

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

IN RE: UNIVERSAL ELECTRONICS, INC.,
Appellant

2022-1782

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. 14/047,072.

Decided: January 12, 2024

JAMES J. LUKAS, JR., Greenberg Traurig, P.A., Chicago, IL, argued for appellant. Also represented by BENJAMIN GILFORD, GARY R. JAROSIK; ERIK BOKAR, Greenberg Traurig, LLP, Orlando, FL.

MAI-TRANG DUC DANG, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Katherine K. Vidal. Also represented by AMY J. NELSON, BRIAN RACILLA, FARHEENA YASMEEN RASHEED.

Before REYNA, HUGHES, and STARK, *Circuit Judges*.
REYNA, *Circuit Judge*.

Universal Electronics, Inc. appeals a final written decision of the United States Patent and Trademark Office Patent Trial and Appeal Board, which found two claims of U.S. Patent Application No. 14/047,072 unpatentable as obvious. We affirm.

BACKGROUND

A. U.S. Patent Application No. 14/047,072

Universal Electronics, Inc. (“UEI”) is the assignee of U.S. Patent Application No. 14/047,072 (“072 application”), titled “User Interface for a Remote Control Application.” J.A. 144. The application describes an improved remote control user interface for controlling home appliances and entertainment devices, such as televisions. J.A. 28 (2:12–17), 70 (44:20–23). The disclosed user interface can display a list of icons representing a user’s favorite channels. *See* J.A. 124 (Fig. 17(a)). A user can tap an icon (such as “ESPN”) to select a channel. J.A. 65 (39:1–5).

The remote control may support electronic program guide (EPG) functionality, which provides information such as channel listings. J.A. 78 (52:3–14). Using EPG data, the application describes automatically updating channel numbers associated with icons representing the user’s favorite channels. J.A. 96–97 (70:18–71:8). The remote control may “compare the most recently downloaded EPG against a previously downloaded EPG to determine if any channel assignments have changed.” J.A. 96 (70:20–23). If there is a change, the remote control can “update the favorites channel list to reflect the new channel number assigned to a favorite.” J.A. 97 (71:2–3). For instance, if the channel number for “ESPN” changes from 29 to 45, the remote control updates the mapping for “ESPN” from channel 29 to channel 45. J.A. 97 (71:3–8). When the user selects the “ESPN” icon, the correct channel is selected and displayed. *Id.*

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Claims 11 and 12 are at issue. J.A. 24–25. Claim 11 is representative and recites,

11. A non-transitory, computer readable media having instructions for displaying information to a user of a hand-held device, the instructions, when executed by a processing device of the handheld device, causing the hand-held device to perform steps comprising:

displaying to the user a plurality of iconic representations of sources of programming each having mapped thereto a first channel number usable by the hand-held device to transmit a channel tuning command to a home appliance to [sic] in response to a selection of a [sic] one of the plurality of iconic representations;

receiving by the hand-held device an electronic program guide having assignments between channel numbers and sources of programming;

determining if the electronic program guide includes an assignment of a second channel number to a source of programming represented by at least one of the plurality of iconic representations; and

in response to determining that the electronic program guide includes the assignment of the second channel number to the source of programming represented by at least one of the plurality of iconic representations, using the electronic program guide to *automatically change the mapping* between the channel numbers and the plurality of iconic representations such that the mapping of the channel numbers to the plurality of iconic representations corresponds to assignments of channel numbers to sources of programs within the electronic program guide.

J.A. 24 (emphasis added to highlight disputed limitations).

B. Prior Art References

The Patent Trial and Appeal Board (“Board”) affirmed rejection of claims 11 and 12 based on prior art references Baker (U.S. Patent No. 6,597,374), Darbee (U.S. Patent No. 6,130,726), and Pietraszak (U.S. Patent No. 6,990,677).

Baker, the primary reference, discloses a universal remote control with a display. Baker at Fig. 1. Baker’s remote control can display a numeric keypad for channel selection. *Id.* at 5:50–52. Baker also discloses programming a “Favorites” list, which allows the user to “create and edit a list of channels that the user wants to access repeatedly.” *Id.* at 7:15–17.

Darbee discloses a remote control that displays program guides with icons mapped to channel numbers, and it allows the user to modify the channel mapping. Darbee at Figs. 13–15, 5:54–57, 9:33–35. Darbee further discloses periodically receiving EPG data and updating program guides stored in the remote control. *Id.* at 8:20–23. According to Darbee, the program guide data can be transmitted in “blocks” or “one-slot at a time.” *Id.* at 9:14–16, 17:3–6.

