NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

3G LICENSING, S.A.,
Appellant

v.

HONEYWELL INTERNATIONAL INC., SIERRA WIRELESS, ULC, TELIT CINTERION DEUTSCHLAND GMBH, F/D/B/A THALES DIS AIS DEUTSCHLAND GMBH,
Appellees

2023-1137

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2021-00584.

Decided: July 31, 2024

ANDREW PETER DEMARCO, Devlin Law Firm LLC, Wilmington, DE, argued for appellant. Also represented by NEIL A. BENCHELL, TIMOTHY DEVLIN.

KOURTNEY MUELLER MERRILL, Perkins Coie LLP, Denver, CO, argued for all appellees. Appellee Sierra Wireless, ULC also represented by AMANDA TESSAR; TARA LAUREN

KURTIS, Chicago, IL.

JEFFREY R. GARGANO, K&L Gates LLP, Chicago, IL, for appellee Honeywell International Inc. Also represented by BRIAN PAUL BOZZO, Pittsburgh, PA; ERIK HALVERSON, San Francisco, CA.

GUY YONAY, Pearl Cohen Zedek Latzer Baratz LLP, New York, NY, for appellee Telit Cinterion Deutschland GmbH. Also represented by KYLE AUTERI, I.

Before LOURIE, STOLL, and STARK, *Circuit Judges*.

LOURIE, *Circuit Judge*.

3G Licensing, S.A. ("3G Licensing") appeals from a final written decision of the United States Patent and Trademark Office Patent Trial and Appeal Board ("the Board") finding claims 16–19, 21, 22, 39, 40, and 42 of U.S. Patent 7,551,625 (the "'625 patent") unpatentable as anticipated or obvious. *Cradlepoint, Inc. v. 3G Licensing S.A.*, IPR2021-00584, 2022 WL 4137702 (P.T.A.B. Sep. 12, 2022) ("*Decision*"). For the reasons provided below, we *affirm*.

BACKGROUND

The '625 patent relates to improvements in allocating network resources in cellular networks. The patent teaches a method where a cell tower provides user equipment ("UE," *e.g.*, cellular phone) with a "scheduling assignment" (also known as a "scheduling grant" or "grant"), which is generally "downlink" (meaning it goes from a cell tower or base station to user equipment). *See* '625 patent, col. 1 ll. 45–46. There are two relevant scheduling assignments: relative grants and absolute grants. Appellant's Br. at 7 (citing J.A. 3230, ¶ 40). A relative grant tells user equipment to increase, decrease, or maintain its usage of network resources relative to a previous grant. *Id.* An absolute grant tells user equipment the maximum amount of

network resources the user equipment can use, regardless of any previous grant. *Id.* To help regulate the amount of network resources used by the user equipment via the uplink channels, the '625 patent teaches the use of a dedicated downlink channel: the Enhanced Absolute Grant Channel ("E-AGCH"). The E-AGCH serves as a channel dedicated to telling the user equipment how much of the network's resources the user equipment may use by providing user equipment multiple identifiers so that it can issue scheduling assignments more efficiently. '625 patent, col. 3 ll. 14–29, col. 4 ll. 4–7. Representative claim 16 reads as follows:

> 16. A method of scheduling an uplink packet transmission channel for user equipment (UE), the method comprising:
>
> receiving a scheduling assignment in an *Enhanced Absolute Grant Channel (E-AGCH)*, wherein the scheduling assignment comprises an identifier for a plurality of UE;
>
> acquiring the contents of the scheduling assignment; and,
>
> transmitting an uplink data packet on an Enhanced Uplink Dedicated Channel (E-DCH) according to the contents of the scheduling assignment.

'625 patent, col. 7 ll. 40–48 (emphasis added).

Honeywell International, Inc., Sierra Wireless, Inc., TCL Communication Technology Holdings Limited, TCT Mobile International Limited, TCT Mobile, Inc., TCT Mobile (US) Inc., TCT Mobile (US) Holdings, Inc., and Thales DIS AIS Deutschland GmbH[1] (collectively, "Honeywell")

---

[1] Petitioners also included Cradlepoint, Inc. but they are not a party to the appeal.

petitioned for *inter partes* review ("IPR") of the '625 patent, asserting anticipation or obviousness based on three Third Generation Partnership Project documents ("3GPP References")[2] and optionally Chen.[3] The 3GPP References are documents publishing the results of several working group meetings by the cellular standard-setting organization 3GPP in 2004 and early 2005. Appellant's Br. at 13–15; Appellee's Br. at 1. Specifically, the three 3GPP References were uploaded and publicly accessible no later than November 21, 2004, December 3, 2004, and January 7, 2005, respectively. *Decision* at *3 nn.5–7, *6, *12–13.

