

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

TWITTER, INC.,
Appellant

v.

VIDSTREAM LLC,
Appellee

2019-1708, 2019-1709

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2017-01131, IPR2017-01133.

Decided: September 3, 2020

DAVID L. MCCOMBS, Haynes & Boone, LLP, Dallas, TX, argued for appellant. Also represented by DEBRA JANECE MCCOMAS; RAGHAV BAJAJ, Austin, TX; THOMAS B. KING, Costa Mesa, CA.

STEPHANIE DEBROW, Norton Rose Fulbright US LLP, Austin, TX, argued for appellee. Also represented by EAGLE HOWARD ROBINSON.

Before PROST, *Chief Judge*, REYNA and HUGHES, *Circuit Judges*.

REYNA, *Circuit Judge*.

In two inter partes review proceedings, the Patent Trial and Appeal Board found that two patents owned by VidStream LLC are not unpatentable as obvious. Twitter argues on appeal that the Board's determination is contrary to law because the Board failed to consider what a prior art reference suggested to a person of ordinary skill in the art at the time of the invention and because the Board ignored Twitter's arguments and evidence contained in its reply brief. For the following reasons, we affirm.

BACKGROUND

A. Patents-at-Issue

This appeal arises from two inter partes review ("IPR") proceedings wherein the petitioner, Twitter, Inc., ("Twitter"), challenged two patents owned by VidStream LLC ("VidStream"), U.S. Patent Nos. 8,464,304 (the "'304 patent") and 8,601,506 (the "'506 patent") (collectively "the challenged patents"). The challenged patents are titled "Content Creation and Distribution System" and are directed to computer methods and systems for creating and sharing user-generated video content. '304 patent at 1:1–2. The challenged patents contain the same disputed limitation and share essentially the same written description.¹ Figure 2 of the challenged patents, shown below, illustrates the patented system at a high level.

¹ For purposes of this appeal, we cite to only the '304 patent.

