NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

KONINKLIJKE KPN N.V.,
Appellant

v.

KATHERINE K. VIDAL, UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,
Intervenor

2019-2447

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2018-00558, IPR2018-01639, IPR2018-01645.

Decided: December 2, 2024

KEITH JONATHAN WOOD, Hamilton, Brook, Smith & Reynolds, P.C., Boston, MA, argued for appellant. Also represented by SAMUEL SUSSMAN; BENJAMIN JOSEPH SPARROW, Concord, MA.

PETER J. AYERS, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for

intervenor.   Also represented by MAI-TRANG DUC DANG, AMY J. NELSON, FARHEENA YASMEEN RASHEED.

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Before PROST, REYNA, and CHEN, *Circuit Judges*.

REYNA, *Circuit Judge*.

Koninklijke KPN N.V. appeals the Patent Trial and Appeal Board's final decision in an inter partes review. The Board determined that claims 31, 33, and 35 of the '667 patent are unpatentable as obvious. We affirm.

BACKGROUND

I. '667 Patent

Appellant Koninklijke KPN N.V. ("KPN") owns U.S. Patent No. 9,014,667 ("'667 patent"). This patent relates to managing access to telecommunication networks. '667 patent, 1:16–19. "Terminals," such as a mobile phone or a computer, request access to a telecommunications network. *Id.* at 1:51–61. In the '667 patent's system, terminals are assigned certain time intervals during which network access for the terminal is either permitted or denied. *Id.* The '667 patent also teaches storing a unique identifier associated with each terminal. *Id.* at 1:46–55, 4:54–57.

Claims 31, 33, and 35 of the '667 patent are at issue on appeal and are provided below with disputed limitations emphasized. The disputed limitations include the "access request" limitation of claims 31, 33, and 35; the "deny access time interval" limitation of claims 31 and 33; and the "unique identifier" limitation of claims 31 and 33. Claim 31 recites in relevant part:

> 31. A telecommunications network configured for providing access to a plurality of terminals, each terminal associated with a ***unique identifier*** for accessing the telecommunications network,

> wherein the telecommunications network comprises:
>
> a register configured to store the ***unique identifier*** of at least one terminal in combination with identification of at least one associated ***deny access time interval***, the at least one associated ***deny access time interval*** being a time period during which telecommunications network access for the terminal is denied;
>
> one or more processors;
>
> memory storing processor instructions that, when executed by the one or more processors, cause the one or more processors to carry out operations including:
>
> an ***access request*** operation to receive an ***access request*** from the terminal and to receive or determine the ***unique identifier*** associated with the terminal;
>
> an access operation to deny access for the terminal if the ***access request*** is received within the time period, ...

Id. at 11:40–12:4 (emphasis added). Claim 33 recites in relevant part:

> 33. A tangible, non-transitory computer-readable medium having instructions stored thereon that, when executed by one or more processors of a telecommunications network device of a telecommunications network, cause the telecommunications network device to perform operations comprising:
>
> receiving an ***access request*** and ***unique identifier*** from a terminal for access to the telecommunications network;

accessing, using the *unique identifier*, an identification of at least one associated *deny access time interval*, the at least one associated *deny access time interval* being a time period during which access for the terminal is denied;

denying the terminal access to the telecommunications network responsive to the *access request* being received within the time period defined by the accessed identification of at least one associated *deny access time interval*; .
. . .

Id. at 12:36–60 (emphasis added). Claim 35 recites in relevant part:

35. A terminal for use in a telecommunications network, wherein the telecommunications network is configured for providing access to a plurality of terminals, each terminal being associated with a unique identifier for accessing the telecommunications network,

wherein the terminal comprises a message receiver configured for receiving a message from the telecommunications network, the message comprising information relating to a deny access time interval, the deny access time interval being a time period during which telecommunications network access for the terminal is denied, . . .

wherein the terminal further comprises one or more processors, and memory storing processor instructions that, when executed by the one or more processors, cause the one or more processors to carry out operations including:

an *access request* operation for transmitting an *access request* to the telecommunications network in accordance with the deny access time interval, ...

Id. at 13:23–14:22 (emphasis added).