3G Licensing responded that the 3GPP References did not qualify as prior art because they post-dated the priority date of the '625 patent. The '625 patent was filed on March 31, 2005, but claims priority from a foreign patent application (the "Korean Application") that was filed on April 2, 2004. But Honeywell argued that the '625 patent was not entitled to the April 2, 2004 filing date of the Korean Application because that application did not provide sufficient support for the challenged claims, as it failed to disclose an E-AGCH. 3G Licensing then argued that the '625 patent is entitled to its earlier priority date because the Korean Application teaches the use of a grant channel sharing the properties of the E-AGCH, even if does not call the channel by that specific name. J.A. 260.

A central element of the parties' dispute regarding priority was the proper claim construction of E-AGCH. In its Preliminary Patent Owner Response, 3G Licensing first argued that E-AGCH should be construed as "a single common grant channel capable of assigning multiple identifiers to a single UE that transmits scheduling grants to a single user equipment, groups of user equipment, or

---

[2] See *Decision* at *3, *3 nn.5–7 for the precise grounds and references.

[3] U.S. Patent 7,155,236.

all user equipment on the channel." *Decision* at *4. Honeywell argued that E-AGCH was a term of art that required no construction beyond its plain and ordinary meaning. *Id.* According to Honeywell, "3GPP first coined the term 'Enhanced Absolute Grant Channel' or 'E-AGCH' in late 2004, defining and standardizing that term in the process." Appellee's Br. at 1. In its Institution Decision, the Board preliminarily determined that "the E-AGCH disclosed in the '625 patent ha[s] 'the same definition as disclosed in the 3GPP standard documents,' and [thus] that it requires an absolute grant." *Decision* at *5 (quoting J.A. 366).

Following institution, 3G Licensing revised its proposed construction of E-AGCH to "a single common grant channel that transmits scheduling grants to a single user equipment, groups of user equipment, or all user equipment on the channel, said channel supporting a single UE being assigned multiple identifiers." *Id.* (quoting J.A. 483) (emphasis omitted). In response to the Board's findings at institution, 3G Licensing argued that E-AGCH, regardless whether or not it was a term of art, did not have a single accepted meaning at the time of invention and that the patentee had acted as its own lexicographer, defining it differently than in the 3GPP References. *Id.* at *5, *7. 3G Licensing pointed to the following portion of the specification in support:

> An Enhanced Absolute Grant Channel (E-AGCH) is a downlink channel used by a base station (Node B) to send a scheduling command to an user equipment (UE). In other words, Node B transmits a command as to how much transmission power or a level of data rate transmission an UE is permitted to transmit. This is also known as an uplink scheduling assignment or scheduling assignment.

Id. at *7 (quoting J.A. 481–82 (quoting '625 patent, col. 3 ll. 14–20)). 3G Licensing claimed that that disclosure was definitional and showed that E-AGCH was not limited to

absolute grants. *Id.* at *7. Further, 3G Licensing argued in its Sur-Reply that the E-AGCH used in the '625 patent *must* differ from that used in the 3GPP References at least because it supports issuing scheduling assignments to three identities (an individual user equipment, a group of user equipments, or all user equipments on the channel), whereas the 3GPP E-AGCH allegedly supports issuing scheduling assignments to only two identities (a "group identity" and an "individual identity"). *Id.* at *8 (citing J.A. 482); *see* '625 patent, col. 3 ll. 42–44.

3G Licensing further argued that, even if E-AGCH was construed to require an absolute grant consistent with the 3GPP References, the '625 patent was still entitled to the earlier priority date because the Korean Application disclosed the "superset" of grants, which a person of ordinary skill in the art would have understood to encompass both absolute and relative grants. *Id.* at *9. In support, 3G Licensing put forth expert testimony, including testimony that a person of ordinary skill in the art would have been "aware of the influence of DOCSIS protocols," which use "grant" without qualifying it as "absolute" or "relative." *Id.* at *10 (quoting J.A. 3318–19, ¶¶ 24–26). In its Sur-Reply, 3G Licensing further argued that the "scheduling assignments" referred to in the Korean Application "are a synonym for 'scheduling grants'" and "the only kind of assignment or grant known at the time of the Korean Application to persons of ordinary skill were absolute grants." *Id.* at *12 (quoting J.A. 633) (emphasis omitted). Honeywell argued that the Korean Application makes "only passing reference to generic 'downlink channels to be used for transmitting scheduling commands' in its discussion of the 'conventional technology in the field,'" but it "lacks any disclosure of the claimed 'E-AGCH'" "nor even a functional equivalent thereof." *Id.* at *10 (quoting J.A. 136–38).