Figure 2

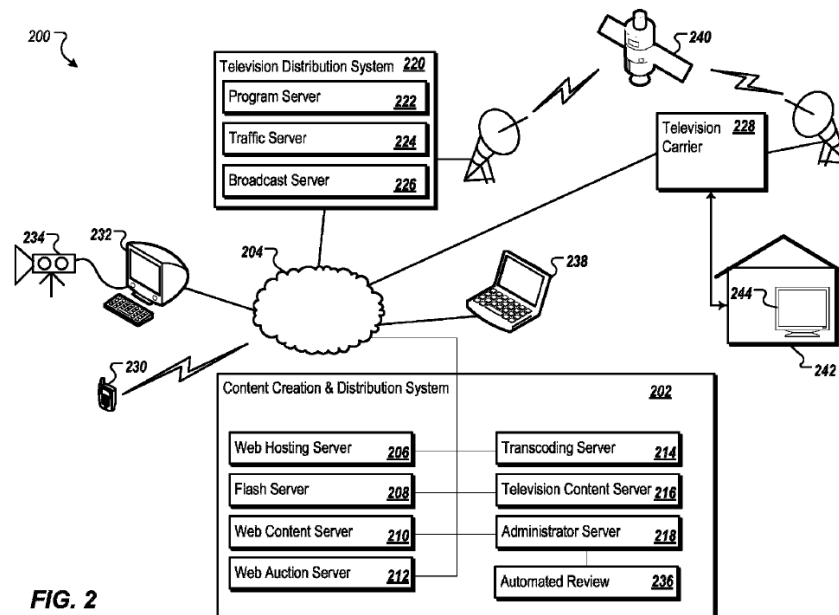


FIG. 2

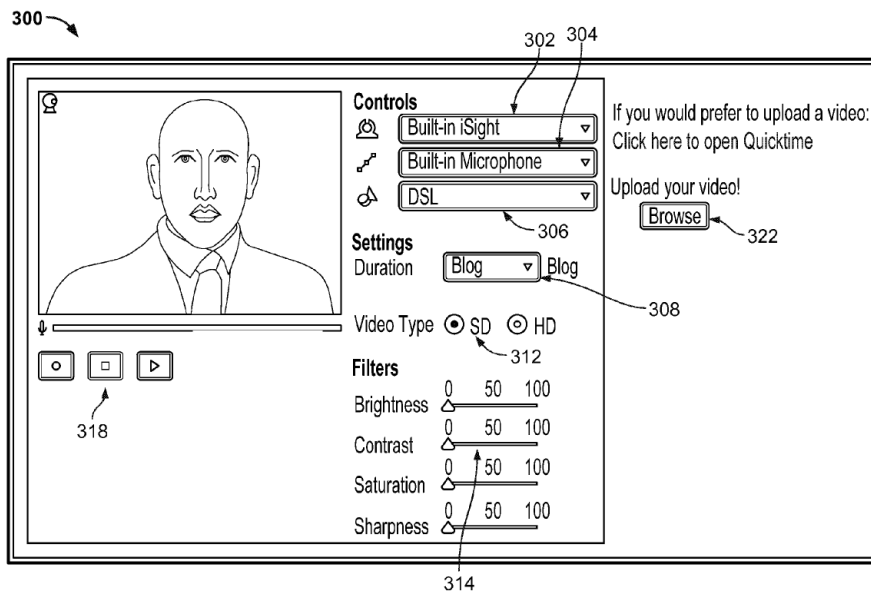
In Figure 2, a mobile device (230) or a computer (232) having a video camera (234) generates video content. *Id.* at 14:30–34. The video content is sent over the internet to a Content Creation & Distribution System (“CCDS”) (202). The CCDS (202) makes the content available for display on the web or as part of a television distribution system (220).

To ensure that user-generated video is suitable for distribution, e.g., having a certain quality level that is appropriate for television programs, the challenged patents disclose recording video according to “predetermined constraints.” Such predetermined constraints can include the format, bit rate, length of submission, frame rate, etc. *Id.* at 13:36–44. Other constraints include parameters such as “a bit rate and an image resolution sufficient to enable transcoding of the video data into the format appropriate for inclusion in the linear television programming transmission.” *Id.* at 4:36–40. The client device (i.e., mobile

device (230) or computer (232)) applies these constraints to the video data it records.

Figure 3 of the challenged patents, shown below, further illustrates the CCDS. The interface (300) can serve as a user-facing front-end of the CCDS, enabling a user to record and upload digital content (e.g., digital video) for distribution. For example, the user can use a mobile device with a built-in camera and a pre-defined application to generate digital video content that is streamed to the CCDS substantially in real time as the content is created.

Figure 3



When the CCDS is implemented as an application installed on a user device, it can enforce predetermined constraints on the captured video such that the video is ready to be rapidly transcoded for insertion into a linear programming time slot. For example, the application can encode the video at a sufficient bit rate and resolution to ensure that the video file can be transcoded to produce video of sufficient quality to be distributed on the internet. *Id.* at 10:56–66.

Claim 1 of the '304 patent, which is representative, illustrates the claimed method:

1. A method performed by data processing apparatus, the method comprising:

receiving video data from a client computing device at a server system, wherein the video data is captured using a camera connected to the client computing device in accordance with instructions executed on the client computing device, *wherein the instructions are provided to the client computing device by the server system and cause the video data to be captured in accordance with predetermined constraints* and the predetermined constraints include a frame rate defined by the instructions;

automatically transcoding the video data, using a server included in the server system, into at least one different format based on at least one of user credentials associated with a user of the client computing device or attributes associated with the video data, wherein at least one format of the transcoded video data defines a video file in a format appropriate for inclusion in a linear television programming broadcast; and uploading the transcoded video data to a distribution server for distribution.

'304 patent at 27:57–28:10 (disputed limitation emphasized). Relevant to this appeal, the challenged patents contain the same disputed limitation: capturing video according to instructions and parameters that are defined by a server system.

B. Lahti

Lahti² is a journal article published approximately five years before the priority date of the challenged patents. Lahti describes a video management system that includes a video server and a mobile camera-phone application called MobiCon. J.A. 1316 (Abstract). MobiCon allows a user to capture videos, annotate them with metadata, specify digital rights management settings, upload videos over a cellular network, and share the videos with others. *Id.* Lahti describes that the MobiCon application is downloaded over the air to a mobile camera-phone. J.A. 1320. MobiCon operates on the Candela system architecture, which was developed as a solution for general video management and includes tools for video creation, analysis, annotation, storage, search, and delivery phases. *Id.* at 1319. Lahti discloses an operating specification for capturing a video clip, stating: “[a] new video clip is captured in Capture Screen using Mobile Media API and it is recorded according to 3GPP specification using AMR coding for audio and H.263 at 176x144 pixels size at 15 frames per second for video.” *Id.* at 1321.

² Janne Lahti et al., “A Mobile Phone-based Context-aware Video Management Application,” *Multimedia on Mobile Devices II, Proc. of SPIE-IS&T Electronic Imaging*, SPIE Vol. 6074, 60740O, 2006 (Ex. 1006, J.A. 1316–27) (“Lahti”).

