

United States Court of Appeals  
for the Federal Circuit

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SKKY, INC.,  
*Appellant*

v.

MINDGEEK, S.A.R.L., MINDGEEK USA, INC.,  
PLAYBOY ENTERPRISES, INC.,  
*Appellees*

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2016-2018

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. IPR2014-  
01236.

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Decided: June 7, 2017

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apolis, MN, argued for appellant. Also represented by  
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Before LOURIE, REYNA, and WALLACH, *Circuit Judges*.

LOURIE, *Circuit Judge*.

Skky, Inc. (“Skky”) appeals from the final written decision of the United States Patent and Trademark Office Patent Trial and Appeal Board (“the Board”) in an *inter partes* review (“IPR”) proceeding concluding that claims 1–3, 5, and 15–23 (“the challenged claims”) of U.S. Patent 7,548,875 (“the ’875 patent”) are unpatentable as obvious. *MindGeek, s.a.r.l. v. Skky Inc.*, IPR 2014-01236, 2016 WL 763036, at \*1 (P.T.A.B. Jan. 29, 2016) (“*Final Decision*”). Because the Board did not err in its claim construction or in concluding that the challenged claims are unpatentable, we *affirm*.

## BACKGROUND

### I. The Patented Technology

Skky owns the ’875 patent, which describes a method for delivering audio and/or visual files to a wireless device. *See* ’875 patent, col. 1 l. 61–col. 2 l. 48. According to the patent, existing devices required music or video clips to be either factory-installed, or downloaded through a direct interface with the Internet. *Id.* col. 1 ll. 39–42. The patent purports to address this issue by allowing users to “browse, download, and listen to or watch sound or image files without the need for hand wired plug-in devices or a computer connection to the Internet.” *Id.* col. 3 ll. 56–59.

The ’875 patent discloses a number of embodiments to achieve this result. One embodiment is purely software (“the software embodiment”); for example, the patent indicates that a cellular phone or other device “may be integrated with software at the time of manufacturing for implementing the system of the present invention.” *Id.* col. 5 l. 67–col. 6 l. 2. The patent makes clear that “a software system may be integrated with the existing hardware chip of a conventional cellular phone without the need for additional hardware.” *Id.* col. 14 ll. 22–25.

In other embodiments, a separate accessory unit attached to the wireless device provides this functionality. *See, e.g., id.* col. 14 ll. 16–19.

Prosecution leading to the '875 patent lasted almost seven years, and involved myriad rejections over the prior art. In particular, the Examiner relied upon U.S. Patent 7,065,342 (“Rolf”), which describes a system and method for wirelessly transmitting music over a network to a cellular phone. *See Rolf*, col. 1 ll. 25–38. The Examiner only allowed the claims over Rolf after they were amended to recite a “wireless device means,” which the Examiner believed to be a means-plus-function term invoking 35 U.S.C. § 112 ¶ 6.<sup>1</sup> *See Joint Appendix (“J.A.”)* 165, 169, 174–75, 202–03. As allowed, claim 1 recites:

1. A method of wirelessly delivering over the air one or more digital audio and/or visual files from one or more servers to one or more *wireless device means* comprising:

compressing said one or more digital audio and/or visual files, wherein said audio and/or visual files comprise one or more full or partial master recordings of songs, musical scores or musical compositions, videos or video segments, movies or movie segments, film or [film] segments, one or more image clips, television shows, human voice, personal recordings, cartoons, film animation, audio and/or visual advertising content and combinations thereof, and

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<sup>1</sup> Because the '875 patent was filed before the adoption of the Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3, 125 Stat. 284, 285–93 (2011), the prior version of § 112 governs, *see Fleming v. Escort, Inc.*, 774 F.3d 1371, 1374 n.1 (Fed. Cir. 2014).

wherein said compressing comprises normalizing, sampling and compressing said digital audio and/or visual files;

storing compressed audio and/or visual files in one or more storage mediums; and

transmitting to said *wireless device means* said compressed audio and/or visual files wirelessly over the air, with or without an Internet network.