In its Final Written Decision, the Board maintained its preliminary construction for E-AGCH, finding that "one of skill in the art would have understood that the patentee

used that term in the '625 patent in accordance with the 3GPP's definition." *Id.* at *6. It rejected 3G Licensing's contention that the E-AGCH did not require an absolute grant, concluding that doing so would "ascribe no meaning to the word 'Absolute' in 'Enhanced Absolute Grant Channel.'" *Id.* at *9. The Board noted that 3G Licensing did not present any evidence to support its contention that there was not a "single accepted meaning," such as another "accepted meaning" for E-AGCH from the appropriate time period that differed from that in the 3GPP References. *Id.* at *6. The Board also, just as at institution, found that there was no evidence of lexicography or disavowal from the patentee. *Id.* at *7. In particular, the Board found that the alleged definition in the '625 patent relied on by 3G Licensing was "substantially similar" to how the 3GPP used the term. *Id.* at *8 (comparing J.A. 1168 to the '625 patent, col. 3 ll. 42–44). The Board thus found that nothing in the intrinsic record was a "clear expression of an intent to depart from the meaning of this term as it would have been understood by a [person of ordinary skill in the art]." *Id.* The Board did not address 3G Licensing's argument that the 3GPP References do not disclose the claimed E-AGCH because the claimed E-AGCH requires the use of three identifiers, while the E-AGCH disclosed in the 3GPP References does not, finding that the argument "was not originally set forth in Patent Owner's Response and [was] therefore untimely." *Id.* at *14. However, it rejected the premise of 3G Licensing's argument, holding that the '625 patent's E-AGCH did not require sending scheduling assignments to three identifiers. *Id.* at *8.

The Board also disagreed with 3G Licensing's argument that, even if E-AGCH was construed consistently with the 3GPP References, the '625 patent was nevertheless entitled to the filing date of the Korean Application. Specifically, the Board found:

> Even assuming, *arguendo*, that [3G Licensing] had sufficiently shown an equivalence between the

> scheduling assignments and scheduling commands that are set forth [in] the Korean Application and the argued scheduling grants, [3G Licensing] does not point to any authority that would support the proposition that disclosing the broader, more generic concept of a channel that transmits a scheduling command or scheduling assignment in the Korean Application . . . is sufficient to provide written description support for the narrower, more specific [] channel that transmits an absolute grant.

Decision at *11. The Board also rejected 3G Licensing's reliance on DOCSIS to show that the Korean Application inherently discloses both absolute and relative grants. *Id.* It concluded that DOCSIS, a cable standard, would not provide insight into what a person of ordinary skill in the art would have understood about the "rapidly evolving state of wireless cellular communications." *Id.* The Board also found 3G Licensing's argument that the Korean Application's disclosure of "scheduling assignments" included absolute grants because those were the only types of known grants at that time to be untimely, unsupported, and at odds with portions of its expert's testimony. *Id.* at *12.

The Board therefore found that the '625 patent was not entitled to the filing date of the Korean Application, and the 3GPP References thus qualified as prior art. It then held all challenged claims to be unpatentable based on the 3GPP References. It did not reach the grounds relying on Chen. *Id.* at *19–20.

3G Licensing appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

3G Licensing makes largely the same claim construction and priority arguments on appeal as it did before the Board. In addition, it argues that (1) the Board erred in first relying on extrinsic evidence for the construction of

E-AGCH and then looking to see if the patentee had disclaimed such meaning, and (2) the Board erred in not considering its arguments regarding the extrinsic evidence because it found them untimely. We first address the construction of E-AGCH, and then whether the Korean Application discloses that limitation such that the '625 patent is entitled to its earlier priority date.

I. CLAIM CONSTRUCTION

We review *de novo* the Board's construction of a claim term and any supporting determinations made based on the intrinsic record. *Personalized Media Commc'ns, LLC v. Apple Inc.*, 952 F.3d 1336, 1339 (Fed. Cir. 2020). Any factual findings the Board made regarding extrinsic evidence are reviewed for substantial evidence. *Id.*