Lahti Figure 3

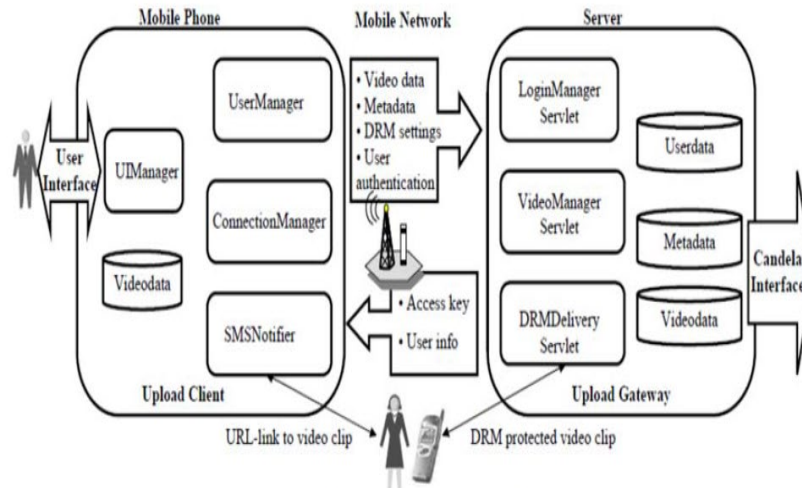


Figure 3: High-level description of MobiCon.

As shown in Lahti Figure 3, the Upload Client, which is a mobile Java application, runs on a mobile phone, and the Upload Gateway, which is implemented as a Java servlet, runs on the server. *Id.* at 1320. The system provides wireless access over a mobile phone network to enable storing video clips on the server. *Id.* Within the Upload Client is the UIManager, which coordinates the capture, saving, and sending of the video data by the mobile camera and the relevant messages. *Id.*

C. Procedural History

Twitter challenged claims 1, 4, 5, 8, 9, 11–17, 19–26, and 28–30 of the '304 patent and claims 1, 4–8, 11, 13–15, 23–26, 29, and 30 of the '506 patent (collectively the “challenged claims”) as obvious over Lahti. The Patent Trial and Appeal Board (“Board”) instituted trial on all asserted grounds of unpatentability and ultimately concluded that the challenged claims are not obvious over Lahti. *Twitter, Inc. v. VidStream LLC*, IPR2017-01131, Paper 71, at 25 (P.T.A.B. Jan. 13, 2019) (J.A. 1–32); *Twitter, Inc. v.*

VidStream LLC, IPR2017-01133, Paper 68, at 26 (P.T.A.B. Jan. 23, 2019) (J.A. 33–62).³

Twitter argued that the challenged claims are invalid in part because Lahti discloses capturing video according to predetermined constraints provided by a server. Twitter argued that a skilled artisan “would understand that a mobile application constitutes software code that controls the operation of a device when executed on that device.” J.A. 176 (citing J.A. 1119–20). Twitter contended that a skilled artisan would understand that MobiCon provides to the mobile device in Lahti the claimed “predetermined constraints” via video capture parameters such as video format (H.263), video resolution (176x144 pixels) and video frame rate (15 frames per second). J.A. 177 (citing J.A. 1119–20, ¶¶ 95–99). Twitter relied on the testimony of its expert, Dr. Houh, who explained that the “MobiCon app disclosed in Lahti . . . describes the parameters provided by the app,” which, in turn, was provided by the server. J.A. 1120, ¶ 97.

VidStream countered that “Lahti does not disclose or suggest that MobiCon has any impact or control over any of the parameters by which a mobile device captures video data, including a frame rate used to capture video data.” J.A. 386–87. According to VidStream, “all digital video data captured by camera phones or digital cameras necessarily inherently has a format (e.g., H.263), a resolution (e.g., 176x144 pixels), and a frame rate (e.g., 15 frames per second).” J.A. 387–88. VidStream argued that “in 2006 it was common for camera phones to natively capture video

³ Because the Final Written Decision for each IPR is substantively identical, we cite to only the Final Written Decision in IPR2017-01131 (J.A. 1–32) unless otherwise stated.

data in accordance with the Third Generation Partnership Project (“3GPP”) specification.” J.A. 388.

VidStream also argued that the recitation of video capture parameters in Lahti “is equally consistent with capturing video using a device’s native capabilities, rather than capturing video according to parameters set by the MobiCon application.” J.A. 388, J.A. 2427–28. VidStream argued that “a POSITA reviewing Lahti would not have viewed Lahti as disclosing that the MobiCon application actually governed video capture parameters.” J.A. 400.

