NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

WI-LAN USA, INC., WI-LAN, INC.,
Plaintiffs-Appellants

v.

ERICSSON, INC., TELEFONAKTIEBOLAGET LM ERICSSON,
Defendants-Cross-Appellants

2015-1766, -1794

Appeals from the United States District Court for the Southern District of Florida in No. 1:12-cv-23569-DMM, Judge Donald M. Middlebrooks.

Decided: January 17, 2017

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KRUMHOLZ, JACOB KEVIN BARON, Holland & Knight, LLP, Boston, MA.

Before MOORE, O'MALLEY, and WALLACH, *Circuit Judges.*

Opinion for the court filed by *Circuit Judge* WALLACH.

Concurring in part and dissenting in part opinion filed by *Circuit Judge* O'MALLEY.

WALLACH, *Circuit Judge.*

The instant dispute returns to us a second time following additional district court proceedings. Initially, Wi-LAN USA, Inc. and Wi-LAN, Inc. (together, "Wi-LAN") sued Ericsson, Inc. and Telefonaktiebolaget LM Ericsson (together, "Ericsson") in the U.S. District Court for the Southern District of Florida ("District Court") alleging infringement of various claims of U.S. Patent Nos. 8,027,298 ("the '298 patent"), 8,249,014 ("the '014 patent"), and 8,229,437 ("the '437 patent") (collectively, "the Patents-in-Suit"). Ericsson argued that Wi-LAN was precluded from asserting infringement and moved for summary judgment based on the Most Favored Licensee Provision ("MFL Provision") in the Patent and Conflict Resolution Agreement ("PCRA") between Wi-LAN and Ericsson. The District Court determined on summary judgment that the MFL Provision was triggered, that Ericsson was entitled to a license, and that the claims of infringement were moot. On appeal, we determined that the "MFL Provision only applies to Wi-LAN's patents owned or controlled as of the effective date of the PCRA, which the [Patents-in-Suit] . . . were not." *Wi-LAN USA, Inc. v. Ericsson, Inc.*, 574 F. App'x 931, 940 (Fed. Cir. 2014). Thus, because "Ericsson's rights under the MFL Provision were not triggered," we reversed the District Court's judgment and remanded the case for further proceedings. *Id.*

On remand, the District Court construed claim terms in the Patents-in-Suit. *See Wi-LAN USA, Inc. v. Telefonaktiebolaget TM Ericsson*, No. 12-cv-23569-DMM, 2015 WL 6673742, at *3–13 (S.D. Fla. Jan. 13, 2015). Ericsson then moved for summary judgment of non-infringement of various claims ("the Asserted Claims")[1] of the '298 patent and the '014 patent (together, "the Bandwidth Patents") and for summary judgment of invalidity of claims 8 and 18 of the '437 patent. Ericsson also argued the MFL Provision applied despite this court's previous decision. The District Court granted Ericsson's Motion in part and entered summary judgment that (1) claims 8 and 18 of the '437 patent were invalid as anticipated and (2) Ericsson's accused products did not directly infringe the Bandwidth Patents. J.A. 12–32. The District Court found the MFL Provision did not apply to the Patents-in-Suit. J.A. 11–12, 32.

Wi-LAN appeals the District Court's decision granting summary judgment of invalidity and non-infringement. Ericsson cross-appeals the District Court's decision that the MFL Provision does not apply to the Patents-in-Suit. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) (2012). We vacate-in-part, affirm-in-part, and remand for further proceedings consistent with this opinion.

BACKGROUND

Before addressing the merits of the parties' arguments, we provide a brief summary of the Patents-in-Suit. We divide our discussion of the Patents-in-Suit into two parts based on their subject matter.

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[1] The Asserted Claims include claims 1–2 and 4 of the '298 patent and claims 1, 4, and 6 of the '014 patent.

I. The Bandwidth Patents

The Bandwidth Patents are entitled "Methods and Systems for Transmission of Multiple Modulated Signals Over Wireless Networks" and disclose "[a] method and apparatus for requesting and allocating bandwidth in a broadband wireless communication system," whereby "a combination of bandwidth allocation techniques" are used to efficiently allocate physical resources. '298 patent, Abstract.[2]

"The broadband wireless communication system facilitates two-way communication between a plurality of base stations and a plurality of fixed subscriber stations or Customer Premises Equipment [('CPE')]." *Id.* col. 1 ll. 62–65. The broadband wireless communication system "includes a plurality of cells . . . . Each cell . . . provides wireless connectivity between the cell's base station . . . and a plurality of . . . [CPEs] positioned at fixed customer sites . . . throughout the coverage area of the cell . . . ." *Id.* col. 2 ll. 2–8. The system is an on-demand system where CPEs "request bandwidth allocations from their respective base stations . . . based upon the type and

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[2] Because the '014 patent is a continuation of the '298 patent, the Bandwidth Patents share a common specification. A continuation patent application is "an application filed subsequently to another application, while the prior application is pending, disclosing all or a substantial part of the subject-matter of the prior application and containing claims to subject-matter common to both applications, both applications being filed by the same inventor or his legal representative." *In re Febrey*, 135 F.2d 751, 757 (CCPA 1943) (internal quotation marks and citation omitted). For ease of reference, discussion of the Bandwidth Patents will refer to the '298 patent's specification.

quality of services requested by the customers served by the CPEs." *Id.* col. 2 ll. 16–19. "Base stations do not have *a priori* information regarding the bandwidth or quality of services that a selected CPE will require at any given time." *Id.* col. 2 ll. 39–42 (italics added). Thus, "[t]he type and quality of services available to the customers are variable and selectable." *Id.* col. 2 ll. 20–21. The Bandwidth Patents "reduce[] the amount of bandwidth that must be set aside for these bandwidth allocation requests." *Id.* col. 9 ll. 38–40.

II. The '437 Patent

Entitled "Pre-Allocated Random Access Identifiers," the '437 patent generally discloses "[s]ytems and methods of pre-allocating identifiers to wireless devices for use in requesting resources over a random access channel . . . ." '437 patent, Abstract. The '437 patent provides a method for "[a] mobile subscriber station[, e.g., cellular telephone, to] transition from a coverage area supported by a first base station to a coverage area supported by a second base station." *Id.* col. 20 ll. 1–3. The "communication link from the subscriber station is handed over from the first or serving base station to the second base station . . . ." *Id.* col. 20 ll. 4–6.