We agree with the Board that E-AGCH requires an absolute grant. Looking first to the claim term itself, it clearly uses the phrase "absolute grant." '625 patent, col. 7 ll. 42–43 (claiming, in part, "an Enhanced *Absolute Grant* Channel (E-AGCH)" (emphasis added)). As the Board found, not requiring an absolute grant would "ascribe no meaning to the word 'Absolute' in 'Enhanced Absolute Grant Channel.'" *Decision* at *9. That understanding is further supported by the specification. It explains that the E-AGCH is used to "transmit[] a command as to how much transmission power or a level of data rate transmission an UE is permitted to transmit." '625 patent, col. 3 ll. 17–19. That is consistent with transmitting an absolute grant, which is the maximum amount of network resources the user equipment can use, rather than a relative value. *See* Appellant's Br. at 7 (citing J.A. 3230, ¶ 41); J.A. 1167. Moreover, the specification also discloses an "Enhance[d] *Relative Grant* Access Channel," or "E-RGCH," that it explicitly distinguishes from the E-AGCH. '625 patent, col. 4 ll. 24–25 (emphasis added). Those statements all support the conclusion that E-AGCH requires an absolute grant.

The extrinsic evidence, the Board's interpretation of which we review for substantial evidence, confirms that E-AGCH requires an absolute grant. For example, one 3GPP Reference explains that the "E-DCH Absolute Grant Channel (E-AGCH) is a fixed rate (30 kbps, SF=256) downlink physical channel carrying the uplink E-DCH absolute grant." J.A. 1219. The 3GPP References likewise explain what an absolute grant, relative grant, and E-RGCH are, providing further information regarding the meaning of E-AGCH. J.A. 1158, 1167–68. Those statements in the 3GPP References are entirely consistent with the '625 patent specification and demonstrate how a person of ordinary skill in the art would have understood E-AGCH at the relevant time.

Although 3G Licensing attempts to separate its use of E-AGCH in the '625 patent from that in the 3GPP References, it provides no persuasive reason not to consider the 3GPP References' use of the term. Courts, as well as the Board, frequently rely on extrinsic evidence for insight on the meaning of terms. As we have explained:

> In many cases that give rise to litigation, . . . determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean."

Phillips v. AWH Corp., 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)). Those sources include not only intrinsic evidence, but "extrinsic evidence concerning relevant scientific principles,

the meaning of technical terms, and the state of the art." *Id.* (quoting *Innova*, 381 F.3d at 1116). Extrinsic evidence may be "less reliable" than the intrinsic evidence, but it still "may be useful" and "can help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand claim terms to mean." *Id.* at *1318–19. As even 3G Licensing concedes, *see* Reply Br. at 6, extrinsic evidence showing that a phrase or word is a term of art, with a commonly understood meaning in the industry, may even be a starting point, provided that the claim construction process remains "centered" on, and consistent with, the intrinsic evidence. *Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1316 (Fed. Cir. 2006) ("The district court's reference to the dictionary was not an improper attempt to find meaning in the abstract divorced from the context of the intrinsic record but properly was a starting point in its analysis, which was centered around the intrinsic record consistent with *Phillips*")). As the Board found, 3G Licensing put forth no evidence of another accepted meaning of E-AGCH, such as from other industry documents or patents. *See Decision* at *6.

We also agree with the Board that there was no clear intent by the patentee to redefine E-AGCH or otherwise disclaim another meaning. "When a patentee acts as his own lexicographer in redefining the meaning of particular claim terms away from their ordinary meaning, he must clearly express that intent in the written description." *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005). "[T]he statement in the specification must have sufficient clarity to put one reasonably skilled in the art on notice that the inventor intended to redefine the claim term." *Id.* The statement that 3G Licensing points to at column 3, lines 14–16 of the '625 patent is simply a general explanation of certain aspects of E-AGCH, not a clear attempt to broaden its commonly understood meaning. That disclosure makes no mention of the

inclusion of relative grants or any other grant type that would lead a person of ordinary skill in the art to believe E-AGCH does not require an absolute grant.

3G Licensing argues that the Board's decision should be vacated and remanded at least because the Board failed to consider its argument that 3GPP References do not disclose the claimed E-AGCH because E-AGCH as used in the '625 patent requires issuing scheduling assignments to three identities (an individual user equipment, a group of user equipments, or all user equipments on the channel), whereas the 3GPP References' E-AGCH does not. *See Decision* at *14; Appellant's Br. at 37–39. The Board did not consider that argument because it found it "untimely" as being put forth for the first time in 3G Licensing's Sur-Reply, rather than in its Patent Owner Response. *Id.* at *14. It further found that, regardless, the '625 patent's E-AGCH did not require the use of three identities. *Id.* at *7–8. 3G Licensing argues that it properly submitted the arguments and evidence pursuant to 37 C.F.R. § 42.23(b) because it was directly responsive to arguments raised by Honeywell for the first time in its Reply and did not contain any new evidence. Appellant's Br. at 4.