In its reply brief, Twitter argued that VidStream’s theories were “based on a mischaracterization of how a person having ordinary skill in the art would understand the teachings of Lahti.” J.A. 421. Twitter argued that mobile phones, both at the time of Lahti’s publication (2006) and on the date of the invention (2011), were capable of recording at multiple resolutions and frame rates and that the Symbian operating system family used by the Nokia 6630 (the mobile phone used in Lahti) expressly gave application developers the ability to specify which frame rate to use during video recording.

Twitter also argued that if MobiCon did not affect the manner in which a video was recorded, by providing the video capture parameters, there would be no reason for Lahti to disclose the identified frame rate. Twitter argued that a skilled artisan would have understood that, given the multitude of devices “capable of recording at multiple resolutions and frame rates,” software development kits used by developers of video management applications such as MobiCon “could be programmed to specify certain parameters, including the frame rate at which video recording should be made,” supporting Lahti’s teachings of specifying the frame rate parameter. J.A. 427.

The Board permitted VidStream to file a sur-reply brief. *See* J.A. 501. VidStream asserted that Twitter improperly-added new arguments and evidence in its reply

brief. J.A. 505. For example, VidStream argued that Twitter’s discussion of a person of ordinary skill in the art’s understanding of application programming interfaces and software development kits was a new argument. J.A. 509. VidStream also characterized the discussion of the Symbian operating system as “new argument.” J.A. 510.

In its Final Written Decision, the Board found that “Lahti does *not expressly state* that the predetermined constraints, including frame rate, come from the MobiCon application.” J.A. 17 (emphasis added). The Board concluded that Twitter “fail[ed] to show by a preponderance of the evidence that Lahti meets the disputed phrases.” J.A. 25. The Board noted that all digital video captured by a camera phone or digital camera necessarily captures video under certain operating specifications including format, resolution, and frame rate. *See* J.A. 17. Although the Board recognized that Lahti disclosed use of the 3GPP specification, which utilizes H.263 coding at 176x144 pixels and 15 frames per second, the Board recognized that the mobile phone utilized in Lahti, the Nokia 6630, natively operates under these same specifications. *See* J.A. 17–18. The Board thus determined that the video recording parameters described in Lahti could have come from either MobiCon or from the mobile phone’s native recording parameters. J.A. 18.

Although the Board further asserted that it “need not and do[es] not consider the new evidence and new arguments made in [Twitter’s] Reply,” the Board addressed Twitter’s reply brief noting that a person having ordinary skill in the art would understand Lahti to teach changing mobile phone settings using software developer kits and that the UIManager of MobiCon handles all the capturing and recording of videos. J.A. 20–22. The Board found that Twitter “has not provided sufficient evidence for [the Board] to conclude that the described parameters are part of the instructions from the MobiCon application as opposed to the native mobile device.” J.A. 25.

DISCUSSION

Twitter contends that the Board’s Final Written Decision of no unpatentability is contrary to law on two grounds.⁴ First, Twitter argues that the Board erred by considering only what Lahti *expressly* teaches and failed to consider what Lahti would *suggest* to a person of skill in the art. In addition, Twitter asserts that the Board erred when it failed to consider the arguments and evidence Twitter presented in its reply brief.

We review de novo the Board’s conclusions on obviousness. *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000). Our case law is clear that when conducting an obviousness analysis, the Board must consider a prior art reference “not only for what it expressly teaches, but also for what it fairly suggests.” *Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1049 (Fed. Cir. 2019) (quoting *In re Baird*, 16 F.3d 380, 383 (Fed. Cir. 1994)). With that instruction, we first review whether the Board considered Lahti for what it fairly suggests to a skilled artisan. We conclude that it did.

Twitter raised several arguments regarding what Lahti teaches or suggests to a skilled artisan, and the Board considered and rejected each of them. *See* J.A. 21–24 (citing J.A. 422–25 (Twitter’s reply brief)). For example, the Board considered Twitter’s argument that MobiCon’s UIManager, “a controller component,” suggests to a skilled artisan that MobiCon controls at least “the features with which [the UIManager] interacts.” *See* J.A. 21. The Board

⁴ *See* Appellant Br. at 28 (“The Decisions fail to ask the correct legal question This fundamental error in the legal standards used to determine obviousness requires reversal.”); Appellant Reply Br. at 22 (explaining that “Twitter did not argue or contend that the Board’s Decisions fail to meet the substantial evidence standard. . . . Twitter argued legal error”).