"The use of pre-allocated codes," i.e., random access identifiers, as taught by the '437 patent, "avoids the collision probability[, e.g., dropped calls,] associated with random subscriber selected access codes . . . ." *Id.* col. 2 ll. 64–66. "The base station . . . pre-allocates one or more codes to registered subscriber stations" in its coverage area, and these base stations "track[] the code allocation such that each of the allocatable codes are allocated to at most one subscriber station at a time." *Id.* col. 6 ll. 20–21, 22–24. The pre-allocated codes are then released by the subscriber station "when it de-registers with the base station" and leaves the coverage area. *Id.* col. 6 l. 26.

DISCUSSION

Wi-LAN argues that (1) genuine issues of material fact precluded invalidity summary judgment for the '437 patent based on anticipation; (2) the District Court erred in construing "bandwidth" in the Bandwidth Patents; and (3) genuine issues of material fact precluded non-infringement summary judgment for the Bandwidth Patents. Appellants' Br. 22–60. Ericsson argues on cross-appeal that the District Court erred in finding as a matter of law that the PCRA's MFL Provision was triggered in this case. Cross-Appellants' Br. 59–69. We address these arguments in turn.

I. Standard of Review

We review the grant of summary judgment under the law of the regional circuit in which the district court sits. *Classen Immunotherapies, Inc. v. Elan Pharm., Inc.*, 786 F.3d 892, 896 (Fed. Cir. 2015). The Eleventh Circuit reviews a district court's grant of summary judgment de novo. *Ellis v. England*, 432 F.3d 1321, 1325 (11th Cir. 2005). Summary judgment is proper only "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986). A genuine dispute of material fact exists when "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In assessing whether summary judgment is appropriate, we "must view all evidence and make all reasonable inferences in favor of the party opposing summary judgment." *Haves v. City of Miami*, 52 F.3d 918, 921 (11th Cir. 1995) (citation omitted).

II. Wi-LAN's Appeal

Wi-LAN's arguments concern three separate aspects of the District Court's decision under review. We address them in turn.

A. Anticipation of the '437 Patent

Wi-LAN argues that the District Court erred in granting summary judgment of invalidity for the '437 patent based on anticipation because there remained a genuine dispute over material facts that the District Court improperly decided. *See* Appellants' Br. 24–44. We find the District Court erred in granting summary judgment and, thus, vacate and remand for proceedings consistent with this opinion.

1. Legal Framework

Although "the anticipation inquiry first demands a proper claim construction," *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1294 (Fed. Cir. 2002), Wi-LAN does not challenge the District Court's claim construction as to the '437 patent*, see* Appellants' Br. 22–44. Thus, we begin with the prior art. A reference is anticipatory under 35 U.S.C. § 102(b) (2006)[3] if "the prior art reference . . . disclose[s] each and every feature of the claimed invention, either explicitly or inherently." *Eli Lilly & Co. v. Zenith Goldline Pharm., Inc.*, 471 F.3d 1369, 1375 (Fed. Cir. 2006) (citation omitted).

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[3] In passing the Leahy-Smith America Invents Act ("AIA"), Congress amended § 102. *See* Pub. L. No. 112-29, § 3(b), 125 Stat. 284, 285–87 (2011). However, because the application that led to the '437 patent was filed before March 16, 2013, the pre-AIA § 102(b) applies. *See id.* § 3(n)(1), 125 Stat. at 293.

2. The Prior Art

Prior art Michel Mouly & Marie-Bernadette Pautet, *The GSM System for Mobile Communications* (Cell & Sys Correspondence 1992) ("Mouly") (J.A. 789–828, 2377–414) discloses the global system for mobile communications ("GSM") standard for cellular communications. Mouly discloses a "handover," which is the process of synchronizing the timing of communications between mobile users and cell towers when "transferring a transaction in progress (a call in particular) from one cell to another to avoid the adverse effects of user movements . . . ." J.A. 795.

Relevant here, Mouly discloses how the timing advance is applied to communications between the mobile device and cellular towers. The timing advance addresses the overall time necessary for data bursts to travel from the mobile device to the cellular tower, which includes a time offset that is not dependent on the user's location as well as a time offset that does depend on the user's location. *See* J.A. 810. The timing advance issue incorporates both synchronous and asynchronous handovers. *See* J.A. 811, 2396.

For synchronous handovers, "the mobile station is able to compute the new timing advance (to be applied with [the new cell tower]), because the old and the new cells are synchronized." J.A. 2396. For asynchronous handovers, "the timing advance must be initiali[z]ed both at the mobile station and at [the new cell tower] during the handover procedure." J.A. 2396. This is accomplished by the mobile station sending access bursts[4] to the new

[4] A burst is a "unit of transmission [that] is a series of about a hundred modulated bits" and is of "a finite duration . . . occupy[ing] a finite part of the radio spec-

cell tower "with a null timing advance." J.A. 2394; *see* J.A. 2409. Once the new cell tower receives this access burst, it "can derive the value of the timing advance, which it sends to the mobile station in a signaling message." J.A. 2394. Once the mobile station "receives this message, [it] is able to start correctly transmitting normal bursts." J.A. 2394.

Both types of handovers involve several processes of transmitting an 8-bit message from the new cell tower, the old cell tower, and the mobile station. *See* J.A. 2398–99, 2403, 2409. For synchronous handovers, "the mobile station first sends a few access bursts (the [8-bit] RIL3-RR HANDOVER ACCESS message), then starts normal transmission by applying the computed timing advance." J.A. 2409. For asynchronous handovers, "the mobile station continues to send access bursts [(i.e., the RIL3-RR HANDOVER ACCESS message)] until it has received an [8-bit message with physical resource information] . . . from [the new cell tower], conveying the actual timing advance to apply. Only then does it start normal transmission." J.A. 2409.