'875 patent, col. 33 ll. 14–32 (emphases added). Claim 21 adds that the “compressed digital and/or visual file is a segment of a full song, musical composition, or other audio recording or visual recordings.” *Id.* col. 34 ll. 51–53. Claim 22 adds that the method “compris[es] the use of OFDM,” *id.* col. 34 l. 54; *i.e.*, an orthogonal frequency-division multiplex (“OFDM”) modulation scheme for data transmission, *id.* col. 16 ll. 60–61.

## II. Proceedings Below

MindGeek, s.a.r.l., MindGeek USA, Inc., and Playboy Enterprises, Inc. (together, “MindGeek”) filed a petition for IPR of the '875 patent, alleging that, *inter alia*, (1) claims 1–3, 5, 15–21, and 23 would have been obvious at the time of the invention over Rolf in view of a publication entitled “MP3: The Definitive Guide” (“MP3 Guide”), which describes attributes of the mp3 audio file format, *see* J.A. 397, 404, 515, 623, 625, 636; and (2) claim 22 would have been obvious over Rolf, MP3 Guide, and a publication entitled “OFDM/FM Frame Synchronization for Mobile Radio Data Communication” (“OFDM/FM”), describing a particular OFDM format, *see* J.A. 958, 960. In the petition, MindGeek also contended that “[t]he term ‘wireless device means’ is clearly a means-plus-function limitation” invoking § 112 ¶ 6. J.A. 72.

The Board instituted review. *See* J.A. 4642. In the institution decision, the Board determined that “wireless

device means” does not invoke § 112 ¶ 6 because “‘wireless device’ is not purely functional language, but rather language that denotes structure.” J.A. 4638–39. The Board determined that no further construction was required at that time. J.A. 4639.

Briefing after institution addressed the Board’s decision that “wireless device means” is not a means-plus-function term. Skky recognized that the Board made that determination, but relied on the written description and prosecution history to argue that the term properly invokes § 112 ¶ 6 and has a function “[t]o request, wirelessly receive, and process a compressed audio and/or visual file,” J.A. 4658, and structure that requires, *inter alia*, multiple processors, wherein one or more processors is a specialized processor primarily dedicated to processing compressed multimedia data. J.A. 4657–66. Even if “wireless device means” is not a means-plus-function term, Skky argued that it should still be construed to require, *inter alia*, multiple processors, one of which must be a specialized processor. J.A. 4667, 4669–75. In reply, MindGeek accepted that “wireless device means” does not invoke § 112 ¶ 6, and contended that, in either case, the term does not require multiple processors or a specialized processor. *See* J.A. 4979–84. Skky continued to argue that (1) Rolf only discloses downloading a full song, not a segment of a song, so claim 21 would not have been obvious; and (2) a skilled artisan would not have been motivated to combine OFDM/FM’s teachings relating to OFDM with Rolf’s system, and therefore claim 22 would not have been obvious.

Skky then moved for permission to file a surreply addressing MindGeek’s arguments that “wireless device means” does not invoke § 112 ¶ 6, which the Board granted. J.A. 5639–40. Skky also moved to strike MindGeek’s reply as presenting various new arguments, J.A. 5562–63, and the PTAB preserved the issue for consideration in the final written decision, J.A. 5640.

In its final written decision, the Board again determined that “wireless device means” does not invoke § 112 ¶ 6 because the term is not “associated with or defined by a function.” *Final Decision*, 2016 WL 763036, at \*3. Even assuming that the term was in means-plus-function format, however, the Board rejected Skky’s argument that the term requires multiple processors, wherein one is a specialized processor. *See id.* at \*4–5. The Board also rejected Skky’s alternative argument that the term requires multiple processors even if it does not invoke § 112 ¶ 6. *Id.* at \*5–6. In both cases, the Board reasoned that because the software embodiment only requires a single processor, the term “wireless device means” could not be construed to require additional processors. *Id.* The Board also construed “a segment of a full song, musical composition, or other audio recording or visual recordings,” appearing in claim 21, to mean a “playable portion of a song, musical composition, or other audio recording or visual recording.” *Id.* at \*6.