Pietraszak discloses managing EPG data from multiple sources and that the EPG data may include channel information such as channel number. Pietraszak at 2:33–36, 8:65–66. Pietraszak explains that the EPG data received from different sources may differ. *Id.* at 2:50–54, 8:38–39. According to Pietraszak, the locally stored EPG data may also differ from EPG data received from various sources. *Id.* at 6:12–15. Pietraszak describes various schemes to resolve conflicts among the EPG data sets. *Id.* at 8:39–54. For example, EPG data sources may be assigned different priorities, or the “last EPG data” may take precedence. *Id.* at 8:42–48.

C. Obviousness Rejection

During prosecution, the Examiner rejected claims 11 and 12 under 35 U.S.C. § 103(a) as obvious over Baker,

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Darbee, and Pietraszak. J.A. 1641. In its appeal brief to the Board, UEI argued that the references do not disclose the “determining” and “in response to determining” limitations. J.A. 1663–64. UEI also stated that “nothing with Pietraszak” suggests that Baker and Darbee can be modified to “arrive at the exact invention claimed.” J.A. 1665.

The Examiner’s answer to UEI’s appeal brief clarified the basis for the rejection. *See* J.A. 1706–14. For the “determining” limitation, the Examiner explained that Pietraszak “teaches local and source EPG data can vary and differ,” and it discloses determining and resolving conflict in the EPG data from different sources. J.A. 1711. The Examiner explained that these teachings of determining and resolving conflicts are “equivalent to” the “determining” limitation. *Id.* For the “in response to determining” limitation, the Examiner cited Darbee’s teachings of “periodically receiving EPG” updates and that the EPG data includes channel numbers mapped to channels. J.A. 1707. Addressing UEI’s argument that Darbee “simply overwrites old data with new data,” the Examiner reasoned that Darbee also teaches “selective updating of program guide channel data, not completely overwriting it.” J.A. 1708.

The Board ultimately affirmed the Examiner’s rejection, adopted the Examiner’s findings, and added brief discussion “primarily for emphasis.” J.A. 2, 5. The Board agreed with the Examiner that Pietraszak and Darbee disclose the two disputed limitations. J.A. 5–7. The Board also noted that UEI belatedly raised in its reply brief a motivation-to-combine argument as to Baker and Darbee.

J.A. 7–8. The Board found such argument untimely and forfeited.¹ *Id.*

UEI appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

STANDARDS OF REVIEW

We review the Board’s legal conclusions de novo, and its fact findings for substantial evidence. *In re Baxter Int’l, Inc.*, 678 F.3d 1357, 1361 (Fed. Cir. 2012). Obviousness is a question of law based on underlying findings of fact. *Id.* The scope and content of the prior art and whether a person of ordinary skill in the art would have been motivated to combine teachings in the prior art are questions of fact. *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1378 (Fed. Cir. 2023). Substantial evidence means “such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Id.* (citation omitted).

DISCUSSION

On appeal, UEI contends that the cited references do not disclose the “determining” and “in response to determining” limitations. Appellant Br. 17. UEI further argues that “the Board and the Examiner” failed to articulate sufficient reasoning for a motivation to combine the references. *Id.* We address each issue in turn.

A. “Determining”

UEI argues that Pietraszak does not disclose the “determining” limitation. *Id.* at 23. As discussed below, substantial evidence supports the Board’s determination that Pietraszak discloses this limitation.

¹ The Board nevertheless considered UEI’s argument and found it unpersuasive because the Examiner provided a rational reasoning to combine Baker and Darbee and UEI failed to address it. J.A. 8.

The Board relied on Pietraszak's disclosures of resolving conflicts between EPG data from various sources to teach this limitation. J.A. 5. On appeal, UEI repeats its argument that Pietraszak replaces EPG data blocks "based on priority," without determining "at the channel number level" whether channel number assignment has changed. Appellant Br. 23–24. As the Board explained, UEI reads Pietraszak's disclosure too narrowly. *See* J.A. 5–6.

Pietraszak discloses that EPG data includes "channel number" information and that conflicts may arise between locally stored and newly received EPG data. *See* J.A. 5–6; *see also* Pietraszak at 8:66–67, 6:12–18, 15:1–4. The cited disclosures describe resolving conflicts "upon *determining*" a conflict exists between EPG data sources. Pietraszak at 15:1–4 (emphasis added). And in addition to resolving conflicts based on assigned priorities, Pietraszak describes giving precedence "to EPG data that is received most recently," namely, the new or updated EPG data. J.A. 6.