3. A Genuine Dispute as to Material Facts Bars Invalidity Summary Judgment on the '437 Patent

Before the District Court, the parties disagreed about the existence of a genuine dispute as to whether Mouly discloses that synchronous and asynchronous handover access messages are sent via a dedicated channel or a random access channel ("RACH"). J.A. 20–21, 23. Ac-

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trum." J.A. 2384 (footnote omitted). The access burst is a short burst that "is only used in the uplink direction during initial phases when the propagation delay between the mobile station and the base station is not yet known." J.A. 2386.

cording to the District Court, although Mouly "supports the statement that the RIL3-RR HANDOVER ACCESS message is the only case where short access bursts are used on a dedicated channel in a synchronous handover, . . . [it] does not support that this is also true with asynchronous handovers." J.A. 24 (internal quotation marks and emphases omitted) (citing J.A. 2394, 2396).

The District Court further stated that, "[a]lthough when read in isolation, this [passage in Mouly] *could* be read to include asynchronous handovers, such a reading is inconsistent with the rest of Mouly (totaling 695 pages) and inconsistent with both [p]arties' expert testimony." J.A. 24–25 (footnote and citations omitted). Thus, the District Court concluded "the HANDOVER ACCESS message [in Mouly] is sent on a RACH" for an asynchronous handover. J.A. 25. Ultimately, the District Court found the claims invalid as anticipated because Wi-LAN failed to identify factual disputes regarding the limitations in claims 8 and 18 of the '437 patent and Mouly discloses these limitations. J.A. 32.

a. The District Court's Errors

The District Court made two errors in its analysis, both involving the use of improper evidence at the summary judgment stage. First, the District Court weighed the evidence presented by Ericsson's expert, Mark Lanning, and Wi-LAN's expert, Paul Min, against the disclosures of Mouly and drew inferences from these facts. *See* J.A. 24–27 (citing Mr. Lanning's declaration and discussing Dr. Min's deposition and Mouly's text and figures); *see also* J.A. 24 n.17 ("[T]his passage [in Mouly] appears to support Ericsson's position . . . ."). However, when ruling on a motion for summary judgment, "[c]redibility determinations, the weighing of the evidence, and the drawing

of legitimate inferences from the facts are jury functions, not those of a judge . . . ."[5] *Anderson,* 477 U.S. at 255.

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[5] The dissent disagrees, saying the District Court relied on Dr. Min's "admission" that "'the mobile station is forbidden to transmit the data which is on a dedicated channel until . . . the synchronization is initiated.'" Dissent at 3 (quoting J.A. 1415). However, this alleged admission is preceded by "I mean, that's what he [(referring to a statement previously quoted by counsel)] said." J.A. 1415; *see* J.A. 1414, 2331. When read in toto, Dr. Min's testimony is not an admission, but rather is paraphrasing what counsel quoted from Mouly.

The dissent also states this "admission" includes Dr. Min's affirmance of Ericsson's clarification "that, to the extent the statement refers to an access burst being sent on a dedicated channel in an asynchronous scenario, 'the synchronization takes place prior to the access burst being sent[]' . . . ." Dissent at 4 (quoting J.A. 1418). However, the testimony culminating in this "admission" was responding to questions about Mouly and the "8-bit handover reference." J.A. 1416 (quoting J.A. 2409). Dr. Min stated the "'8-bit handover reference' clearly is related to a handover scenario, but the next . . . sentence said, '[t]his message is the only case where short access bursts are used on a dedicated channel.'" J.A. 1416 (quoting J.A. 2409). Dr. Min further said "[s]o this has more to do with . . . communicating over [a] dedicated channel as opposed to [a] Random Access Channel." J.A. 1416. Following objections from Wi-LAN's counsel, Ericsson further asked whether Dr. Min could "tell one way or the other" if Mouly was "referring to . . . a synchronous handover?" J.A. 1417. In response, Dr. Min stated that "[i]t can be either way" and then proceeded to discuss both asynchronous and synchronous handovers before making

Next, the District Court cites to unsupported statements made by Ericsson's counsel to reach its conclusion that the record does not demonstrate that the RIL3-RR HANDOVER ACCESS message uses short access bursts on a dedicated channel for asynchronous handovers. *See* J.A. 21, 24 n.17 ("As counsel for Ericsson explained during the May 13, 2015 hearing, [the new cell tower] cannot set up a dedicated channel until synchronization has occurred because it is not until then that [the new cell tower] knows how far away the phone is, how it is moving, and other physical information required to set up a dedicated channel."). These statements are attorney argument, not record evidence, and relying on these bare assertions was improper.[6] *See, e.g., Laitram Corp. v.*

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this alleged admission. J.A. 1417. The District Court improperly made inferences from portions of Dr. Min's testimony. The testimony leading up to this supposed admission of "[y]es, that's right," J.A. 1418, demonstrates this statement is far from an unequivocal admission.

[6] The dissent disagrees, saying the District Court "included a quotation of an argument by Ericsson's counsel in the portion of the court's opinion where the court was laying out the arguments made by *each* party before making its findings in relation to which party's arguments were well taken." Dissent at 2. Context, however, demonstrates the District Court is relying on attorney argument in making its findings.

Preceding the phrase at issue, the District Court said "the passage Wi-LAN quotes [from Mouly] supports Ericsson's position that asynchronous communications must take place on the RACH until the mobile station receives . . . the actual timing advance to apply . . . ." J.A. 24 n.17 (internal quotation marks and citation omitted). It further stated that "a timing adjustment is required for

Cambridge Wire Cloth Co., 919 F.2d 1579, 1583 (Fed. Cir. 1990) (criticizing the parties' "reliance on attorney argument and counsel's unsworn fact statements as 'evidence'"), *superseded by statute on other grounds as stated in Rotec Indus., Inc. v. Mitsubishi Corp.*, 215 F.3d 1246, 1259 (Fed. Cir. 2000); *see also Gemtron Corp. v. Saint-Gobain Corp.*, 572 F.3d 1371, 1380 (Fed. Cir. 2009) ("Saint-Gobain's unsworn attorney argument to the contrary—made for the first time at oral argument on appeal—is not evidence and cannot rebut the video and other admitted evidence concerning Saint-Gobain's manufacturing process.").

