

United States Court of Appeals  
for the Federal Circuit

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CLASSCO, INC.,  
*Appellant*

v.

APPLE, INC.,  
*Appellee*

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2015-1853

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. 95/002,109.

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Decided: September 22, 2016

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DAVID M. QUINLAN, David M. Quinlan, P.C., Princeton, NJ, argued for appellant.

BRIAN ROBERT MATSUI, Morrison & Foerster LLP, Washington, DC, argued for appellee. Also represented by DAVID LEE FEHRMAN, MEHRAN ARJOMAND, Los Angeles, CA.

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Before TARANTO, BRYSON, and STOLL, *Circuit Judges*.  
STOLL, *Circuit Judge*.

ClassCo, Inc. appeals from a decision of the Patent Trial and Appeal Board in inter partes reexamination No. 95/002,109 of ClassCo's U.S. Patent No. 6,970,695. The Board affirmed an examiner's rejection of claims 2–5, 7, 9, 10, 14, 17, 18, 23, 26–30, and 34 as unpatentable under 35 U.S.C. § 103. We affirm.

## BACKGROUND

### I.

The U.S. Patent and Trademark Office issued the '695 patent on November 29, 2005. The patent discusses technology that identifies incoming telephone calls and alerts the called party to the caller's identity. The specification explains that telephone companies had made identifying incoming calls possible through a subscriber service known as Caller ID. It describes previous Caller ID systems that visually displayed a caller's name or number. The patent purportedly improves on these and other pre-existing systems by introducing a call-screening system that verbally announces a caller's identity before the call is connected.

In one embodiment, for example, the patented system works alongside a user's preexisting "Call Waiting" service. '695 patent col. 4 ll. 53–63. When a user is on the phone and another person calls, the system will play a tone and then verbally announce through the handset the caller's identity, or as the claims refer to it, "identity information." Because the system may be installed between the incoming telephone line and the user's telephone, the purported invention does not require a special telephone, auxiliary display terminal, or speaker to let users screen calls. Rather, it works with ordinary phones, an attribute the specification describes as "[o]ne of the most important features of the invention." '695 patent, Abstract.

## II.

In an inter partes reexamination of ClassCo's '695 patent, the Board affirmed the examiner's rejection of claims 2–5, 7, 9, 10, 14, 17, 18, 23, 26–30, and 34<sup>1</sup> as being obvious under 35 U.S.C. § 103(a). The Board affirmed the examiner's rejection of the claims as obvious over U.S. Patent No. 4,894,861 to Fujioka et al. in view of U.S. Patent No. 5,199,064 to Gulick et al.

ClassCo identified claim 2 as representative of all claims except claim 14, which it argued separately. Claims 2 and 14 depend from claim 1, and all three claims are reproduced below:

1. A caller announcement apparatus for a telephone system that provisions a telephone call between a caller telephone at a caller station and a called telephone at a called station, where the caller station is associated with an identity, where the telephone system provides signals to the called station that include caller identification signals representative of the identity associated with the caller station and voice signals representative of audio detected by an audio transducer of the caller telephone, and where the voice signals are processed by the called telephone to produce audio using an audio transducer at the called station, the caller announcement apparatus comprising:

a signal receiver at the called station operatively connected to the telephone system to receive signals therefrom, the

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<sup>1</sup> ClassCo canceled claims 1, 11–13, 15, 16, 19–22, 25, 31–33, 35, and 36 of the '695 patent in an earlier ex parte reexamination, No. 90/011,679.

signal receiver being operative to extract caller identification signals from the signals received from the telephone system and to provide caller identification data corresponding to the extracted caller identification signals;

a processing unit operatively connected to the signal receiver to receive caller identification data therefrom, the processing unit being operative to provide identity information associated with the caller identification data;

an audio announcing circuit operatively connected to the processing unit to receive identity information therefrom, *the audio announcing circuit being operative to use the identity information to produce audio using the audio transducer at the called station.*

2. The caller announcement apparatus of claim 1 wherein the processing unit *comprises memory storage for storing identity information associated with the caller identification data.*

14. The caller announcement apparatus of claim 1 wherein the *identity information* is associated with plural items of caller identification data.

'695 patent col. 9 ll. 9–42, col. 10 ll. 25–28 (emphases added).

