NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: UNIVERSAL ELECTRONICS, INC.,
Appellant

2022-1230

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 15/962,451.

Decided: May 10, 2023

JAMES J. LUKAS, JR., Greenberg Traurig, LLP, Chicago, IL, argued for appellant Universal Electronics, Inc. Also represented by BENJAMIN GILFORD, GARY R. JAROSIK.

MICHAEL S. FORMAN, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Katherine K. Vidal. Also represented by THOMAS W. KRAUSE, MONICA BARNES LATEEF, AMY J. NELSON, FARHEENA YASMEEN RASHEED.

Before CHEN, MAYER, and HUGHES, *Circuit Judges*.

CHEN, *Circuit Judge*.

Universal Electronics Inc. (UEI) appeals a decision by the Patent Trial and Appeal Board (Board) that affirmed

an Examiner's rejection of claims 1–12 of U.S. Patent Application No. 15/962,451 ('451 application) as unpatentable under 35 U.S.C. § 103. *Ex Parte Pouw*, No. 2020-004505, 2021 WL 4745439, at *9 (P.T.A.B. Oct. 8, 2021) (*Decision*). Because the Board failed to address UEI's arguments identifying a hole in the rejection, we *vacate* and *remand*.

BACKGROUND

I

The '451 application is directed to a "switching device," like the audio/video (AV) receiver 902 shown below, that "is connected to and capable of switching" connections between multiple "source devices," like DVD player 904 and cable set top box 104, and "sink devices," like TV set 106. J.A. 48, 51. Each source and sink device has its own dedicated remote controller, 906, 907, and 908. J.A. 48.

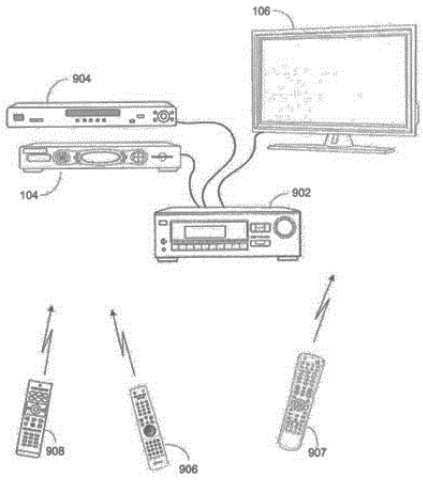

Figure 9

J.A. 63. In the present invention, when "one of several [remote] controlling devices 906 through 908, each corresponding to one of devices 104, 106 or 904, is currently in use," the remote controller's transmitted signal is detected

and read not only by the corresponding source or sink device, but also by the switching device, which may include a universal infrared (IR) receiver capable of identifying and decoding the command transmission formats of multiple manufacturers. J.A. 48. Upon determining that the IR signal is intended for a specific source or sink device, the switching device establishes the appropriate connection between the source device and the sink device. J.A. 48, 51.

The '451 application includes independent claims 1, 5, and 9. J.A. 23–26. The Board determined that claims 1 and 5 are exemplary, affirmed the Examiner's rejection of claim 5, and sustained the rejection of claims 1 and 9 for the same reasons as claim 5. *Decision*, 2021 WL 4745439, at *1, *3–9. Thus, we also focus on claim 5. It recites:

> A switching device, comprising:
>
> a plurality of audio/video (AV) ports;
>
> a receiver; and
>
> control logic that is operable to selectively connect at least one of a plurality of source devices to a sink device each of which is connected to a corresponding one of the plurality of AV ports, the control logic being configured to:
>
> determine that the receiver has received an infrared (IR) signal transmitted by a remote control device, *wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by* a first device among the plurality of source devices and the sink device;

> in response to determining that the receiver has received the IR signal, determine that the remote control device is in use; and
>
> in response to at least determining that the remote control device is in use, controlling a connection between the at least one of the plurality of source devices and the sink devices as a function of the detected IR signal.

Id. at *1–2 (emphasis added). Thus, the invention claimed is a switching device that detects an IR signal sent directly to a source or sink device, like a DVD player or TV, that the switching device responds to by controlling a connection between the source and sink devices. For example, if a user turns on the DVD player using the remote control for the DVD player, the switching device also detects the IR signal from the remote control to the DVD player and responds by connecting the DVD player to the TV.