b. Material Facts Are in Dispute

Apart from these errors, we also find that there remains a genuine dispute as to what Mouly discloses. Mouly is ambiguous in its explanation of whether access bursts in asynchronous and synchronous handovers occur on a RACH. When defining "access burst," Mouly states "it is the only kind of burst used on the RACH." J.A. 2386. Additionally, an access burst "is only used . . . during initial phases when the . . . [timing] delay . . . is not yet known. This is the case with the first access of a mobile station on the RACH, or sometimes with the access of a mobile station to a new cell upon handover." J.A. 2386. However, Mouly later discusses both synchronous and asynchronous handovers, where "[i]n both cases, the RIL3-RR HANDOVER ACCESS message . . . . *is the only case where short access bursts are used on a dedicated channel*." J.A. 2409 (emphasis added).

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synchronization, which in turn, is required for communication on a dedicated channel." J.A. 24 n.17. The District Court was no longer restating the parties' arguments; it was making findings.

Additionally, both Wi-LAN's and Ericsson's experts have provided evidence that, when viewed in favor of Wi-LAN, demonstrates summary judgement is improper. In discussing Mouly in his report to the District Court, Mr. Lanning relied upon the GSM standard that states the handover message is transmitted over a dedicated channel. *See* J.A. 405 ("This [handover access] message is sent in random mode on the main [dedicated channel] during a handover procedure." (quoting GSM standard 3GPP TS 44.018 § 9.1.14)); *see also* J.A. 2424 (providing in the GSM standard that a non-synchronized cell case operates by "*sending continuously on the main* [*dedicated channel*] *a HANDOVER ACCESS message. This message is sent in random mode and thus does not follow the basic format*." (emphasis added)). Dr. Min's expert report provides additional support, interpreting Mouly to disclose a dedicated channel that is used during handover. *See* J.A. 3183–84 (stating that "Mouly does not disclose receiving the random access identifier over a [RACH] . . . . To the contrary, Mouly explicitly discloses that access bursts containing the handover reference are used on a dedicated channel." (emphases and footnote omitted)).

Mouly's statements are at least highly ambiguous as to whether synchronous or asynchronous handover messages occur on a RACH or a dedicated channel. Additionally, the parties' experts demonstrate that there is a dispute as to which interpretation is correct. Such ambiguity is best left for determination by a factfinder. Because the District Court erred in finding that there was no genuine dispute as to any material fact, granting summary judgment of invalidity was improper and we need not address the remaining limitations of claims 8 and 18 of the '437 patent. We therefore vacate the District Court's grant of summary judgment and remand for further proceedings consistent with this opinion.

B. Non-Infringement of the Bandwidth Patents

1. Standard of Review and Legal Framework

A person infringes a patent if, without permission of the patentee, that person "makes, uses, offers to sell, or sells any patented invention[] within the United States . . . during the term of the patent therefor . . . ." 35 U.S.C. § 271(a) (2012). Whether an accused product infringes a patent involves a two-step inquiry. *See Glaxo, Inc. v. Novopharm, Ltd.*, 110 F.3d 1562, 1565 (Fed. Cir. 1997). "First, the court must construe the asserted claim. . . . Second, the court must determine whether the accused product . . . contains each limitation of the properly construed claim[], either literally or by a substantial equivalent." *Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1356–57 (Fed. Cir. 2005) (citations omitted).

The first step is a question of law reviewed de novo. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). Claim terms "are generally given their ordinary and customary meaning" as they would be understood by a person having ordinary skill in the art at the "time of the invention." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312, 1313 (Fed. Cir. 2005) (en banc) (internal quotation marks and citation omitted). "To ascertain the scope and meaning of the asserted claims, we look to the words of the claims themselves, the specification, the prosecution history, and, if necessary, any relevant extrinsic evidence." *Chi. Bd. Options Exch., Inc. v. Int'l Sec. Exch., LLC*, 677 F.3d 1361, 1366 (Fed. Cir. 2012) (citation omitted). "[T]he specification is the single best guide to the meaning of a disputed term, and . . . acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." *Phillips*, 415 F.3d at 1321 (internal quotation marks and citations omitted).

The second step is a question of fact. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129–30

(Fed. Cir. 2011). Thus, a court properly may enter infringement summary judgment "when no genuine issue of material fact exists, in particular, when no reasonable jury could find that every limitation recited in the properly construed claim either is or is not found in the accused device." *Bai v. L&L Wings, Inc.*, 160 F.3d 1350, 1353 (Fed. Cir. 1998) (citation omitted).

Wi-LAN raises arguments under each step of the infringement inquiry. Appellants' Br. 45–60. We address each step in turn.

2. The District Court Did Not Err in Construing "Bandwidth"

The District Court "accept[ed] Ericsson's proposed construction based on [another district court judge]'s prior holding" and construed "bandwidth" to mean "data transmission resources in a particular time period." *Wi-LAN*, 2015 WL 6673742, at *4. Wi-LAN argues that the District Court improperly narrowed the construction by adding a time requirement that is not required in the disclosed embodiment of the Bandwidth Patents. Appellants' Br. 46–47. Wi-LAN contends that "bandwidth" is used broadly in the Bandwidth Patents to describe "a quantity of data to be transmitted or . . . the units of time and frequency within the radio spectrum that are used to send that data." *Id.* at 46.

We first look to the claim language to ascertain the scope and meaning of "bandwidth." Independent claims 1, 4, and 6 of the '014 patent disclose a system and a method that "detect[s] a bandwidth . . . request in the [uplink] traffic [or data] received from a subscriber unit" and "identif[ies] in the [bandwidth] request a requested amount of [uplink] bandwidth." '014 patent col. 23 ll. 13–14, 15–16 (claim 1); *see id.* col. 23 ll. 45–46, 47–48 (claim 4) (similar), col. 24 ll. 24–25, 25–27 (claim 6) (similar). Independent claim 1 of the '298 patent states the same, '298 patent col. 23 ll. 17–19, and dependent claims 2 and 4

of the '298 patent describes "bandwidth" in a similar fashion, *id.* col. 23 ll. 30–35, 39–41. None of these claims contain an explicit restriction to "a particular time," as Wi-LAN argues. Thus, we next turn to the specification of the Bandwidth Patents.