II. Prior Art

There are two prior art references at issue: Obhan[1] and Shatzkamer.[2]   Obhan relates to "manag[ing] available spectrum within a wireless communication system." J.A. 1148, Abstract. Obhan teaches dividing terminals or "subscribers" into a plurality of classes and dividing the wireless communication system into "corridors." J.A. 1166, 2:62–67; J.A. 1167, 3:11–13. Obhan also teaches using an "Admission Control Block" or "ACB" to store both a "good till" time and a minimum terminal class designation for each corridor.   J.A. 1157, Fig. 9B; J.A. 1173, 16:15–20. Finally, Obhan teaches accessing its ACB to determine whether a terminal has "access to the system." J.A. 1174, 18:47–61.

Shatzkamer relates to managing access to a wireless communication network and network security. J.A. 1189, ¶¶ 0011–12. Shatzkamer teaches using an international mobile subscriber identity ("IMSI") feature to identify and monitor each terminal and further teaches adding terminals to a "blacklist" upon determining that the system should deny a terminal access to the network. J.A. 1189, ¶¶ 0012, 15.

III. The Board's Decision

HTC America, Inc. ("HTC"), Lenovo (United States) Inc., and LG Electronics, Inc. (collectively, "Petitioners") petitioned for inter partes review of the '667 patent. J.A. 216; J.A. 1743; J.A. 2052.   The Patent Trial and Appeal Board ("Board") joined all three petitions. J.A. 1625; J.A. 2049. Petitioners asserted that claims 31

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[1]   U.S. Patent No. 6,275,695 ("Obhan").
[2]   U.S.   Patent   Pub.   No.   2008/0220740 ("Shatzkamer").

and 33 were unpatentable as obvious in view of Obhan, Shatzkamer, and Budka,[3] and that claim 35 was unpatentable as obvious in view of Obhan, Taniguichi,[4] and Budka.   The Board agreed and concluded that all challenged claims are unpatentable as obvious. *See LG Elecs., Inc. v. Koninklijke KPN N.V.*, IPR2018-00558, 2019 WL 3519293 (P.T.A.B. Aug. 1, 2019) ("*Final Decision*").

The Board determined that Obhan as modified by Shatzkamer and Budka teaches the access request limitations of claims 31 and 33, and that the combination of Obhan and Budka teaches the access request limitation of claim 35. *Id.* at *7–9, *20–21. In so finding, the Board agreed with Petitioners that Obhan's modified Admission Control Block stores time slot information and each time slot represents times "during which accesses from a list of terminals are denied." *Id.* at *7 (quoting J.A. 259). Next, the Board determined that Obhan teaches the deny access time interval limitation of claims 31 and 33. The Board found that Obhan's good till time is used to determine whether to deny access to terminals. *Id.* at *5–6, *8–9. Finally, the Board determined that while Obhan alone does not teach storing the unique identifier of claims 31 and 33, a person of ordinary skill in the art would be motivated to modify Obhan to incorporate Shatzkamer's IMSI feature, which teaches this limitation. *Id.* at *6. The Board found that a person of ordinary skill in the art would have made this modification to increase granularity and thus provide more specific access control. *Id.*

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[3]   European Patent Pub. No. EP 1009176 ("Budka") is not at issue on appeal.

[4]   U.S. Patent No. 7,505,755 ("Taniguchi") is not at issue on appeal.

KPN appeals.[5] We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

STANDARD OF REVIEW

We review the Board's legal determinations de novo and its factual determinations for substantial evidence. *In re NuVasive, Inc.*, 842 F.3d 1376, 1379 (Fed. Cir. 2016). Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938). Obviousness is a question of law based on underlying findings of fact, such as the scope and content of the prior art and whether a skilled artisan would have been motivated to combine the prior art to achieve the claimed invention. *In re NuVasive*, 842 F.3d at 1381–82.

DISCUSSION

KPN argues that the Board committed three errors. First, KPN argues the Board erred in determining that Obhan teaches the access request limitations of claims 31, 33, and 35.[6] Appellant Br. 30. Second, KPN argues the Board erred in determining that Obhan teaches the deny

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[5]   Petitioners withdrew from this appeal. The U.S. Patent and Trademark Office ("Patent Office") intervened while relying on HTC's brief. ECF No. 96.