rejected this argument and found that Twitter’s expert, Dr. Houh, failed to explain “what Lahti’s MobiCon UIManager includes or how it works.” *Id.* The Board reasoned that Dr. Houh’s conclusion—that “Lahti teaches a POSITA that MobiCon . . . control[s] the video capture process” because the UIManager “handle[s]” and “coordinates the video capture” (J.A. 2399–400, Ex. 1052 ¶ 17)—fails to show whether it is the UIManager or the phone’s native video-capturing capabilities that control video capture. J.A. 21–22. Additionally, the Board addressed Twitter’s argument that Dr. Olivier, VidStream’s expert, “conceded that [Lahti suggests that] MobiCon’s UIManager controlled at least some aspects of the video capture process.” *See* J.A. 21 (internal quotation marks omitted). The Board reviewed those portions of Dr. Olivier’s testimony on which Twitter relied and found that they did not support Twitter’s argument. J.A. 21.

Twitter incorrectly suggests that the Board adopted VidStream’s argument that Lahti “is equally consistent with capturing video using a device’s native capabilities, rather than capturing video according to parameters set by the MobiCon application.”⁵ The Board made no finding that it is *equally possible* that MobiCon either utilizes the mobile phone’s native video-capturing capabilities or that it controls the phone’s video-capturing capabilities. Instead, the Board explained that while either the UIManager or the phone’s native video-capturing capabilities “could” control the predetermined parameters in Lahti, Twitter failed to show that Lahti itself discloses or suggests a UIManager that controls the parameters. *See* J.A. 22–25.

⁵ Appellant Br. at 31–32 (stating that “[t]he Board agreed with [VidStream’s] arguments and found this insufficient to show how Lahti meets the disputed phrase”) (citation and internal quotation marks omitted).

Twitter misapprehends the evidentiary standard for proving unpatentability at the Board. While, as noted above, it is correct that a reference must be considered for what it fairly teaches or suggests to a skilled artisan, *In re Baird*, 16 F.3d at 383, it is the petitioner's burden to establish the scope and content of a prior art reference by a preponderance of the evidence. See 35 U.S.C. § 316(e) ("the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence."); see also 37 C.F.R. § 42.1(d) ("The default evidentiary standard is a preponderance of the evidence."). The preponderant evidence standard requires the party carrying the burden of proof to show that the fact to be proven is "more probable than not." *Velander v. Garner*, 348 F.3d 1359, 1370, 1376 (Fed. Cir. 2003). Here, it was Twitter's burden to establish that it was more probable than not that Lahti fairly teaches or suggests to a skilled artisan the predetermined constraints limitation. We conclude that the Board properly considered this question and applied the proper standard when the Board found that the suggestion that Lahti's UI-Manager *could* control the predetermined parameters does not fairly suggest to a skilled artisan that it *would* control the predetermined parameters.

Twitter also argues that the Board erred by analyzing obviousness as of the date of Lahti's publication (2006) rather than the date of the invention (2011). Twitter argues that the Board improperly disregarded Dr. Houh's testimony regarding technological developments in the mobile phone industry and "the impact those changes would have had on a person of ordinary skill in the art's understanding of Lahti." Appellant Br. at 36–37. Twitter argues that, in light of these purported advancements, a skilled artisan would have understood "that mobile phones in 2011 were capable of recording at resolutions much higher than what was disclosed in Lahti" and, thus, "would not read Lahti as limited to the native frame rate of the device." *Id.* at 37–38. VidStream responds that the Board rejected Twitter's

argument because it fails to address whether a skilled artisan would understand that the MobiCon application, as opposed to the native mobile device, provided the video-capture parameters discussed in Lahti. Appellee Br. at 23. We conclude that the Board did not improperly limit its obviousness analysis as Twitter contends. The Board considered the arguments Twitter raised to the Board and rejected them because, as explained above, it found that Dr. Houh's analysis failed to establish that, in Lahti, MobiCon controlled the phone's video-recording capabilities. J.A. 24–25.

Finally, Twitter argues that the Board erred by declining to consider evidence and arguments first presented by Twitter in its reply brief. Appellant Br. at 42–49. We see no merit in Twitter's argument. The Board made clear that it did not disregard the arguments and evidence presented in Twitter's reply brief by stating that “the Reply arguments and evidence, along with the Petition arguments and evidence as a whole” fail to demonstrate that “Lahti meets the disputed claim phrases.” J.A. 25; *see also* J.A. 20–25 (setting forth the Board's analysis of the arguments and evidence in Twitter's reply brief).

CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. For the reasons stated above, we conclude that the Board's Final Written Decisions are not contrary to law.

AFFIRMED