Four separate portions of the specification inform the meaning of "bandwidth" in the Bandwidth Patents' claims. All four portions discuss bandwidth with the addition of a time component. First, the specification discloses that bandwidth allocation can be structured as "us[ing] either time division duplexing [('TDD')] or frequency division duplexing [('FDD')] methods to facilitate the exchange of information between the base station and the subscriber units." *Id.* col. 1 ll. 54–57. In discussing Figure 1 and the use of a TDD scheme, the specification states that the "base station . . . transmits without having to coordinate with other base stations, *except for the overall time-division duplexing* that divides time into upstream (uplink) and downstream (down-link) transmission periods." *Id.* col. 6 ll. 44–49 (emphasis added). The specification also incorporates a prior patent that discusses why TDD systems are more advantageous. *See id.* col. 7 ll. 52–57 (discussing U.S. Patent No. 6,016,311 ("Gilbert")); *see also* Gilbert col. 2 ll. 7–9, 16–17 (discussing the disadvantages of FDD systems as being "more complex and therefore more costly than those used by TDD systems," as well as having "limited flexibility and limited available frequency spectrum"), col. 6 ll. 45, 47–48 (discussing a "typical TDD system" that has "equal use of time slot allocations for the uplink and downlink transmissions"). After demonstrating the advantages of a TDD system over a FDD system, the specification only discusses the claimed invention within a TDD scheme. *See generally* '298 patent.

Next, the specification discusses the use of a TDD scheme for allocating bandwidth. Figure 2 shows that "the TDD frame is subdivided into a plurality of physical

slots [('PS')]" where "the frame is one millisecond in duration and includes 800 [PS]." *Id.* col. 7 ll. 37–38, 39–40. "Alternatively, the present invention can be used with frames having longer or shorter duration and with more or fewer PS[]. The available bandwidth is allocated by a base station in units of a certain pre-defined number of PS[]." *Id.* col. 7 ll. 40–43.

A third example of where the specification discusses the use of a TDD scheme for allocating bandwidth occurs in its discussion of downlink and uplink sub-frame maps. *See id.* col. 8 l. 6–col. 9 l. 27. In Figure 4, "[a]ll of the bandwidth allocated to a selected CPE within a given TDD frame (or alternatively an adaptive TDD frame, as the case may be) is grouped into a contiguous CPE scheduled data block . . . ." *Id.* col. 9 ll. 21–25. "The [PS] allocated for the [CPE transition gaps] . . . are included in the bandwidth allocation to a selected CPE . . . in the base station uplink sub-frame map." *Id.* col. 9 ll. 25–27.

A final example of where the specification discloses the use of a TDD scheme occurs during its discussion of the transmission of queued data and the quality of service for this queued data. *See id.* col. 19 l. 50–col. 21 l. 4. Fairness algorithms are used to help ensure data quality when there "is insufficient bandwidth to transmit all the queued data during the current TDD Frame." *Id.* col. 19 ll. 50–51. "For each TDD frame, the [algorithm running in the] base station allocates the down-link portion of the TDD frame and it performs an estimate of the uplink traffic to allocate uplink bandwidth to the CPEs." *Id.* col. 21 ll. 2–4.

Taken together, we find that the specification demonstrates that the bandwidth requirements will vary over time, depending on the needs of the consumer. We therefore affirm the District Court's claim construction of "bandwidth" to mean "data transmission resources in a

particular time period." We next move to the second step of the infringement determination.

3. The District Court Erred in Granting Non-Infringement Summary Judgment

Wi-LAN argues the District Court erred in entering summary judgment that Ericsson did not infringe the Bandwidth Patents because there were genuine disputes of material fact. *See* Appellants' Br. 50–60. We agree.

a. Ericsson's Accused Products

Wi-LAN accused Ericsson's radio base station products, which practice the fourth generation telecommunications standard of Long Term Evolution ("LTE"), of infringing the Bandwidth Patents. The radio base stations allow subscribers to access a carrier's LTE network by "receiv[ing] uplink data from connected subscriber units and forward[ing] that data to providers' networks and to the Internet. . . . The subscriber units require bandwidth to send the uplink data to the [radio base stations]." J.A. 9 (citations omitted).

Two features of Ericsson's accused products are relevant to this appeal—the "buffer status report[] [('BSR')] and the Scheduler":

> A [BSR] is a report periodically sent from the subscriber unit to the [radio base station] that reports the amount of data presently available to be sent on the uplink. . . . The subscriber unit sends a BSR when it has no data left to send, or when it has a lot of data available to send. . . . The Scheduler allocates bandwidth by sending an individual . . . message to each subscriber unit. . . . That message contains all the information a subscriber unit needs to transmit its data, and also contains retransmission commands that the subscriber unit must follow.

J.A. 9 (citations and footnote omitted).

b. The District Court's Errors

The District Court's opinion contains two errors that preclude the entry of summary judgment. The District Court determined that Wi-LAN failed to identify a genuine issue of material fact as to direct infringement and concluded that Ericsson's accused products do not infringe the Bandwidth Patents. J.A. 17. In reaching this conclusion, the District Court stated that

> Ericsson's [radio base station] . . . decides how much, if any, bandwidth to allocate to a subscriber unit, based in part on a report the subscriber unit sends it (the "BSR"). . . . The BSR contains only two pieces of information: (1) an identification number for a logical channel group, and (2) an integer that approximates the bytes of data available for uplink transmission. . . . In other words, the BSR merely *reports* an approximation of how much data is available for transmission on the uplink.