On the merits, the Board found that Rolf discloses, *inter alia*, a “wireless device means” through its disclosure of a cell phone, and “a segment of a full song, musical composition or other audio recording or visual recordings,” as required by claim 21, because Rolf discloses downloading of a song, which is a “playable portion” of a full album. *Id.* at \*8. The Board also rejected Skky’s argument that a skilled artisan would not have been motivated to combine Rolf and OFDM/FM, reasoning that OFDM/FM discloses that “it can be implemented simply and inexpensively by retrofitting existing FM communication systems.” *Id.* (quoting OFDM/FM). Based on those findings, the Board concluded that MindGeek had proven that the challenged claims are unpatentable as obvious. *Id.* at \*10. The Board did not strike any portion of MindGeek’s reply brief. *See id.*

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

## DISCUSSION

Skky challenges (1) the Board’s conclusion that “wireless device means” does not invoke § 112 ¶ 6 and does not require multiple processors; (2) various aspects of the merits of the obviousness determination; and (3) the Board’s decision not to strike MindGeek’s reply brief before the Board. We address each issue in turn.

## A. Claim Construction

“[W]e review the Board’s ultimate claim constructions de novo and its underlying factual determinations involving extrinsic evidence for substantial evidence.” *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015) (citing *Teva Pharm. USA Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841–42 (2015)). “The task of determining whether the relevant claim language contains a means-plus-function limitation is . . . a question of law that we review de novo.” *TriMed, Inc. v. Stryker Corp.*, 514 F.3d 1256, 1259 (Fed. Cir. 2008); *see also Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346 (Fed. Cir. 2015). In an IPR, claims are given their broadest reasonable interpretation. *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2142–46 (2016).

In determining whether a claim term invokes § 112 ¶ 6, “the essential inquiry is not merely the presence or absence of the word ‘means’ but whether the words of the claim are understood by persons of ordinary skill in the art to have a sufficiently definite meaning as the name for structure.” *Williamson*, 792 F.3d at 1348 (en banc in relevant part). To determine whether a claim recites sufficient structure, “it is sufficient if the claim term is used in common parlance or by persons of skill in the pertinent art to designate structure, even if the term covers a broad class of structures and even if the term identifies the structures by their function.” *TecSec, Inc. v. Int’l Bus. Machs. Corp.*, 731 F.3d 1336, 1347 (Fed. Cir. 2013) (internal quotation marks and citations omitted).

Skky argues that the presence of “means” in “wireless device means” creates the presumption that § 112 ¶ 6 has been invoked, and that the function of the “wireless device means” is “to request, wirelessly receive, and process a compressed audio and/or visual file.” Skky’s Br. 36–39. Skky contends that the Examiner’s specific indication that the term invokes § 112 ¶ 6, as well as MindGeek’s initial same understanding, counsels that result. Skky further argues that the written description supports its argument relating to the function corresponding to “wireless device means.”

MindGeek responds that “wireless device means” does not invoke § 112 ¶ 6 because the clause in which it appears describes no corresponding function, and instead denotes structure. MindGeek contends that functionality cannot be imported from the written description, and that the Board need not adopt the parties’ construction.

We agree with MindGeek that “wireless device means” does not invoke § 112 ¶ 6 because its clause recites sufficient structure. *See TriMed*, 514 F.3d at 1259. Although the term uses the word “means” and so triggers a presumption, the full term recites structure, not functionality; the claims do not recite a function or functions for the wireless device means to perform, and “wireless device” is “used in common parlance . . . to designate structure.” *TecSec*, 731 F.3d at 1347 (citation omitted). Skky’s arguments to the contrary are, in effect, an attempt to improperly import limitations from the written description into the claims. *See Williamson*, 792 F.3d at 1346.

The Examiner’s statements at the time of allowance and MindGeek’s initial agreement do not change that result. The Examiner did not explain why he believed “wireless device means” invoked § 112 ¶ 6, the functionality performed by the “wireless device means,” or how he believed the addition of that term overcame the prior art of record. *See J.A.* 169–70. In any event, we are not

bound by the Examiner's or the parties' understanding of the law or the claims. *See Microsoft*, 789 F.3d at 1297–98. Accordingly, we agree with MindGeek and the Board that “wireless device means” is not a means-plus-function term under § 112 ¶ 6.