II

During prosecution, the Examiner rejected the original claims of the '451 application as unpatentable under 35 U.S.C. § 102 over U.S. Patent Pub. No. 2007/0220150 (Garg). J.A. 146–61. Garg discloses a "hub" that connects "a plurality of source devices . . . to one or more sink devices," where the user selects a source or sink device through (1) "manual selection means" like "switches, buttons or keys" on the front panel of the hub, or (2) "remote selection means" like an IR remote controller. Garg ¶¶ 60, 64–66. Although UEI argued that Garg's hub (i.e., the switching device) only responds to an IR signal intended for the hub rather than a signal intended for a source device, J.A. 136–38, the Examiner found the claims anticipated because the outcome of Garg's IR signals was the same—i.e.,

connection of a source and sink device, J.A. 148–49. *See also* J.A. 180–83; J.A. 186; J.A. 191–92.

UEI responded to this rejection by amending the claims to add the limitation emphasized in claim 5 above, thus requiring the switching device to receive and respond to an IR signal directed to a source or sink device. J.A. 209–18. The Examiner conceded that Garg did not anticipate the claims as amended but rejected the claims as unpatentable under 35 U.S.C. § 103 over Garg in view of U.S. Patent Pub. No. 2013/0187767 (Igoe). J.A. 225–41. Igoe teaches a wireless home entertainment hub that "facilitates the transfer of data between the source and sink devices," where the user activates or changes source devices (1) through a universal remote controller or (2) by interacting directly with the source device, like inserting a DVD into a DVD player. Igoe ¶¶ 23–24, 27, 42, 47. When a given source device is active, the hub sends a signal to the universal remote controller to display actuators (e.g., buttons) that correspond to the active source, and when a user presses one of those buttons, an IR signal is sent from the remote controller to the active source device. J.A. 232; *see also* J.A. 229, 235. According to the Examiner, a skilled artisan would have found it obvious to modify Garg's remote controller to send a signal directly to a source device, as taught by Igoe, rather than sending a signal to the hub, as taught by Garg. J.A. 232; *see also* J.A. 229, 235. The Examiner, however, did not suggest any corresponding changes to Garg's hub in view of Igoe or explain how Garg's hub would respond, if at all, to an IR signal sent directly to a sink or source device.

III

UEI appealed to the Board, disputing the Examiner's rejection because (1) the rejection only contemplated modifying Garg's remote controller, not Garg's hub; (2) Garg's hub, even if modified by Igoe, is not the claimed switching device because Igoe does not teach a switching device that

detects and responds to a protocol and a command value that is directly recognizable by a source or sink device; and (3) the Examiner did not articulate a motivation to combine Garg and Igoe. J.A. 285–88.

The Examiner's Answer responded to UEI's arguments by adjusting the proposed combination to modify Garg's hub according to Igoe, explaining that Igoe teaches a hub that "is operable to switch between sources and sink devices" and thus "it would have been obvious, based on the teachings of Igoe, *to modify the switching device* (Hub)/method of Garg [] in order to transmit the IR command from the remote controller directly to any sinks and/or source devices connected to the Hub[]." J.A. 315 (emphasis added). The Examiner did not explain, however, how Garg's now modified hub would respond to IR signals sent directly to a sink or source device. Regarding motivation to combine, the Examiner stated, without further explanation, that "obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art." J.A. 316 (citations omitted).

IV

The Board affirmed the Examiner's rejection. *Decision*, 2021 WL 4745439, at *1, *9. After dismissing UEI's argument as "not directed to the Examiner's specific findings," the Board explained that the Examiner found, and UEI did not persuasively dispute, that Garg teaches certain limitations of claim 5, and thus "Igoe does not need to teach those limitations again." *Id.* at *4. The Board then recited the limitations of claim 5, but without explanation, omitted the limitation that UEI added by amendment. *Id.*

The Board also determined that UEI's motivation to combine argument "is moot in light of the Examiner's

refined rationale" in the Answer. *Id.* at *6. The Board explained that the Examiner "provided articulated reasoning with a rational underpinning," including that a skilled artisan would have combined Garg and Igoe "to facilitate communications with the remote controller" and that the combination "would have predictably used prior art elements according to their established functions—an obvious improvement." *Id.* (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007)).

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

DISCUSSION

The Board's decision here is inadequate. To start, the Board never addressed UEI's argument that neither Garg nor Igoe, alone or in combination, teaches a switching device that detects and responds to an IR signal directed to a device *other* than the switching device. The Board dodged this argument by stating what was uncontested—i.e., that Garg teaches, and thus Igoe does not need to teach, the undisputed limitations of claim 5. *Decision*, 2021 WL 4745439, at *4. In doing so, the Board omitted from its recitation of claim 5 the limitation that was added in response to the Examiner's rejection over Garg—i.e., "wherein the IR signal transmitted by the remote control device comprises a protocol and a command value that is directly recognizable by" a first device. *Compare id.*, *with* J.A. 214. Although "we will uphold a decision of less than ideal clarity if the agency's path may reasonably be discerned," the Board's "explanation must suffice for us to see that the agency has done its job and must be capable of being reasonably discerned." *In re NuVasive*, 842 F.3d 1376, 1383 (Fed. Cir. 2016) (cleaned up) (citations omitted). We cannot conclude that the Board has "done its job" when it avoids an applicant's primary argument by omitting the disputed limitation from its obviousness analysis. *See Gechter v. Davidson*, 116 F.3d 1454, 1459–60 (Fed. Cir. 1997) (holding

that "the Board's opinion lacks the level of specificity necessary for [] review" because the Board's decision addressed only one of several limitations in the claim).