J.A. 14 (footnote and citations omitted). The District Court further stated that "[a]ll of the [A]sserted [C]laims [of the Bandwidth Patents] require that Ericsson's [radio base stations] *identify in the bandwidth request* a requested amount of bandwidth[.]" J.A. 15 (emphasis added) (internal quotation marks and citations omitted). In light of this evidence, the District Court held that Ericsson could not infringe the Wi-LAN patents because the Ericsson products do not request bandwidth as claimed in the Bandwidth Patents; rather the accused product calculates an amount of bandwidth to allocate. *See* J.A. 15 ("The [radio base stations] . . . use the bytes of data reported in the BSR, along with other information to *calculate* an amount of bandwidth to allocate. In other words, there is no 'requested amount of bandwidth' in the BSR for a[] [radio base station] to 'identify.'" (citations

omitted)). Additionally, the District Court noted that "LTE subscriber units send BSRs to [radio base stations] even when they have no need for bandwidth." J.A. 17 (citation omitted). The District Court found that this further supported its conclusion that no bandwidth is requested by the Ericsson products.

The District Court erred in entering summary judgment because it ignored conflicting evidence in the record and placed greater weight on Ericsson's evidence. As to the conclusion that a BSR is not a request for bandwidth, Wi-LAN had argued to the District Court that "[t]he base station treats each BSR as a request and identifies in it a requested amount of bandwidth because of its purpose, contents, and context." J.A. 2246 (Wi-LAN's Opposition to Ericsson's Motion for Summary Judgment). In this Opposition, Wi-LAN further stated that "Dr. Min explains[] 'all understand that the BSR is sent for the purpose of requesting bandwidth from the base station to transmit the uplink data and to clear its buffers . . . and [thus] . . . the base station will respond by granting bandwidth in response to the BSR." J.A. 2246 (citation omitted); *see* J.A. 2245 (Dr. Min stating "[t]he entire purpose of the BSR is to inform the base station, which would otherwise have no way of knowing the amount of bandwidth [the user equipment] requires at a particular [transition time interval]."). Rather than acknowledge the dispute about this fact, the District Court determined this evidence did not support Wi-LAN's arguments. J.A. 15. The District Court rejected Wi-LAN's evidence because "it merely indicates that the number of bytes of data reported in a BSR is a *factor* [that radio base stations] use in calculating the number of [physical resource blocks] to allocate to subscriber units." J.A. 15.

Taken together, we find that the District Court weighed conflicting evidence and improperly credited Ericsson's evidence when reaching its conclusion that the accused products do not request bandwidth. *See Ander-*

son, 477 U.S. at 255. We vacate the grant of summary judgment and remand for further proceedings consistent with this opinion.

III. Ericsson's Cross-Appeal

In its cross-appeal, Ericsson challenges only one aspect of the District Court's decision—i.e., whether the District Court erred by finding that the MFL Provision did not apply to the Patents-in-Suit. We agree with the District Court that the MFL Provision does not apply.

A. Legal Framework

The PCRA is "governed in all respects in accordance with the laws of the state of New York." J.A. 1766. Under New York law, "[t]he fundamental, neutral precept of contract interpretation is that agreements are construed in accord with the parties' intent." *Greenfield v. Philles Records, Inc.*, 780 N.E.2d 166, 170 (N.Y. 2002) (citation omitted). "[T]he construction of a plain and unambiguous contract is for the court to pass on, and . . . circumstances extrinsic to the agreement will not be considered when the intention of the parties can be gathered from the instrument itself." *West, Weir & Bartel, Inc. v. Mary Carter Paint Co.*, 255 N.E.2d 709, 711–12 (N.Y. 1969) (citation omitted). "In interpreting a contract[,] the court should examine the entire agreement and consider the relation of the parties and the circumstances under which it was executed." *William C. Atwater & Co. v. Pan. R.R. Co.*, 159 N.E. 418, 419 (N.Y. 1927). Additionally, "[p]articular words should be considered, not as if isolated from the context, but in the light of the obligation as a whole and the intention of the parties as manifested thereby." *Id.* "Where the document makes clear the parties' over-all intention, courts examining isolated provisions should then choose that construction which will carry out the plain purpose and object of the agreement." *Kass v. Kass*, 696 N.E.2d 174, 181 (N.Y. 1998) (internal quotation marks, brackets, and citation

omitted).

B. The District Court Did Not Err in Finding the MFL Provision Does Not Apply to the Patents-In-Suit

The District Court concluded that the PCRA's MFL Provision did not apply to the Patents-in-Suit. J.A. 32. In reaching this determination, the District Court applied this court's previous holding regarding the PCRA between Ericsson and Wi-LAN. The District Court stated that the "'MFL Provision only applies to Wi-LAN's patents owned or controlled as of the effective date of the PCRA, which the [Patents-in-Suit] were not.'" J.A. 12 (alteration omitted) (quoting *Wi-LAN,* 574 F. App'x at 940). "Ericsson does not contend that the [Patents-in-Suit] were owned or controlled by Wi-LAN as of the effective date of the PCRA." J.A. 12. Rather, the District Court found that "it is undisputed that Wi-LAN acquired [the Patents-in-Suit] after the execution of the PCRA" and, thus, the MFL Provision does not apply to the Patents-in-Suit. J.A. 12.

On cross-appeal, Ericsson argues that the PCRA was triggered by Wi-LAN's assertion of U.S. Patent No. 6,549,759 ("the '759 patent")[7] against unrelated third parties' products (i.e., products under the Universal Mobile Telecommunications System ("UMTS") or High Speed Packet Access ("HSPA") standards, collectively "UMTS/HSPA products").[8] Once the PCRA was triggered,

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[7] Wi-LAN owned or controlled the '759 patent before the November 1, 2007 effective date of the PCRA. *See* J.A. 1756 (effective date of the PCRA); J.A. 1789 (assignment history of the '759 patent).

[8] The UMTS "standard broadly defines third generation cellular network specifications and protocols—more commonly known as '3G.' The UMTS standard consists of

Ericsson contends that it has the right to "a license on the same terms as" unrelated third party BelAir Networks Inc.'s license with Wi-LAN ("the BelAir License"). Cross-Appellants' Br. 61 (capitalization modified). Ericsson contends the scope of the future license under the MFL Provision "is not tied to the patent that triggers the MFL Provision[] [(i.e., the '759 patent,)] for while only patents allegedly infringed by [the unrelated third parties'] UMTS/HSPA [p]roducts can trigger Ericsson's right to a license, that license necessarily and explicitly extends beyond [the unrelated third parties'] UMTS/HSPA [p]roducts." *Id.* at 62 (citation omitted). Because the terms of the BelAir License "extend . . . to the [Patents-in-Suit], the [c]ourt should hold that Ericsson is entitled to judgment on its counterclaims." *Id.* at 63.