The Board found that Fujioka disclosed all but one of the elements of claim 2, including announcing a caller's identity. The Board recognized that Fujioka did not, however, disclose using the same "audio transducer" (i.e., speaker) for announcing both a caller's identity and telephone voice signals, as claim 2 requires. J.A. 5–6. The Board looked to Gulick for that teaching. Gulick

generally discloses a hands-free telephone that integrates various phone features into a single device. '064 patent col. 1 ll. 5–7. The Board explained that “Gulick discloses a speaker that produces audio derived from tonal ringing call-alerting and also from caller voice signals.” J.A. 6 (internal quotation marks omitted). It found that, in light of Gulick, “one of ordinary skill in the art would have understood that a speaker in a telephone system may (and does) produce audio derived from multiple types of data in a telephone system, including tonal ringing call-alerting and caller voice signals.” J.A. 6 (internal quotation marks omitted). Accordingly, the Board held that the combination of Fujioka and Gulick rendered representative claim 2 and the claims that depend from it obvious. The Board explained that one of ordinary skill in the art would have been motivated to develop Fujioka’s single-speaker embodiment based on Gulick using one speaker to convey different data in a telephone system. J.A. 6.

The Board also held claim 14 obvious over Fujioka in view of Gulick. Claim 14 depends from claim 1 and further requires “the caller announcement apparatus of claim 1 wherein the identity information is associated with plural items of caller identification data.” '695 patent col. 10 ll. 25–27. The Board adopted the examiner’s construction of “identity information” as “something that identifies, such as a name that identifies a phone number as a particular person.” J.A. 1107; *see* J.A. 9 (agreeing with the examiner). The Board found that the combination of Fujioka and Gulick disclosed this element, as Fujioka stored identity information in the form of the calling party’s name. J.A. 9.

The Board also considered ClassCo’s evidence of objective indicia of nonobviousness, but concluded that the evidence merited no weight whatsoever in the obviousness inquiry. ClassCo had presented evidence of praise, long-felt need, and commercial success relating to its commercial products and licensing efforts. The Board found that

each piece of evidence had no nexus to the merits of the claimed invention. J.A. 9–15. The Board explained that no nexus existed because much of the evidence related to features disclosed in the prior art, such as Fujioka’s announcement of a caller’s identity. And to the extent that the evidence focused on features not in the prior art, the Board added, those features were unclaimed. Having found that none of ClassCo’s evidence of objective indicia merited weight, the Board affirmed the examiner’s rejections of claims 2–5, 7, 9, 10, 14, 17, 18, 23, 26–30, and 34 as unpatentable under 35 U.S.C. § 103. ClassCo timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

## DISCUSSION

“We review the Board’s ultimate obviousness determination *de novo* and underlying factual findings for substantial evidence.” *In re Varma*, 816 F.3d 1352, 1359 (Fed. Cir. 2016).<sup>2</sup> Substantial evidence “means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 217 (1938).

### I.

ClassCo agrees with the Board’s finding that Fujioka discloses all but one of the elements of claim 2. Appellant Br. 31. ClassCo nonetheless argues that the Board could not simply “combine” Fujioka and Gulick, because neither Fujioka nor Gulick discloses the claimed function of

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<sup>2</sup> Given the effective filing date of the claims of the ’047 application, the version of 35 U.S.C. § 103 that applies here is that in force preceding the changes made by the America Invents Act. See Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(n), 125 Stat. 284, 293 (2011).

“us[ing] the identity information to produce audio using the audio transducer at the called station.” In particular, ClassCo argues that the Board’s affirmance of the examiner’s rejection runs contrary to the Supreme Court’s use of the term “combination” in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007). According to ClassCo, “[a] basic characteristic of a *KSR* combination is that it ‘only unites old elements with no change in their respective functions.’” Appellant Br. 28 (quoting *id.* at 416).

We find that those contentions do not show that the Board’s approach is inconsistent with *KSR*. While neither Fujioka nor Gulick taught a single speaker for announcing both voice signals and identity information, substantial evidence supports the Board’s finding that one of ordinary skill in the art would have been motivated to modify Fujioka to use a single speaker given Gulick’s disclosure that a speaker in a telephone system can desirably produce audio derived from multiple types of data within a telephone system (e.g., voice signals or tonal ringing call-alerting). The examiner found the motivation when she stated that the modification would “advantageously provide a non-handset, external speaker output for the voice signal from the caller and thereby enable the called person to communicate with the caller in a hands-free (speakerphone) manner.” J.A. 1082. Fujioka itself notes the benefit of allowing the recipient to “judge the original party from an audible indication immediately upon receiving the incoming call,” ’861 patent col. 1 ll. 39–41, and Gulick notes the hands-free benefit, ’064 patent col. 1 ll. 49–50. Against that background, and focusing on ClassCo’s appeal arguments, the Board explained that modifying Fujioka in a way taught by Gulick “would have resulted in no more than the predictable result of the use of a speaker in the telephone system that produces audio derived from data in a telephone system, the data being any of voice signals, identity information, or tonal ringing

call-alerting, for example.” J.A. 6 (internal quotation marks omitted).