[6]   While KPN argues that Obhan does not teach the access request limitations of claims 31, 33, and 35, we note that the Board determined that Obhan as modified by Shatzkamer and Budka teaches the access request limitations of claims 31 and 33, and Obhan in combination with Budka teaches the access request limitation of claim 35. *Final Decision*, 2019 WL 3519293, at *7–9, *20–21. That said, KPN only appears to take issue with portions of the Board's decision that address Obhan alone. As such, we only address the portions of the Board's decision that discuss Obhan itself.

access time interval limitation of claims 31 and 33. Appellant Br. 27. Third, KPN argues the Board erred in determining that a person of ordinary skill in the art would be motivated to combine Obhan and Shatzkamer. Appellant Br. 35–36. We address each argument in turn.

I

KPN first argues that for two separate reasons, substantial evidence does not support the Board's determination that Obhan teaches the access request limitations of claims 31, 33, and 35. First, KPN argues that Obhan does not teach consulting its good till time in deciding whether to grant a terminal access to the network. Second, KPN argues that the Board misread and misstated claim 33. We disagree with KPN on both points.

KPN's first argument that Obhan does not teach consulting its good till time fails under the substantial evidence standard of review. Obhan teaches that its Admission Control Block "includes a time stamp for each corridor through which the respective mobile ACB **950** is valid." J.A. 1173, 16:17–19. Figure 9B of Obhan illustrates an Admission Control Block, which includes entries, e.g., 12:22:24, for the previously mentioned time stamps, labeled as the good till times.

CORRID. NO.	MINIMUM ACC. CLASS	GOOD TILL	
1	9	12:22:24	952
2	7	12:22:00	954
3	5	12:22:00	956

950

FIG. 9B

J.A. 1157, Fig. 9B. This is substantial evidence that the good till time stamps teach the disputed portion of the access request limitations. Further, Obhan teaches that its system may consult the Admission Control Block to determine access. J.A. 1174, 18:47–61 ("[T]he network infrastructure may simply block [an] attempted call if the subscriber unit does not have access to the system (as may be determined upon access of an ACB)."). As the Board both explained and relied on, these disclosures in Obhan teach consulting its good till time in deciding whether to grant a terminal access to the network. *Final Decision*, 2019 WL 3519293, at *4, *10, *14, *16, *24. These disclosures are substantial evidence supporting the Board's finding that Obhan discloses the access request limitations of claims 31, 33, and 35.

At most, KPN's argument before us presents a plausible alternative understanding of Obhan. But under the substantial evidence standard of review, the existence of another plausible conclusion does not compel us to determine the Board's decision is unsupported by substantial evidence. *In re Jolley*, 308 F.3d 1317, 1320 (Fed. Cir. 2002). As such, we decline KPN's invitation to reweigh evidence or make factual findings. *See Roku, Inc.*

v. Universal Elecs., Inc., 63 F.4th 1319, 1326 (Fed. Cir. 2023).

We also conclude that KPN's argument that the Board misread and misstated claim 33 fails. KPN's argument is as follows: In relevant part, claim 31 recites "an access operation to deny access for the terminal *if* the access request is received within the time period." '667 patent, 11:58–59 (emphasis added). Claim 33, on the other hand, recites "denying the terminal access to the telecommunications network *responsive to* the access request being received within the time period defined by the accessed identification of at least one associated deny access time interval." *Id.* at 12:48–52 (emphasis added). KPN makes too much of one sentence in the Board's decision, which states that the relevant limitation in claim 33 "requires only that the access request be denied *if* it is received within the time period during which access is denied." Appellant Br. 33 (quoting J.A. 44). KPN seeks to fault the Board for using the term *if* in the previous passage because claim 33 requires denying access *responsive to* receiving an access request, not *if* a request is received.

KPN advances no meaningful explanation why the if/responsive to distinction is more than a distinction without a difference. As the appellant, KPN must show not only that an error exists, but also that the error was in fact harmful. *In re Watts*, 354 F.3d 1362, 1369 (Fed. Cir. 2004). KPN has not made the requisite showing that there is a material difference between the if/responsive to claim language such that the alleged error affected the Board's decision and is thus harmful. Nor do we discern how this purported error could be harmful. Thus, assuming an error exists, in the absence of any argument or evidence to the contrary, we determine the error is harmless.