We agree with the District Court's conclusion that Ericsson is not entitled to a most favored licensee status as to the Patents-in-Suit, but for different reasons than those articulated by the District Court. We find that Ericsson is entitled to a most favored licensee status only for the patent or patents that trigger the MFL provision—i.e., the '759 patent.

The MFL Provision is provided in Article VII of the PCRA. In relevant part, Article VII, § 1 states:

> In the event that Wi-LAN owns or controls the licensing of patents not already addressed under this Agreement and which are infringed or alleged to be infringed by UMTS/HSPA PRODUCTS, W[i]-LAN hereby agrees that[,] . . . at [Ericsson's]

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a number of narrower standards, including . . . []HSPA[]." *Wi-LAN*, 574 F. App'x at 933. "HSPA is a wireless standard that specifically relates to the transfer of data between the network and a mobile device." *Id.*

> request, W[i]-LAN will grant . . . a non-exclusive license to make, have made, use, sell, offer for sale, lease or otherwise dispose of, and import [Ericsson's] PRODUCTS including UMTS/HSPA PRODUCTS and Wi-LAN agrees to grant such a license at most-favored licensee status as compared to any future licensee of W[i]-LAN.

J.A. 1760.

Under New York law, courts "should . . . choose that construction which will carry out the plain purpose and object of the agreement." *Kass*, 696 N.E.2d at 181 (internal quotation marks, brackets, and citation omitted). "[A] court should not adopt an interpretation which will operate to leave a provision of a contract without force and effect." *Corhill Corp. v. S. D. Plants, Inc.*, 176 N.E.2d 37, 38 (1961) (internal quotation marks, citations, and alteration omitted). Thus, in interpreting the relevant passage of the MFL Provision, we must consider the entire contract and choose the interpretation "which best accords with the sense of the remainder of the contract." *Rentways, Inc. v. O'Neill Milk & Cream Co.*, 126 N.E.2d 271, 273 (N.Y. 1955) (citations omitted).

We previously concluded that the first clause of the relevant section is triggered when patents that Wi-LAN owned or controlled as of the PCRA's effective date are asserted against Ericsson's alleged infringing products. *See Wi-LAN*, 574 F. App'x at 940. Ericsson's interpretation of the second clause of the relevant section—i.e., that it is entitled to a license on the same terms as the BelAir License—divorces the second clause from the previously interpreted first clause. The section discusses the rights extended to Ericsson in terms of patents, not products. By its terms, the section addresses the "licensing of patents not already addressed under this Agreement," "which are infringed or alleged to be infringed by UMTS/HSPA PRODUCTS." J.A. 1760. Within the same

sentence, the section further states that, "during the TERM of this Agreement," Wi-LAN will grant a "non-exclusive license" that covers the alleged infringing "PRODUCTS including UMTS/HSPA PRODUCTS." J.A. 1760. Reading the sentence in its entirety, the scope of the license would cover the patent or patents asserted by Wi-LAN against Ericsson for infringement, which is limited to pre-PCRA patents, such as the '759 patent. And reading the scope of the section to apply to any post-PCRA patent would result in an unreasonable interpretation of the MFL Provision as a whole.

Granting a license to Ericsson on the same terms as the BelAir License would grant Ericsson significantly broader rights than those contractually agreed to in the PCRA. We previously held that the MFL Provision is triggered by the assertion of only pre-PCRA patents. *See Wi-LAN*, 574 F. App'x at 939–40. Today we determine that once the MFL Provision is triggered, the scope of that license is limited to the patent that triggered the MFL Provision. The Patents-in-Suit are excluded by this analysis. We conclude that the District Court did not err in finding the MFL Provision does not apply to the Patents-in-Suit.

CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. Accordingly, the final judgment of the U.S. District Court for the Southern District of Florida is

VACATED-IN-PART, AFFIRMED-IN-PART, AND REMANDED

COSTS

Each party shall bear its own costs.

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

WI-LAN USA, INC., WI-LAN, INC.,
Plaintiffs-Appellants

v.

ERICSSON, INC., TELEFONAKTIEBOLAGET LM ERICSSON,
Defendants-Cross-Appellants

2015-1766, -1794

Appeals from the United States District Court for the Southern District of Florida in No. 1:12-cv-23569-DMM, Judge Donald M. Middlebrooks.

O'MALLEY, *Circuit Judge*, concurring in part, dissenting in part.

Respectfully, I must disagree with two of the conclusions the majority reaches: (1) that the district court erred in granting summary judgment of invalidity with respect to the asserted claims of the '437 patent; and (2) that the MFL provision in the PCRA, once triggered, is limited to the patent or patents that triggered the provision. I agree with all other aspects of the majority's thoughtful analysis, including the ultimate conclusion that the MFL provision of the PCRA does not bar suit with respect to the products at issue in this proceeding.

I.

On my first point of disagreement, I believe that, when considered in its entirety, Mouly unambiguously teaches that its handover reference is sent over a RACH during asynchronous handover and, thus, anticipates that aspect of the asserted claims of the '437 patent. The majority points to two errors it says the district court made—relying on arguments of Ericsson's counsel and weighing the expert testimony from both parties against the teachings of Mouly to draw inferences therefrom. Maj. Op. at 10–14. While I do not dispute that a trial court would err if it predicated summary judgment on such findings, I do not believe the district court relied on such findings here.

The district court included a quotation of an argument by Ericsson's counsel in the portion of the court's opinion where the court was laying out the arguments made by *each* party before making its findings in relation to which party's arguments were well taken. In this portion of the opinion, the district court also laid out all of Wi-LAN's arguments to the contrary. The district court did not directly rely on these statements when making its final determination as to what the Mouly reference discloses, which comes well after the court's references to statements made by counsel.