Skky argues that even if “wireless device means” does not invoke § 112 ¶ 6, the term still should be construed to require multiple processors, wherein one is a specialized processor primarily dedicated to processing compressed multimedia data. Skky contends that the written description contains several embodiments requiring a cell phone, which includes a processor, attached to an accessory with its own processor, and that the software embodiment does not fall within the claim language. Skky argues that the prosecution history also supports this requirement, based on statements made during prosecution and because, as the claims were allowed over Rolf, they must cover something more than the wireless device with a single processor disclosed in Rolf.

MindGeek responds that Skky's proposed construction is not the broadest reasonable construction because the written description includes the software embodiment, which uses a single processor, and that Skky's proposed requirements import limitations into the claims from the written description and prosecution history. MindGeek further responds that the prosecution history actually supports the conclusion that the claims cover the software embodiment, as the Examiner cited the portion of the written description containing that embodiment in his notice of allowance.

We agree with MindGeek and the Board that the challenged claims do not require multiple processors. Although the written description contains embodiments where the wireless device contains multiple processors, *see, e.g.*, '875 patent, col. 6 ll. 2–8, it also includes the software embodiment, in which the wireless device con-

tains a single processor. For example, the written description states that “[a] cellular phone, or similar device (having *a* processor, RAM and flash elements) may be integrated with software at the time of manufacturing for implementing the system of the present invention.” *Id.* col. 5 l. 66–col. 6 l. 2 (emphasis added). The written description then “[a]lternatively” describes an embodiment that includes an accessory unit, *id.* col. 6. ll. 2–8, and specifies that “a software system may be integrated with the existing hardware chip of a conventional cellular phone without the need for additional hardware,” *id.* col. 14 ll. 22–25.

Similarly, the software embodiment is fatal to Skky’s argument that “wireless device means” requires a processor (or processors) primarily dedicated to processing the compressed media. The argument that the invention requires a “specialized processor,” Skky’s Br. 50, is refuted by the patent’s express disclosure that the invention may be practiced using “a *conventional* cellular phone *without the need for additional hardware*,” ’875 patent, col. 14 ll. 24–25 (emphasis added); *see id.* col. 2 ll. 44–48 (“The ability to provide this technology without the need for extra hardware is very significant, particularly to the cellular phone industry . . .”).

Accordingly, the Board did not err in concluding that “wireless device means” does not invoke § 112 ¶ 6, and did not err in concluding that the claimed device does not require multiple processors or a specialized processor.

## B. Obviousness

We review the Board’s factual determinations for substantial evidence and its legal determinations *de novo*. *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015). Obviousness is a question of law based on subsidiary findings of fact relating to “the scope and content of the prior art, differences between the prior art and the claims at issue, the level of ordinary skill in the

pertinent art, and any objective indicia of non-obviousness.” *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013) (citing *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) and *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966)). Whether there would have been a motivation to combine multiple references at the time of the invention is also a question of fact. *S. Ala. Med. Sci. Found. v. Gnosis S.P.A.*, 808 F.3d 823, 826 (Fed. Cir. 2015). Accordingly, we review these findings for substantial evidence. *Allied Erecting & Dismantling Co. v. Genesis Attachments, LLC*, 825 F.3d 1373, 1380 (Fed. Cir. 2016). A finding is supported by substantial evidence if a reasonable mind might accept the evidence as sufficient to support the finding. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938).

Skky first argues that the Board erred in its conclusion that the challenged claims are unpatentable as obvious because it considered no more than the references already considered by the Examiner. Skky also argues that the Board erred because Rolf does not disclose multiple processors or a specialized processor. MindGeek responds that the references disclose all required aspects of the claims under the correct constructions.