We review the Board's decision to exclude or not consider evidence and argument for failure to comply with its rules for abuse of discretion. *ParkerVision, Inc. v. Vidal*, 88 F.4th 969, 978–79 (Fed. Cir. 2023). Here, 3G Licensing does not contest that it did not raise the three-identities argument in its Patent Owner Response. Nor cannot it plausibly claim that it was not previously on notice that Honeywell—and the Board—were relying on the 3GPP References as support for its construction of E-AGCH. Indeed, the Board in its Institution Decision said that the "E-AGCH disclosed in the '625 patent ha[s] 'the same definition as disclosed in the 3GPP standard documents.'" *Decision* at *5 (quoting J.A. 366). 3G Licensing has not provided a persuasive reason it could not have made its three-identities argument sooner. The Board therefore did

not abuse its discretion in declining to consider that belated argument.

We further agree with the Board's alternative holding that, regardless, the E-AGCH claimed in the '625 patent does not *require* sending scheduling assignments to three identifies. The language in the specification that 3G Licensing points to is permissive, not mandatory. *See Personalized Media*, 952 F.3d at 1343 (explaining that the descriptions in the specification "fall short of limiting" and "are not definitional" because "they are merely illustrations that use open-ended, permissive phrases"). For example, that language explains that "[i]n E-AGCH, scheduling assignment(s) *can be* transmitted from Node B via shared channel(s) to an UE, group(s) of Ues, or all the Ues." '625 patent, col 3, ll. 42–44 (emphasis added). As the Board found, nothing in that statement expresses a clear intent to define the term to require sending scheduling assignments to three identities. *Decision* at *8.

We are likewise unpersuaded by 3G Licensing's additional argument that the use of "an" in the claims, '625 patent, col. 7 l. 42, shows that the E-AGCH is limited to a single channel. We have "repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.'" *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000). We therefore find that, although E-AGCH may be a single channel, there is nothing in the claims or specification that limits it to such. *See Decision* at *9.

II. PRIORITY DATE

3G Licensing argues that, even under the Board's construction of E-AGCH, the Board erred in not finding the '625 patent entitled to its earliest priority date, *i.e.*, the filing date of the Korean Application. "Priority of invention is a question of law to be determined based upon underlying factual determinations." *Innovative Scuba Concepts,*

Inc. v. Feder Indus., Inc., 26 F.3d 1112, 1115 (Fed. Cir. 1994) (citing *Price v. Symsek*, 988 F.2d 1187, 1190 (Fed. Cir. 1993)). "Whether an earlier-filed application possesses sufficient written description to qualify it as a priority document or is instead invalidating prior art is a fact-finding we review for substantial evidence." *Hologic, Inc. v. Smith & Nephew, Inc.*, 884 F.3d 1357, 1361 (Fed. Cir. 2018) (citing 35 U.S.C. §§ 112, 120; *Yeda Rsch. & Dev. Co. v. Abbott GmbH & Co. KG*, 837 F.3d 1341, 1344–45 (Fed. Cir. 2016)).

The Korean Application nowhere explicitly discloses an E-AGCH, a channel having the properties of the claimed E-AGCH, or even an absolute grant. 3G Licensing's best argument is that the Korean Application discloses the general concept of a channel transmitting scheduling commands through its use of scheduling assignments and/or scheduling commands. *See generally* J.A. 1377–92. However, there is no record evidence that a person of ordinary skill in the art would have understood that disclosure to be referring to, including, or inherently disclosing absolute grants. *See Decision* at *11. 3G Licensing's only evidence that "grant" may include both absolute and relative grants is unsupported expert testimony, or expert testimony concerning a cable, not wireless, system. *Id.* The Board was entitled to give little weight to that testimony, and it is not appropriate for us to reweigh it. *See B/E Aerospace, Inc. v. C&D Zodiac, Inc*, 962 F.3d 1373, 1379 (Fed. Cir. 2020) ("We do not reweigh evidence on appeal.").

We therefore find the Board's conclusion that the Korean Application did not disclose the claimed E-AGCH to have been supported by substantial evidence. For that reason, the '625 patent is not entitled to the filing date of that application and the 3GPP References qualify as prior art. 3G Licensing does not otherwise challenge the Board's findings of obviousness and anticipation based on the 3GPP References, so we therefore *affirm*.

CONCLUSION

We have considered 3G Licensing's remaining arguments but find them unpersuasive. For the foregoing reasons, the decision of the Board is *affirmed*.

AFFIRMED