The majority claims that the context provided by footnote 17 shows that the district court relied on the argument of counsel to make findings. Maj. Op. at 12–13 n.6. But the district court's analysis as to the meaning of Mouly's statement that the handover access message "is the only case where short access bursts are used on a dedicated channel" does not rely on statements by counsel. Instead, the district court finds Wi-LAN's argument "inconsistent with the rest of Mouly (totaling 695 pages) and inconsistent with both Parties' expert testimony." J.A. 24–25. The district court then identifies the admis-

sions of Dr. Min, Wi-LAN's expert, as support for its holding. J.A. 25 n.18.

Complaints about the district court's reference to expert testimony are also misplaced. The district court cited an admission by Wi-LAN's own expert as a key piece of expert testimony. There is nothing improper about predicating summary judgment on binding admissions.

Specifically, counsel asked Dr. Min about the teachings of Mouly. The portion of Mouly counsel referred to states:

> At initial assignment, or at handover between two cells which are not synchronised, no information can be used by either side to predict the timing advance. Signalling messages are different, but the timing advance initialisation process is very similar in both cases. The mobile station is forbidden to transmit normal bursts until it knows the new timing advance to apply.

J.A. 2394. Counsel then asked Dr. Min whether that language indicated to Dr. Min that "the communication between the mobile station and the target base station will not be on a dedicated channel until there has been a synchronization of the timing?" J.A. 1415. Dr. Min admitted that Mouly included this teaching, stating "I mean, that's what he [Mouly] said, the mobile station is forbidden to transmit the data which is on a dedicated channel until . . . the synchronization is initiated." J.A. 1415.

Counsel then turned Dr. Min's attention to the statement from Mouly on which Wi-LAN based its argument against anticipation, and on which the majority relies. In addressing the RIL3-RR HANDOVER ACCESS message, Mouly states, "[t]his message is the only case where short access bursts are used on a dedicated channel." J.A. 826.

Counsel asked Dr. Min whether this statement applied to only synchronous handover, and Dr. Min replied:

> It can be either way. You just have to—if it's an asynchronous handover, then you have to obtain the synchronization and then you can use it afterward. So if it's for the synchronous handover then it's easier, clearly, you know, you haven't lost your synchronization. But if it's asynchronous, then you obtain the synchronization first and then you can use it on a dedicated channel.

J.A. 1417–18. Counsel then clarified with Dr. Min that, to the extent the statement refers to an access burst being sent on a dedicated channel in an asynchronous scenario, "the synchronization takes place prior to the access burst being sent," and Dr. Min stated, "[y]es, that's right." J.A. 1418.

Wi-LAN's attempts to dismiss these statements as ambiguous testimony about obtaining synchronization on the dedicated channel in asynchronous handover misunderstand its place in the analysis. Dr. Min admits that a mobile device cannot transmit data on a dedicated channel until after synchronization has been completed. The mobile device therefore must transmit on the RACH prior to synchronization.

Although Dr. Min does not specifically state that the handover reference is transmitted prior to synchronization, his testimony can only support that result given the teachings of Mouly. Figure 6.37 of Mouly shows that the RIL3-RR HANDOVER ACCESS message is sent prior to the mobile device receiving the RIL3-RR PHYSICAL INFORMATION message that has the timing advance from the new base station, and therefore prior to synchronization. J.A. 826. Dr. Min admitted Mouly teaches that a mobile device "is forbidden to transmit data which is on a dedicated channel until . . . the synchronization is initiated." J.A. 1415; *see also* J.A. 1417–18. If the mobile

device cannot transmit over a dedicated channel prior to synchronization, as admitted by Dr. Min, J.A. 1415, 1417–18, then the teaching of Mouly that "[t]his message is the only case where short access bursts are used on a dedicated channel," J.A. 826, must apply only to synchronized handovers. In asynchronous scenarios, the RIL3-RR HANDOVER ACCESS message sent prior to synchronization, as shown in Figure 6.37, cannot be sent over a dedicated channel—because synchronization has not been established yet—and therefore must be sent over the RACH.

In the absence of material errors by the district court, the majority ultimately predicates its conclusion that Mouly's teaching is ambiguous on one oddly phrased sentence in the entire reference, which encompasses hundreds of pages and includes at least seventeen pages dedicated specifically to handover execution. As explained above, however, Mouly's teachings and Dr. Min's admissions show that this sentence cannot apply to asynchronous handovers. Because no reasonable juror could read Mouly other than the way the district court did, or conclude that the one grammatically confusing phrase to which Wi-LAN and the majority point is enough to offset the otherwise clear teachings of Mouly, I do not find that Wi-LAN's dispute predicated on that phrasing raises a genuine dispute of material fact to preclude summary judgment.

II.

With respect to the MFL provision of the PCRA, I agree with the majority that our prior opinion, *Wi-LAN USA, Inc. v. Ericsson, Inc.*, 574 F. App'x 931 (Fed. Cir. 2014), only decided whether the assertion of after-acquired patents triggers the MFL provision. Importantly, in that set of companion opinions, we affirmed a Texas judgment that rested only on a determination of what could trigger the MFL provision and reversed a Florida

judgment, finding it erred in its assessment of that same predicate issue. We expressly refused to determine the scope of the MFL provision once triggered.

Now that the MFL provision has been triggered, we must decide that reserved question. Like the majority, I do not believe our earlier decision compels the conclusion the district court reached here. Unlike the majority, however, I believe the MFL provision defines the products as to which most favored licensee status would apply, not the patents. I conclude that the reasoning of our earlier decision as well as basic rules of grammar both limits and extends (depending on one's perspective) the MFL provision to *products* which incorporate the type of technology at issue in the triggering patents—all UMTS technology. Because the products at issue in this action do not incorporate UMTS technology, I agree with the majority that the MFL provision does not bar Wi-LAN's action; I just do so for slightly different reasons.

III.

Finally, I agree that the district court properly interpreted the term Bandwidth and that, based on that construction, the trial court erred in entering summary judgment of non-infringement of the '298 and '014 patents.

IV.

For these reasons, I concur-in-part and dissent-in-part.