We agree with MindGeek that the Board did not err. As explained previously, the Board applied the correct claim constructions; accordingly, we are not convinced by Skky’s arguments based on its constructions. Moreover, Skky has not cited any authority for the proposition that once an examiner concludes that claims are patentable over a reference, that reference may no longer be considered further in determining a claim’s validity; indeed, the Supreme Court has characterized the “congressional objective” of the IPR process as “giving the Patent Office significant power to revisit and revise earlier patent grants.” *Cuozzo*, 136 S. Ct. at 2139–40. Accordingly, Skky’s general challenges to the Board’s obviousness analysis are not persuasive.

Skky next argues that the Board erred in concluding that claim 21 is unpatentable as obvious because Rolf only allows transmission of a full song, not a playable portion of a song as required by the claim. MindGeek responds that the Board properly determined that a song is a playable portion of a full album, and that the claim is not limited to transmitting a portion of a song.

We agree with MindGeek that Skky's argument relies on a less-than-complete reading of claim 21. In full, the claim is directed to the method of claim 1, wherein the file "is a segment of a full song, musical composition or *other audio recording or visual recordings*." '875 patent, col. 34 ll. 52–53 (emphasis added). Thus, the claim language is not limited to segments of full songs, but also reaches segments of other audio recordings and musical compositions. As the Board noted, a single full song is a segment of the album (musical composition or audio recording) on which it appears. *Final Decision*, 2016 WL 763036, at \*8.

Skky next argues that the Board's finding that a skilled artisan would have been motivated to combine Rolf, MP3 Guide, and OFDM/FM to arrive at the invention of claim 22 is not supported by substantial evidence because the combination would have produced an inoperable device. Specifically, Skky argues that Rolf and OFDM/FM disclose different protocols, and that the Board disregarded its evidence that a skilled artisan would not have expected success in combining them. Skky contends that the Board impermissibly shifted the burden to Skky to prove otherwise.

MindGeek responds that the Board's finding of a motivation to combine is supported by substantial evidence. MindGeek contends that OFDM/FM specifically notes that it could be retrofitted into existing systems, so combination would have been within the abilities of a skilled artisan.

We agree with MindGeek that the Board’s finding of a motivation to combine the three references is supported by substantial evidence. OFDM/FM specifically discloses, for example, that its protocol “is particularly attractive because it can be implemented simply and inexpensively by retrofitting existing FM communication systems.” J.A. 958. Moreover, the Board was not required to credit Skky’s expert evidence simply because Skky offered it. *See In re Ethicon, Inc.*, 844 F.3d 1344, 1352 (Fed. Cir. 2017) (concluding that the Board properly gave little weight to conclusory expert testimony of objective indicia); 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”). The Board reviewed the evidence presented by the parties, and chose not to credit Skky’s expert testimony. *See Final Decision*, 2016 WL 763036, at \*8–10. “We may not reweigh this evidence on appeal.” *In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1333 (Fed. Cir. 2016). Accordingly, we discern no reversible error in that choice.

### C. Motion to Strike

Finally, Skky argues that the Board abused its discretion by not striking MindGeek’s reply brief, which it contends contained new arguments. Specifically, Skky argues that MindGeek only introduced its argument that “wireless device means” does not invoke § 112 ¶ 6, as well as other substantive arguments, in reply.

MindGeek responds that Skky was given a full opportunity to respond to any new arguments, because Skky was permitted additional filings to address its contentions. MindGeek also contends that its reply simply responded to the Board and Skky’s positions.

We agree with MindGeek that the Board did not abuse its discretion. MindGeek’s reply responded to the positions laid out by Skky and the Board. The Board’s decision was “based on the same combinations of refer-

ences that were set forth in its institution decision[],” *Genzyme Therapeutic Prods. L.P. v. Biomarin Pharm. Inc.*, 825 F.3d 1360, 1366 (Fed. Cir. 2016), and Skky does not contend that, for example, it lacked notice and the ability to respond to any particular argument; indeed, Skky filed a surreply addressing the means-plus-function argument, J.A. 5639–40. Accordingly, we discern no error.

#### CONCLUSION

We have considered the remaining arguments, but find them unpersuasive. For the foregoing reasons, the decision of the Board is affirmed.

**AFFIRMED**