Contrary to ClassCo’s argument, *KSR* does not require that a combination only unite old elements without changing their respective functions. *KSR*, 550 U.S. at 416. Instead, *KSR* teaches that “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 421. And it explains that the ordinary artisan recognizes “that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.* at 420. The rationale of *KSR* does not support ClassCo’s theory that a person of ordinary skill can only perform combinations of a puzzle element A with a perfectly fitting puzzle element B. To the contrary, *KSR* instructs that the obviousness inquiry requires a flexible approach. *Id.* at 415. Here, the Board faithfully applied this flexible approach to find that the combination of Fujioka and Gulick “would have resulted in no more than [a] predictable result.” J.A. 6.

## II.

ClassCo also argues that the Board wrongly “dismissed the patent owner’s objective evidence of nonobviousness on the grounds that there is insufficient nexus between the claimed invention and the objective evidence of nonobviousness.” Appellant Br. 16–17.

We agree with ClassCo that the Board erred in dismissing some of its evidence of nonobviousness. Even though it was not dispositive evidence of nonobviousness, the Board should have given some weight and consideration to ClassCo’s evidence of praise and commercial success. As we have explained, “when secondary considerations are present, though they are not always dispositive, it is error not to consider them.” *In re Huai-Hung Kao*, 639 F.3d 1057, 1067 (Fed. Cir. 2011). Moreover, “[a]

determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.” *WBIP, LLC v. Kohler Co.*, No. 2015-1038, 2016 WL 3902668, at \*5 (Fed. Cir. July 19, 2016).

The Board correctly determined that much of ClassCo’s evidence of praise deserved no weight because it did not have a nexus to the merits of the claimed invention. “For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention.” *Kao*, 639 F.3d at 1068 (emphasis and internal quotation marks omitted) (quoting *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010)). A nexus may not exist where, for example, the merits of the claimed invention were “readily available in the prior art.” *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1580 (Fed. Cir. 1983); *see also Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369 (Fed. Cir. 2011). Additionally, there is no nexus unless the evidence presented is “reasonably commensurate with the scope of the claims.” *Rambus Inc. v. Rea*, 731 F.3d 1248, 1257 (Fed. Cir. 2013) (quoting *Kao*, 639 F.3d at 1068).

As the Board correctly explained, much of ClassCo’s evidence of praise focused on conventional features in the prior art. J.A. 11, 14. For example, ClassCo submitted news releases that praised its device’s “voice-capable caller ID unit,” J.A. 12, but, as the Board correctly explained, the prior art, including Fujioka, disclosed “storing identification data and producing a voice announcement (i.e. audio corresponding to identification data of a caller).” J.A. 11. The Board properly discounted this and other evidence relating to features that were in the prior art. But while the Board properly discounted some of ClassCo’s evidence, it improperly dismissed some

evidence of praise related to features that were not available in the prior art.

For example, ClassCo presented an article from Tele-connect Magazine that praised ClassCo's product for enabling a user to pick up a ringing telephone and hear a caller's identification on the handset speaker before the line connects. By using a single speaker for both announcing a caller's identity and the telephone call, ClassCo's product enabled users to use an ordinary handset to both screen calls and take them:

On the left side of the device is a switch marked "handset." When the switch is off, the device announces calls through its speaker, and lets you answer them directly — calls can be answered by lifting the handset of any attached phone. When the switch is on, the VACID [Voice Announce Caller ID] switches the phone out of the loop, so you can lift the handset without "answering the call." It then announces over the inside line—you can answer by pressing Flash (or briefly bouncing the hook-switch), or just hang up. This feature really adds utility—it frees you from being tied to the immediate proximity of the box, and lets the device serve multiple extensions (dispersed through an apartment, for example) and wireless phones.

