NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

WHATSAPP, INC., FACEBOOK, INC., Appellants

 $\mathbf{v}$ .

TRIPLAY, INC.,
Appellee

 $2017\hbox{-}2549,\, 2017\hbox{-}2551$ 

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2016-00717, IPR2016-00718.

Decided: November 14, 2018

HEIDI LYN KEEFE, Cooley LLP, Palo Alto, CA, argued for appellants. Also represented by REUBEN HO-YEN CHEN, MARK R. WEINSTEIN.

MICHAEL ANTHONY NICODEMA, Greenberg Traurig LLP, Florham Park, NJ, argued for appellee. Also represented by BARRY SCHINDLER.

Before DYK, WALLACH, and TARANTO, Circuit Judges.

Dyk, Circuit Judge.

WhatsApp, Inc. and its parent, Facebook, Inc., ("petitioners") appeal the Patent Trial and Appeal Board's ("the Board") Final Decisions in IPR Nos. 2016-00717 and 2016-00718. The Board declined to find claims of U.S. Patent No. 8,874,677 ("the '677 patent"), owned by TriPlay, Inc. ("TriPlay"), unpatentable as obvious. We vacate and remand.

## BACKGROUND

The '677 patent, entitled "Messaging System and Method," is directed to an electronic messaging system that addresses the problem of "cross-platform messaging," wherein messaging devices have "different communication and displaying capabilities and may use different communication protocols." '677 patent, Abstract; id. col. 11 ll. 53–56. The specification states that such messages may be "any kind of communication objects capable to be exchanged between communication devices," id. col. 10 ll. 43–46, and that the messaging system of the invention "is configured to support a variety of message formats, including, . . . video format (e.g. MPEG family, WMV family, 3GPP, etc.)," id. col. 12 ll. 16–19. The claims would, for example, cover an embodiment in which a PC user and cell phone user can send messages to one another containing pictures and video.

Independent claim 1 of the '677 patent is representative:

# 1. A method comprising:

receiving, by a messaging system, an initial message sent by an originating communication device to a destination communication device, the initial message being characterized, at least, by message format, an initial message layout and data indicative of at least one receiver associated with the in-

itial message, wherein the initial message includes a video;

obtaining, by the messaging system, data indicative of displaying capabilities of the destination communication device;

before delivery to the destination communication device associated with the at least one receiver, enabling, by the messaging system, conversion, in accordance with a criterion related to the displaying capabilities of the destination communication device, of the initial message into an adapted message, wherein the conversion comprises:

- a) providing, by the messaging system, a clickable icon:
  - i) based on the video from the initial message and
  - ii) clickable into an adapted version of the video, wherein the adapted version of the video is adapted to the displaying capabilities of the destination communication device, and
- b) determining, by the messaging system, an adapted message layout, comprising the clickable icon; and

facilitating, by the messaging system, delivery of the adapted message to the destination communication device.

'677 patent, col. 23 ll. 23–51.

On March 6, 2016, WhatsApp filed two petitions for inter partes review ("IPR") of claims 1–21 of the '677 patent. The PTAB instituted IPR based on the first petition as to claims 1, 2, 11, 13, 14, 16, 17, 20, and 21

(IPR No. 2016-00717), and based on the second petition as to claims 6, 7, and 15 (IPR No. 2016-00718). In both institution decisions, the Board concluded that the claims were likely unpatentable as obvious over three pieces of prior art: U.S. Patent Application No. 2003/0236892 ("Coulombe"), U.S. Patent Application No. 2006/0176902 ("Bellordre"), and U.S. Patent No. 7,593,991 ("Friedman").

Coulombe, entitled "System for Adaptation of SIP Messages Based on Recipient's Terminal Capabilities and Preferences," is directed to solving the same problem as the '677 patent and does so generally in the same way as the '677 patent. J.A. 222. The Coulombe application teaches a messaging system relating to "interoperability between terminal devices using session initiation protocol (SIP) messages and, more particularly, to multimedia content adaptation." J.A. 225  $\P$  [0001]. As with the '677 patent, Coulombe recognizes the importance of interoperability, given the "wide diversity of terminal characterisdisplay size and resolution, available memory, tics: formats supported, etc." J.A. 225 ¶ [0002]. Thus, the system described in Coulombe includes a "Capability Negotiation Manager" and a "Message Adaptation Engine," which respectively "resolv[e] terminal capability information" and "manipulat[e] or modif[y] ... message content based on the terminal capabilities, user preferences, network conditions, or any characteristics of the user, his terminal or his environment." J.A. 228  $\P$  [0059], [0063].

