NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

IN RE: UNIVERSAL ELECTRONICS, INC.,
Appellant

2022-1758

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 15/711,381.

Decided: August 24, 2023

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

ROBERT MCBRIDE, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Katherine K. Vidal. Also represented by OMAR FAROOQ AMIN, MARY L. KELLY, THOMAS W. KRAUSE, AMY J. NELSON, FARHEENA YASMEEN RASHEED.

Before REYNA, TARANTO, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

Universal Electronics, Inc. appeals from the final decision of the Patent Trial and Appeal Board affirming the rejection of certain claims in U.S. Patent Application No. 15/711,381 ('381 application) as obvious under 35 U.S.C. § 103. The rejected claims recite methods for using a universal remote control in conjunction with a relay device to control various appliances. Because substantial evidence supports the Board's findings, we affirm.

BACKGROUND

The '381 application, titled "System and Method for Ubiquitous Appliance Control," discloses a system in which a universal remote controls various appliances through a slave relay device. The universal remote has a graphical user interface (GUI) page that may display a "series of icons representative of appliance control actions." J.A. 50. The specification discloses that when an icon, or HTML tag, is selected, a "message [may be] transmitted back to the . . . slave relay device, receipt of which causes the desired command(s) to be issued to an appliance." *Id.* The slave relay device stores tag files which "specify the actions to be performed by a slave relay device when an HTML tag is activated" on the universal remote control. *Id.* at 58. These tag files may be a "series of XML statements to be executed by the . . . slave relay device" that include "a definition . . . of the appliance to which commands are to be directed" and "a list . . . of the functions to be transmitted." *Id.* at 58–59. As an exemplary embodiment, the specification discloses that the universal remote control may be a mobile phone which displays icons such as various TV channels. When an icon is selected by a user, the phone sends a message to a slave relay device, which would then send commands specified in its tag files to perform the desired function, such as setting the TV to the desired channel.

The Examiner rejected claims 2–3, 5–9, 12, 17, and 20–21 of the '381 application, with claims 2–3, 6–8, 12, 17, and

20–21 rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,631,197 (Niwamoto) in view of U.S. Patent Application Publication No. 2005/0097618 (Arling) and U.S. Patent No. 7,589,642 (Mui). The claim limitations in dispute on appeal are in claims 2 and 3.

Claim 2 recites:

> 2. A method for using a relay device having a memory in which is stored *a tag file* comprising both first data indicative of a brand and type of a device that is to commanded in response to an activation of an activatable link that is associated with the tag file and second data indicative of one or more commands to be transmitted to the device in response to the activation of the activatable link, the method comprising:
>
> receiving by the relay device from an input device via a first wireless communications link a communication containing data that functions to indicate that the activatable link was activated;
>
> using by the relay device the first data as stored in the tag file to select a code data having commands for use in commanding functional operations of the device; and
>
> transmitting a command communication from the relay device to the device via a second communications link, where the command communication comprises one or more commands selected from the selected code data, wherein the command communication uses a protocol defined within the selected code data, and wherein the one or more commands are selected from the selected code data via use of the second data as stored in the tag file.

J.A. 710 (emphasis added to highlight disputed limitation).

Claim 3 recites:

> 3. The method as recited in claim 2, wherein the data that functions to indicate that the activatable link was activated comprises a *file name* of the tag file.

Id. (emphasis added to highlight disputed limitation).

The Board affirmed the examiner's rejection of 2–3, 5–9, 12, 17, and 20–21, and Universal appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

We review the Board's legal determinations de novo, *In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), and its fact findings for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). 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. *In re Mouttet*, 686 F.3d 1322, 1330 (Fed. Cir. 2012); *In re Kahn*, 441 F.3d 977, 985 (Fed. Cir. 2006). Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Mouttet*, 686 F.3d at 1331.

Universal challenges the Board's findings that Arling discloses the "tag file" limitation of claim 2 and that Niwamoto teaches the "file name" limitation of claim 3. Universal also argues that the Board failed to properly articulate why a person of ordinary skill would have combined Niwamoto, Arling, and Mui. We address each issue in turn.

Substantial evidence supports the Board's finding that Arling teaches a "tag file comprising both first data indicative of a brand and type of a device that is to commanded in response to an activation of an activatable link that is associated with the tag file and second data indicative of one or more commands to be transmitted to the device in response to the activation of the activatable link" as

required by claim 2.[1] Arling discloses that its system may be used to control a "home entertainment center having a set of home appliances of different brand, model, or type" and that "[t]o identify [these] home appliances by type and make (and sometimes model) . . . data may be entered into the universal remote control device." Arling [0018], [0026]. Arling also states that its system contains "general device conversion definitions includ[ing] device selection/state data . . . [and] device definitions . . . (which may comprise available device command and function abilities for individual appliances)." *Id.* [0031]. Arling further discloses that "corresponding data elements for source appliances . . . may be saved for subsequent command generation" and "may be saved in any known format, for example as an XML file." *Id.* [0030]. These disclosures support the Board's finding that Arling discloses the "tag file" limitation of claim 2.

We are also not persuaded by Universal's argument that Niwamoto fails to teach "the data that functions to indicate that the activatable link was activated comprises a file name" as required by claim 3. Niwamoto discloses that a user's selection of a button on its remote-control device will "transmit[] the instruction information to [a] gateway device" and that this instruction information, which "always includes a . . . control apparatus ID," is used to "generate[] control information directed to controlling [an appliance] based on the operation information included in the instruction information." Niwamoto col. 23 l. 42–

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[1] The government asserts that Universal is collaterally estopped from arguing that Arling does not teach this "tag file" limitation of claim 2. Universal responds that the government waived this argument by not raising it below. We need not address this issue because we find that substantial evidence supports the Board's finding that Arling discloses a "tag file."

col. 24 l. 60. Based on this disclosure, the Board adopted the Examiner's finding that "Niwamoto points to links which are selected and provide instruction information (file) including control apparatus ID" that correlates to the file name. J.A. 793. We hold that substantial evidence supports the Board's finding that Niwamoto teaches a file name because Niwamoto's disclosure of its links—like the file name—identifies both the intended device and the desired function.

Finally, Universal contends that the Board failed to properly articulate why a person of ordinary skill would have combined Niwamoto, Arling, and Mui. We disagree. Though the Board's discussion is short, the Board articulated a motivation to combine these references. The Board's discussion must be read in light of the examiner's explanation that one skilled in the art would have been motivated to combine the art because the combination "provides an established system with one to one mapping for accessing information thereby improving overall operability," which the Board adopted. J.A. 5. Further, as the Board noted, Universal's argument that there would have been no motivation to combine the prior art references rested on its assertion that Arling does not disclose a tag file. Having found that Arling teaches a tag file (a finding that we affirm on appeal), the Board explained that Universal's argument is moot. For these reasons, the Board sufficiently articulated a motivation to combine Niwamoto, Arling, and Mui.

CONCLUSION

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

AFFIRMED