J.A. 1653 (Teleconnect Magazine, *Who's There!?? Speak Up!!* October 1995, p. 40). ClassCo submitted several other articles describing benefits derived from the single-speaker feature. E.g., J.A. 1825 (Computer Telephony, July 1996, page 114) ("If [ClassCo's product] is connected right as the phone line comes into your home, and all the phones are behind it, as soon as you pick up the phone it can play the name of the caller (assuming that it is one of the 20 in the list) before connecting the caller."); J.A. 1829–30 (The Dallas Morning News (the Archive),

Oct. 20, 1998) (“On a cordless phone, the call will be announced through the handset.”); *see also* Appellant Br. 20–23 (collecting articles). Neither party asserts that this single-speaker feature was readily available in the art, and the Board was wrong to dismiss it as such.

The Board also dismissed this evidence for a different reason: it found that the claims were not commensurate in scope with the praised features. We disagree. Both parties agree that the single-speaker embodiment falls within the scope of representative claims 2 and 14. Moreover, Apple admits that dependent claim 5 expressly recites the embodiment touted in the articles: picking up a telephone handset without answering a call so that the user can first hear a caller’s identification. Appellee Br. 55–56; *see also* ’695 patent col. 9 ll. 52–56. (“The caller announcement apparatus of claim 1 further comprising: an isolation circuit operative to prevent the telephone system from completing the telephone call from the caller telephone to the called telephone while the audio announcement circuit is producing audio using the audio transducer at the called station.”). Because claim 5 depends from claim 1, it is reasonable to infer that claim 1 includes the scope of claim 5. *See Intamin Ltd. v. Magnetar Techs., Corp.*, 483 F.3d 1328, 1335 (Fed. Cir. 2007) (“An independent claim impliedly embraces more subject matter than its narrower dependent claim.”).

While claims 2 and 14, which depend from claim 1, also encompass the praised embodiment, the Board found the evidence not commensurate in scope with these claims on the ground that they are too broad, encompassing other embodiments. But “we do not require a patentee to produce objective evidence of nonobviousness for every potential embodiment of the claim.” *Rambus*, 731 F.3d at 1257. Rather, “we have consistently held that a patent applicant ‘need not sell every conceivable embodiment of the claims in order to rely upon evidence of [objective indicia of nonobviousness].’” *In re Glatt Air Techniques*,

*Inc.*, 630 F.3d 1026, 1030 (Fed. Cir. 2011) (quoting *In re DBC*, 545 F.3d 1373, 1384 (Fed. Cir. 2008)). As such, the Board should have afforded ClassCo’s evidence *some* weight, taking into account the degree of the connection between the features presented in evidence and the elements recited in the claims. There is no hard-and-fast rule for this calculus, as “[q]uestions of nexus are highly fact-dependent and, as such are not resolvable by appellate-created categorical rules and hierarchies as to the relative weight or significance of proffered evidence.” *WBIP*, 2016 WL 3902668, at \*8. Here, because claims 2 and 14 are considerably broader than the particular features praised in the articles, it would be reasonable for the Board to assign this evidence little weight.<sup>3</sup> But, contrary to the finding of the Board, the evidence is due at least some weight.

We also view the Board’s analysis of ClassCo’s evidence of commercial success as flawed. ClassCo presented testimony that its “sales volumes and growth of market share . . . [were] strong evidence of the commercial success of ClassCo products.” J.A. 1821. According to testimony presented by ClassCo, the market for ClassCo’s products consisted of “all Caller ID devices,” including those that simply displayed Caller ID. J.A. 1820–21. “ClassCo’s share of that [\$82,000,000] market was 0.8%.” J.A. 1821. The Board dismissed this testimony on the ground that “the market included ‘total number of units capable of audible announcement based on Caller ID’ but [ClassCo] does not demonstrate that the claims recite the system as ‘capable of audible announcement based on Caller ID.’” J.A. 14. The Board’s analysis improperly

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<sup>3</sup> ClassCo did not argue claim 5 separately from claims 2 and 14. Thus, like the Board, we focus our nexus analysis on claims 2 and 14.

focuses on the market instead of ClassCo's product. Our cases require consideration of whether "the marketed product embodies the claimed features." *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000). If a patent owner makes this showing, "then a nexus is presumed and the burden shifts to the party asserting obviousness to present evidence to rebut the presumed nexus." *Id.* ClassCo made that showing here. It presented unrebutted evidence that its products experienced some, albeit limited, commercial success, and that those products embodied the claimed features. This evidence deserved some weight in the obviousness analysis, and the Board's blanket dismissal of it was in error.