The Board's failure is particularly problematic because it is unclear if the Examiner's rejection relies on modifying Garg's remote controller, Garg's hub, or both. *See Decision*, 2021 WL 4745439, at *3 (adopting Examiner's findings and conclusions). Even assuming the Examiner meant both, the Examiner's rejection does not fully address the limitation at issue. The Examiner's rejection only explained that Igoe's hub sends a signal to the remote controller, and the remote controller sends a signal to the source device. Igoe does not teach that the hub responds to the IR signal sent to the source device by changing a connection between a source and sink device. Thus, even if Garg's hub was modified according to Igoe to transmit a signal from the remote controller to a source or sink device, the rejection still fails to teach the limitation at issue—i.e., that an IR signal configured to be read by a specific source or sink device *is also detected by the switching device*, which then automatically takes action to control the connections between the source and sink devices, as a function of that detected signal.

The Board's motivation to combine analysis also is conclusory and insufficient. *See NuVasive*, 842 F.3d at 1382 ("Although identifying a motivation to combine need not become a rigid and mandatory formula, *KSR*, 550 U.S. at 419, 127 S.Ct. 1727, the PTAB must articulate a *reason why* a [skilled artisan] would combine the prior art references."). The Board relied on the Examiner's Answer, but the Answer merely parroted case law without any attempt to apply that case law to the proposed combination in a manner that matched all the claim limitations. J.A. 315–16; *Decision*, 2021 WL 4745439, at *6. These conclusory statements unsupported by a reasoned explanation are insufficient. *See NuVasive*, 842 F.3d at 1383.

The Board also mechanically recited that a skilled artisan would "be able to fit the teachings of multiple patents together like pieces of a puzzle" and that the proposed combination "would have predictably used prior art elements according to their established functions." *Decision*, 2021 WL 4745439, at *6 (quoting *KSR*, 550 U.S. at 420–21). But the Board failed to cite any part of the record or the prior art to explain how or why those statements apply here.

Finally, the Board asserted that a skilled artisan "would have modified Garg's system to incorporate Igoe's feature in order to facilitate communications with the remote controller." *Id.* Setting aside the fact that Garg alone teaches that its hub communicates with its remote controller, this fails to explain why a skilled artisan would modify Garg such that Garg's hub detects and responds to an IR signal directed to another device.

The Director's brief acknowledges that the rejection may not constitute "a model of clarity" but argues that the rejection "was more than sufficient" because the "claimed invention is straightforward" and the "prior art references are easily understandable." Appellee's Br. 20–21. Although a "brief explanation may do all that is needed if, for example, the technology is simple and familiar and the prior art is clear in its language and easily understood," *Personal Web Technologies, LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017), neither the Board nor the Examiner provided even a brief explanation as to how Garg would be modified by Igoe to render obvious the '451 application's claims.

The Director also advances multiple arguments on appeal based on theories that were not made by the Examiner or the Board. The Director, for example, argues that the '451 application's specification admits that universal IR receivers were known in the art, that it would have been "well within the capabilities of a skilled artisan" to modify Garg's switching device IR circuitry to add a universal IR receiver

that responds to IR signals sent directly to a source device, and that a skilled artisan would be motivated to combine Garg and Igoe such that the switching device automatically responds to an IR signal sent to another device to "simplify[] the process of changing sources." Appellee's Br. 15–17, 19. Even if we found these arguments persuasive, we "have no warrant to accept appellate counsel's *post hoc* rationalizations for agency action"; "our review of a patentability determination is confined to the grounds on which the Board actually relied." *Power Integrations, Inc. v. Lee*, 797 F.3d 1318, 1326 (Fed. Cir. 2015) (internal quotation marks and citations omitted). Instead, the required course is for the agency in the first instance to consider these possible bases for rejecting the claim.

CONCLUSION

The Board's reasoning does not meet the requirements for a sustainable obviousness rejection, and we vacate the Board's determination that claims 1–12 of the '451 application are unpatentable under 35 U.S.C. § 103. We remand for the agency to reconsider the merits of the claims in view of the Director's new arguments.

VACATED AND REMANDED

COSTS

No costs.