There is no dispute that Coulombe discloses a majority of the claim limitations, with the exception of two limitations: adaptation of video objects (a limitation petitioners find in Bellordre) and clickable icons (a limitation petitioners find in Friedman). Together, Coulombe, Bellordre, and Friedman disclose all the limitations of the '677 patent.

Bellordre is directed to solving the same general problem as Coulombe and the '677 patent but solves it in a different way. However, Bellordre, unlike Coulombe, discloses a method of processing "video objects." J.A. 238 ¶¶ [0003]–[0004].

On August 28, 2017, the Board issued final decisions in both IPRs declining to find the claims obvious. The Board explained that while all elements of the claims were disclosed by the cited prior art references, the "[p]etitioner has not explained sufficiently its reasoning for the combination of Coulombe's message adaptation system with Bellordre's video adaptation and delivery processes." J.A. 16. The Board's decision addressed only the motivation to combine Coulombe with Bellordre; the Board did not address the motivation to combine Friedman with Coulombe and Bellordre.

As to the Coulombe and Bellordre combination, the petitioners' theory was that one skilled in the art would have been motivated to combine the video objects of Bellordre with the method of Coulombe because video was "more powerful." J.A. 50. The Board found the petitioners' "ha[d] not provided the necessary reasoned analysis and evidentiary support for the assertion that the incorporation of a video object for adaptation and delivery by Coulombe's system would have been 'common sense." J.A. 17–18. The Board stated that the petitioners "ha[d] not explained with reasoning or supporting evidence why a person of ordinary skill in the art, or a layperson, would consider video to be 'more powerful' than text or still J.A. 18. Thus, the Board concluded that the petitioners and their expert's "comparison of televisions to text and photos is too simplistic and general, and is not directed to the particular technology at issue." J.A. 21. Although the claims challenged in the two IPRs were different, the reasons given by the Board for finding nonobvious the claims at issue were largely identical.

The petitioners appeal. This court has jurisdiction pursuant to 35 U.S.C.  $\S 141(c)$  and 28 U.S.C.  $\S 1295(a)(4)(A)$ .

# DISCUSSION

We review the Board's legal conclusions de novo and its factual findings for substantial evidence. *Redline Detection, LLC v. Star Envirotech, Inc.*, 811 F.3d 435, 449 (Fed. Cir. 2015). A claim is unpatentable for obviousness where "the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a) (2006); *accord KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). Obviousness is a question of law based on underlying factual findings. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966); *K/S HIMPP v. Hear–Wear Techs., LLC*, 751 F.3d 1362, 1364 (Fed. Cir. 2014).

As part of the obviousness inquiry, we consider "whether a person of ordinary skill in the art would have been motivated to combine the prior art to achieve the claimed invention and whether there would have been a reasonable expectation of success in doing so." *DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006); *see also KSR*, 550 U.S. at 418 ("[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the same way the claimed new invention does.").

In *KSR*, the Supreme Court instructed courts to take a more "expansive and flexible approach" in determining whether an invention was obvious at the time it was made. 550 U.S. at 415. In doing so, the Court noted that "common sense . . . can be important to identify a reason that would have prompted a person of ordinary skill in

the relevant field to combine elements in the way the claimed new invention does." *Id.* at 418; *see also Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016) (affirming that courts should "consider common sense, common wisdom, and common knowledge in analyzing obviousness").

This court has in some cases been hesitant to use common sense to supply a missing limitation, particularly where the assertion is conclusory. See Arendi, 832 F.3d at 1361, 1366 (declining to apply common sense to supply missing limitation); K/S HIMPP, 751 F.3d at 1365–66 (same); Mintz v. Dietz & Watson, Inc., 679 F.3d 1372, 1377–78 (Fed. Cir. 2012) (same). But see Perfect Web Techs., Inc. v. InfoUSA, Inc., 587 F.3d 1324, 1330–31 (Fed. Cir. 2009) (common sense to repeat e-mail distribution steps where there existed a goal of reaching a certain number of people).

But, as KSR suggests, common sense has frequently been used to support a motivation to combine. See, e.g., Western Union Co. v. MoneyGram Payment Sys., Inc., 626 F.3d 1361, 1369–70 (Fed. Cir. 2010) (common sense to add electronic transaction device from prior art system where "such a transition was commonplace in the art"); Ball Aerosol & Specialty Container, Inc. v. Ltd. Brands, Inc., 555 F.3d 984, 991–93 (Fed. Cir. 2009) (common sense to combine features that would increase the distance between candle holder and table where there existed a concern with scorching the supporting surface); see also Cimline, Inc. v. Crafco, Inc., 413 F. App'x 240, 245–46 (Fed. Cir. 2011) (non-precedential) (common sense to include a powered conveyor belt).