In view of these disclosures, one skilled in the art would have read Pietraszak to teach determining if local EPG data, such as a channel number, is conflicted with newly received source EPG data. *See id.* We agree with the Board that this teaching sufficiently discloses determining whether a new channel number is assigned to a source of programming. *See* J.A. 5–6. We conclude that the Board's finding that Pietraszak teaches the "determining" limitation is supported by substantial evidence.

B. "In Response to Determining"

UEI argues that Darbee does not disclose the "in response to determining" limitation. UEI does not appear to dispute that Darbee teaches updating EPG data, which includes updating channel numbers. *See* Oral Arg. 7:54–8:17, 11:23–42. Rather, the thrust of UEI's argument is that Darbee cannot teach the claimed "in response to determining" requirement because it does not teach the

“determining” limitation.² Appellant Br. 26. We disagree with UEI’s contention.

The Board’s finding that Darbee discloses the “in response to determining” limitation is supported by substantial evidence. This limitation requires “automatically chang[ing] the mapping between the channel numbers and the plurality of iconic representations.” J.A. 24. As the Board explained, Darbee discloses periodically receiving new EPG data, which includes new channel number assignments. J.A. 6–7 (citing Darbee 9:14–16, 17:3–12, 18:51–53, and Fig. 12). The cited Darbee disclosures also describe that new EPG data can be transmitted to the remote control “one time-slot at a time,” and in that manner, “[o]nly the time-slot just received” is updated. Darbee at 17:3–12. The Board found that, based on these teachings, one skilled in the art would have understood Darbee to disclose “overwriting channel data in response to determining whether the channel data has changed.” J.A. 7. To the Board, this disclosure of “selective updating of program guide channel data” in response to determining channel data updates “teaches or at least suggests” the “in response to determining” limitation. *Id.* We agree and conclude that the Board’s finding is supported by substantial evidence.

C. Motivation to Combine

UEI asserts that the Board erred in (1) adopting the Examiner’s reasoning for a motivation to combine Baker and Darbee, which UEI contends was insufficient; and (2)

² To the extent UEI argues the Board must base its obviousness rejection on a *single* reference disclosing *both* disputed limitations, we reject such a proposition. Unlike anticipation, for obviousness, limitations of a disputed claim can be “found in a number of prior art references.” *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006).

failing to “make any findings” regarding the Examiner’s motivation-to-combine analysis for all three references. Appellant Br. 29–30. We hold that UEI forfeited its motivation-to-combine argument as to any of the three references before the Board.

In the Final Office Action, the Examiner reasoned that one skilled in the art would have been motivated to combine Baker with Darbee “so that users can navigate to the program channel they want to see” by “selecting a corresponding channel logo.” J.A. 1645. The Examiner further explained that one skilled in the art would also have been motivated to combine Baker and Darbee with Pietraszak so that “the user is presented with the mostly likely accurate [EPG] data.” J.A. 1646.

UEI’s appeal brief to the Board did not challenge the Examiner’s motivation-to-combine analysis or explain how UEI believed it to be insufficient.³ Nor did UEI do so in its reply brief. The first time UEI addressed the Examiner’s reasoning was in its briefing on appeal to this court. *See* Appellant Br. 28–30; J.A. 8. Under these circumstances, we hold that UEI failed to properly raise, and thus forfeited, its motivation-to-combine argument before the

³ In its appeal brief to the Board, UEI generally stated that Pietraszak would not lead one to modify Baker and Darbee to arrive at the claimed invention or the “determining” limitation. *See* J.A. 1665–66. These statements are premised on UEI’s contention as to what the prior art references (alone or modified) teach. They do not raise with sufficient specificity, or preserve, an argument against finding a motivation to combine the references. *See* 37 C.F.R. § 41.37(c)(iv). As a result, the Examiner was deprived of reasonable notice and an opportunity to respond. The Board, in turn, was deprived of a fulsome record necessary to make an informed judgment. *See In re Watts*, 354 F.3d 1362, 1368 (Fed. Cir. 2004).

Board. *See In re Google Tech. Holdings LLC*, 980 F.3d 858, 862–63 (Fed. Cir. 2020). Absent exceptional circumstances, an argument not properly raised before the Board will not be considered on appeal. *See id.*; *In re Couvaras*, 70 F.4th 1374, 1379 (Fed. Cir. 2023). No exceptional circumstance exists here to justify a departure from this principle, and we therefore decline to entertain UEI’s motivation-to-combine argument.

CONCLUSION

We have considered UEI’s remaining arguments and find them unpersuasive. Accordingly, the decision of the Board is affirmed.

AFFIRMED

COSTS

No costs.