisdictional because “the relevant time prescription is absent from the U.S. Code.” *Id.* at 21. That distinguished the case from *Bowles*, in which the time prescription was rooted in statute. *Id.* (“In conflating Rule 4(a)(5)(C) with § 2107(c), the Court of Appeals failed to grasp the distinction our decisions delineate between jurisdictional appeal filing deadlines and mandatory claim-processing rules, and therefore misapplied *Bowles*.”).

IPRL has not identified any statutory basis for the deadline to file a cross-appeal. Indeed, there is none. For example, 28 U.S.C. § 2107(a) sets the deadline for notices of appeal without mention of cross-appeals. *See also* 35 U.S.C. § 142 (same). The cross-appeal deadline is instead rooted in the Federal Rules of Appellate Procedure. *See* Fed. R. App. Proc. 4(a)(3). But, as the Court recognized in *Hamer*, that is not enough to mark the deadline as jurisdictional. 138 S. Ct. at 17. Rather, “a provision governing the time to appeal in a civil action qualifies as jurisdictional only if *Congress* sets the time.” *Id.* at 17

(emphasis added). Congress has not done so here. The cross-appeal deadline is therefore properly treated as a claim-processing rule, *i.e.*, it “promote[s] the orderly progress of litigation by requiring that the parties take certain procedural steps at certain specified times” but does not withdraw a case from our jurisdiction. *Id.* (quoting *Henderson v. Shinseki*, 562 U.S. 428, 435 (2011)).

The Sixth Circuit addressed this question in *Gunter v. Bemis Co.*, 906 F.3d 484 (6th Cir. 2018), and reached the same result. After discussing *Bowles* and *Hamer*, the court explained that “only deadlines reflected in statutes, not those spelled out just in the Federal Rules of Appellate Procedure, count as jurisdictional.” *Gunter*, 906 F.3d at 492. It therefore concluded that “a timely notice of appeal is a jurisdictional requirement. . . . [b]ut a timely notice of cross-appeal is not.” *Id.* at 492–93; *see also Mathias v. Superintendent Frackville SCI*, 876 F.3d 462, 471 (3d Cir. 2017) (same), *cert. denied sub nom. Mathias v. Brittain*, 138 S. Ct. 1707 (2018).

Rather than identify a statutory basis for the cross-appeal deadline, IPRL relies on *Minnesota Mining & Manufacturing Co. v. Chemque, Inc.*, 303 F.3d 1294 (Fed. Cir. 2002). In that case, we concluded that a party’s failure to cross-appeal invalidity issues deprived us of jurisdiction to consider those issues. *Minnesota Mining*, 303 F.3d at 1309 (“[E]ven a liberal construction of the notice requirement [from Rule 3(c)(1)(B)] in this case warrants finding that there is no jurisdiction since the notice of appeal for the cross-appeal does not even mention validity issues. . . . [W]e do not have jurisdiction to consider them.”). But *Minnesota Mining* predates *Bowles* and *Hamer*, which delineated a more precise line between jurisdictional and claim-processing rules. *See Hamer*, 138 S. Ct. at 21 (explaining that several courts of appeals, and even some Supreme Court opinions, had been “less than meticulous” in using the term jurisdictional); *see also Gonzalez v. Thaler*, 565 U.S. 134, 141 (2012) (“Recognizing our ‘less than

meticulous’ use of the term [jurisdictional] in the past, we have pressed a stricter distinction between truly jurisdictional rules, which govern ‘a court’s adjudicatory authority,’ and nonjurisdictional ‘claim-processing rules,’ which do not.”). IPRL’s reliance on *Minnesota Mining* is therefore unpersuasive in light of *Bowles* and *Hamer*. “Where intervening Supreme Court precedent makes clear that our earlier decisions mischaracterized the [jurisdictional] effects of § 281, we are bound to follow that precedent rather than our own prior panel decisions.” *Lone Star Silicon Innovations LLC v. Nanya Tech. Corp.*, 925 F.3d 1225, 1235 (Fed. Cir. 2019) (citing *Troy v. Samson Mfg. Corp.*, 758 F.3d 1322, 1326 (Fed. Cir. 2014)).

Accordingly, we agree with ZTE that its failure to file a cross-appeal—assuming one was required—does not mean we lack the authority to remand as to the non-instituted grounds. We therefore turn to whether remand is appropriate.

2. Remand

IPRL argues that remand based on *SAS* is not warranted because ZTE did not seek remand until its response brief on appeal. We need not decide whether waiver occurred at any point before oral argument, however, because ZTE’s withdrawal from this appeal clearly constitutes waiver.

On October 25, 2019, after the completion of briefing and following oral argument, ZTE filed an unopposed Motion to Withdraw from this appeal, pursuant to a settlement agreement between the parties. Dkt. No. 64. We granted this motion. ZTE’s withdrawal from this appeal is a waiver of its request to institute an IPR on the non-instituted grounds.

III. CONCLUSION

We have considered the parties’ remaining arguments and find them unpersuasive. The Board’s obviousness

finding as to claim 8 relied on a reference that IPRL could not anticipate or rebut. It was therefore erroneous. Because the Board's remaining findings as to claim 8 are unsupported by substantial evidence, we reverse as to ground one. And, because all other challenges to the Board's final judgment of invalidity are waived, we vacate that judgment.

REVERSED AND VACATED

COSTS

No costs.