II

KPN next argues that for two separate reasons, substantial evidence does not support the Board's determination that the single good till time disclosed in Obhan's Admission Control Block teaches the "deny access time interval" limitation of claims 31 and 33. First, KPN argues that Obhan's single good till time cannot disclose an interval because an interval cannot be defined by a single value. Second, KPN argues that Obhan teaches that even if a user has insufficient access, they can nonetheless immediately gain access to the network regardless of the good till time by requesting to connect to the network using a corridor that has a lower threshold for access. We disagree with KPN on both points.

The Patent Office asserts that KPN has forfeited its argument that an interval cannot be defined by a single value by failing to raise this point before the Board. Below, KPN repeatedly advanced arguments about the purpose of Obhan's good till time. *See, e.g.*, J.A. 1472 (arguing the purpose of Obhan's good till time is to identify when subscriber demand information has expired); J.A. 1473 (arguing Obhan's good till time is "used for a fundamentally different purpose"); J.A. 1476–77 (arguing Obhan's good till time "is never consulted"). But KPN never argued below that the "deny access time interval" limitation cannot be defined by a single value. As such, the Board never addressed whether the "deny access time interval" limitation can be met by a single value, but instead, only addressed KPN's arguments about the purpose of Obhan's good till time. *See Final Decision*, 2019 WL 3519293, at *9–10. KPN's sole meaningful response to the Patent Office's claim of forfeiture is that before the Board, KPN referred to the good till time as a "stamp," not an interval. Appellant Reply Br. 12. KPN's minor word choice below falls short of showing that a single value cannot be an interval. Absent exceptional circumstances, we do not consider arguments on appeal that a party failed

to advance in the tribunal under review. *In re Google Tech. Holdings LLC*, 980 F.3d 858, 863 (Fed. Cir. 2020). Seeing no exceptional circumstances here, we agree with the Patent Office's assertion of forfeiture and decline to address KPN's new argument.

KPN's next argument is that a user with insufficient access can merely connect to the network using a different corridor irrespective of the good till time. This, too, is also unavailing. KPN's argument is not more than a restatement of its previous argument that Obhan does not teach consulting the good till time in deciding whether to grant a terminal access to the network. As already discussed, the Board determined that user access *at each corridor* "depends on the value of the good till time," and thus the good till time is consulted when granting a terminal access even when that terminal seeks access at a different corridor than it previously had. *See supra* Discussion Section I. As we have noted, the Board's determination is supported by substantial evidence. *Id.*; *see also Final Decision*, 2019 WL 3519293, at *10. KPN's argument to the contrary amounts to a disagreement with the Board's reasonable conclusions about the scope and content of the prior art, which we must reject. *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006).

III

KPN's final argument is that the Board erred in determining that a person of ordinary skill in the art would be motivated to combine Obhan and Shatzkamer. According to KPN, the Board relied on an alleged motivation to combine that no party raised, i.e., that modifying Obhan in view of Shatzkamer would result in increased network security.

KPN ignores the Board's explicit statements in support of its motivation to combine analysis. The Board determined that a person of ordinary skill in the art would have combined Obhan and Shatzkamer to "increase

granularity" and thus provide more specific access control. *Final Decision*, 2019 WL 3519293, at *6. The Board unequivocally provided that "increased granularity is a sufficient reason to support the legal conclusion of obviousness." *Id.* at *13. Notably, KPN's counsel acknowledged before the Board that increased granularity "could be beneficial" and is a "possible motivation." *Id.* (citations omitted). And KPN does not dispute that Petitioners argued before the Board that increased granularity supplies a motivation to combine. *See, e.g.*, J.A. 233, J.A. 253. We conclude that the Board properly relied on the precise argument Petitioners presented about granularity, not a *sua sponte* argument about network security, in finding a motivation to combine.

CONCLUSION

We have considered KPN's remaining arguments and find them unpersuasive. For the reasons stated, we affirm the Board's determination that claims 31, 33, and 35 of the '667 patent are unpatentable as obvious.

AFFIRMED

COSTS

Costs against KPN.