ClassCo also argues that the Board improperly dismissed evidence of a successful licensing program of the '695 patent. ClassCo had presented testimony that it had licensed the patent to Philips in 1995. But the Board dismissed this evidence because it "d[id] not find specific evidence demonstrating why 'Philips took a license from ClassCo' and what specific claim features caused Philips to take the alleged licenses, if any." J.A. 14. We find the Board's conclusion on this issue to be supported by substantial evidence. The parties had disputed before the Board whether, as a factual matter, Philips had taken out a license for the features in claim 1, or for other business reasons. In several declarations submitted by ClassCo, a witness testified that Philips was motivated to take the licenses because of the features of claim 1. J.A. 1646 ("All of the products licensed under the '695 patent have included the features of claim 1 . . . ."). But ClassCo cancelled claim 1 in an earlier reexamination proceeding. After ClassCo cancelled claim 1, it submitted another declaration that credited the features of claims 2 and 14 as Philips's motivation. J.A. 1822. Thus, ClassCo's own inconsistent evidence belies its position and supports the Board's conclusion. Accordingly, the Board's conclusion

that ClassCo had submitted insufficient evidence to prove that Philips was motivated to take the license because of merits of the claimed invention is supported by substantial evidence. *See In re Cree, Inc.*, 818 F.3d 694, 703 (Fed. Cir. 2016).

After weighing ClassCo’s evidence of nonobviousness in light of the other three *Graham* factors, we find no error in the Board’s ultimate conclusion of obviousness. The examiner and the Board correctly found that the combination of Fujioka and Gulick presents a strong showing that the claims at issue would have been obvious. While the Board erred in giving ClassCo’s evidence of nonobviousness no weight, we nonetheless agree that the value this evidence possesses in establishing nonobviousness is not strong in comparison to the findings and evidence regarding the prior art under the first three *Graham* factors. *See Kao*, 639 F.3d at 1071–72 (finding that the Board erred in ascribing no weight to secondary considerations evidence but nonetheless affirming the Board’s ultimate holding of obviousness); *see also Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 36 (1966) (holding that alleged secondary considerations of commercial success and long-felt need did not “tip the scales of patentability” where the invention “rest[ed] upon exceedingly small and quite non-technical mechanical differences in a device which was old in the art”).

### III.

ClassCo also challenges the Board’s construction of “identity information” in claim 14. Because the patent has expired, the Board construed the claims applying the principles explained in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). “[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). Because the parties

and the Board relied solely on the intrinsic record to determine the proper construction, we review the Board's construction *de novo*. *See id.*

The Board adopted an ordinary-meaning construction of identity information as "something that identifies, such as a name that identifies a phone number as a particular person." J.A. 1107; *see* J.A. 9 (agreeing with the examiner). ClassCo proposes alternatively that "identity information" is not an abstract concept, and that the '695 patent "uses the term 'identity information' to mean a physical item that can only exist in one place at one time (e.g., a particular section of a particular memory element containing a stored name . . .)." Appellant Br. 50.

We agree with the Board's construction. Contrary to ClassCo's contentions otherwise, the plain claim language and specification support giving "identity information" its ordinary meaning. The language of claim 1 does not require that identity information be stored in memory. The claim merely requires that identity information be produced by the processing unit and used by the audio announcing circuit. The claim does not, however, require identity information to be stored in "a particular section of a particular memory element." Nor does the '695 specification limit the term this way. Indeed, the specification never uses the term "identity information." ClassCo points to embodiments in the specification that discuss related terms like "caller ID records" and "stored audio" that are stored in memory, but these embodiments do not limit the term "identity information."

ClassCo further argues that claim 2 explicitly defines identity information as always being stored in memory. We disagree. Claim 2 does not define the term "identity information," but instead requires that claim 1's processing unit "comprises memory storage for storing identity information." '695 patent col. 9 ll. 40–41. Although claim 2 requires the processing unit to have memory to

store identity information, this limitation in claim 2 does not define identity information as information always stored in memory. To the contrary, dependent claim 2 adds the memory-storage limitation, and importing a memory requirement into the term “identity information” would improperly render claim 2 functionally meaningless. *See Cat Tech LLC v. TubeMaster, Inc.*, 528 F.3d 871, 885 (Fed. Cir. 2008). We thus decline ClassCo’s invitation to import additional limitations into the term “identity information” and agree with the Board’s construction.

#### CONCLUSION

Because we find that substantial evidence supports the Board’s conclusion that claims 2–5, 7, 9, 10, 14, 17, 18, 23, 26–30, and 34 of the ’695 patent are unpatentable, we affirm.

#### **AFFIRMED**