Here the parties agree that the prior art references disclose all the claim limitations, and common sense is argued only to supply a motivation to combine the teachings of Coulombe and Bellordre. Petitioners in this case presented undisputed evidence that video is sometimes a more powerful medium than text or still photographs and provided supporting expert testimony to that effect. Petitioners' expert, Mr. Klausner, testified that "people have long understood that video information (such as television and motion pictures) can provide a more powerful message than text or still photos." J.A. 163 ¶ 64. TriPlay's expert agreed that "MMS is more powerful because you could actually include multimedia content with the message." J.A. 957, 48:22–25. The undisputed record also established that consumers valued video. At oral argument, TriPlay again agreed that "people value video in some contexts." Oral Arg. at 14:10–14:20.

Petitioners submitted several articles predating the priority date of the '677 patent (August 2005), which illustrate consumer demand for such functionality.<sup>1</sup> For

TriPlay argues that we should not consider this evidence because it was first presented in the petitioners' reply before the Board. See Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd., 821 F.3d 1359, 1369 (Fed. Cir. 2016). We do not find this argument persuasive. As an initial matter, the petitioners appear to have properly raised this evidence in response to arguments made by TriPlay's expert after institution. And in any event, "it is incumbent upon the party complaining of some procedural violation—such as the inclusion of improper rebuttal in a reply brief—to first raise the issue below." Techs., Inc. v. Global Tel\*Link Corp., 685 F. App'x 979, 985 (Fed. Cir. 2017) (non-precedential) (citing Belden Inc. v. Berk-Tek LLC, 805 F.3d 1064, 1081 (Fed. Cir. 2015)). Because TriPlay did not argue before the Board that petitioners raised new arguments in their reply and failed to "avail itself of the procedures for filing a sur-reply, a motion to strike, or a conference call to challenge th[e] allegedly improper argument," we see no reason to entertain such argument now. Id.

example, the petitioners cited an article indicating that, prior to 2005, consumers "want[ed] more news on the fly—two way communications, full text stories, picture displays and, increasingly, video." J.A. 982; see also J.A. 975 ("And you thought your camera phone was cool – Yet taking photos with mobile phones is so last year – the excitement now is video."). Petitioners also pointed to various articles indicating that even before the priority date, major mobile carriers and mobile-device manufacturers—including Verizon, AT&T, Sprint, T-Mobile, and Samsung—were providing consumers video-messaging There was no contrary evidence. Given the capability. advantages of video as a powerful medium and consumer desire for video, it would have been common sense to include the video objects from Bellordre in the processing system of Coulombe. We conclude that the Board's contrary conclusion is not supported by substantial evidence.

Finally, although the Board did not rely on this theory, TriPlay argues that there would have been no motivation to combine Coulombe and Bellordre because Coulombe already discloses video-messaging capability. But Coulombe's sole reference to video describes "video calls," i.e., streaming video, J.A. 228 ¶ [0069], whereas Bellordre discusses the use of "encapsulated or video objects," J.A. 1990, 113:23-24. As both parties' and their experts agree, streaming video and video objects are distinct. Coulombe's disclosure of video relates to the sort of live, streaming video communication associated with video calls or a television broadcast. The video objects of the invention, on the other hand, can be sent as video that can be watched at any time. Given these differences, there is no basis to find that the disclosure of streaming video in Coulombe would have dissuaded the inclusion of video objects in Coulombe.

Despite our conclusion that there was a motivation to combine the messaging system of Coulombe with the video of Bellordre, we note that the Board did not expressly consider TriPlay's alternative bases for finding that the petitioners had not carried their burden of proving unpatentability of the instituted claims. Specifically, the Board has not yet addressed TriPlay's arguments that the petitioners have failed to establish a motivation to combine Friedman with Coulombe and Bellordre.

In this respect, petitioners presented expert testimony from Mr. Klausner that "the advantage of Friedman's clickable thumbnail graphic is 'self-explanatory' - it 'makes it possible to view a video object by clicking on an icon." J.A. 940-41 ¶ 45. He explained that this was a "simple combination" that "would... not have required even the experience of a skilled artisan to appreciate the clear benefits of this combination." Id. Mr. Klausner further testified that combining the clickable icons of Friedman with Coulombe and Bellordre would have been viewed as "particularly advantageous" because "one of ordinary skill in the art would have appreciated that pictorial icons . . . . allow a message recipient to make a more informed decision of whether he or she wants to download the video from the messaging server, thereby conserving device and network resources." Id. ¶ 48. The Board has not addressed this testimony.

Accordingly, we *vacate* the Board's nonobviousness decision and *remand* for further consideration of the motivation to combine the clickable icons of Friedman with Coulombe and Bellordre.

## VACATED AND REMANDED

Costs

Costs to appellants.