

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,

v.

TOUCHSTREAM TECHNOLOGIES, INC.,
Patent Owner.

Case No. IPR2024-00321
U.S. Patent No. 8,356,251

**DECLARATION OF STEPHEN B. WICKER
IN SUPPORT OF PATENT OWNER'S PRELIMINARY RESPONSE**

I. OVERVIEW

1. I have been retained as an expert witness on behalf of Touchstream Technologies, Inc. (“Patent Owner”) for the above-captioned petition for *inter partes* review (“IPR”). For time spent in connection with study, analysis, and testifying in this matter, I will be compensated in the amount of \$900 per hour. My compensation does not depend on the outcome of this matter.

2. I understand that this IPR involves U.S. patent No. 8,356,251 (Ex. 1001, the “’251 patent”). I submit this declaration in connection with Patent Owner’s Preliminary Response.

3. Based on my review of the Petition and the evidence in this IPR it is my opinion that claims 1–26 of the ’251 patent would not have been obvious to a person of ordinary skill in the art based on the grounds asserted by Comcast Cable Communications, LLC (“Petitioner”) in this IPR.

4. At this stage I only opine on U.S. Patent No. 8,660,545 (Ex. 1005, “Redford”) and U.S. Published Patent Application No. 2008/0235588 (Ex. 1006, “Gonze”) insofar as is necessary to show that they do not anticipate or render obvious the teachings of the ’251 patent. I do not detail my full opinions on the asserted grounds of this IPR at this time, as it is my understanding each ground relies on the Redford Reference or the Gonze Reference and their deficiencies obviate the

need to further consider the asserted grounds. Should I be called upon to do so at a future date, I will provide my full opinions on the remaining materials.

II. BACKGROUND & QUALIFICATIONS

5. I received my Bachelor of Science in Electrical Engineering from the University of Virginia in 1982. In 1983, I received a Master of Science in Electrical Engineering from Purdue University, and in 1987, I received a Ph.D. in Electrical Engineering from the University of Southern California.

6. In 1982, I worked for the Network Architecture Research Group of Bell Laboratories, in Columbus, Ohio. From August 1983 through September 1987, I was a System Engineer for the Space and Communications Group of the Hughes Aircraft Company, in El Segundo, California. While at Hughes Aircraft I designed and developed wireless communication payloads for commercial, military, and NASA spacecraft. My work at Hughes included acting as the Principal System Engineer for new business in advanced satellite communications.

7. From September 1987 through June 1996, I was a member of the faculty of the School of Electrical and Computer Engineering at Georgia Institute of Technology. From July 1, 1996 to February 29, 2024 I was a member of the faculty of the School of Electrical and Computer Engineering at Cornell University, where I taught and conducted research in wired and wireless information networks, digital telephony, information theory, security, and digital systems. I am now Professor

Emeritus of the School of Electrical and Computer Engineering at Cornell, where I continue to do research and advise junior faculty.

8. I have consulted extensively in the telecommunications industry, working with Motorola, Lockheed, Integrated Device Technologies, Digital Technics, Unisys, Texas Instruments, and other corporations to develop advanced technologies for their telecommunications products. This experience includes extensive work with analog and digital telephony, and digital information networks.

9. My current research focuses on wireless and wired information networks, with an emphasis on network security and privacy.

10. A list of my education, employment history, professional experience, consulting history, and publications in my curriculum vitae attached as an exhibit.

III. INFORMATION CONSIDERED

11. In forming the opinions I express here, I considered the '251 Patent, the Petition, the Exhibits filed in this proceeding (including the Declaration of David B. Lett, Petitioner's expert), and all documents and other information referenced or cited herein. In addition, I relied on my professional experience in the relevant field, including information that would have been well-known by a person of ordinary skill in the art at the time of the invention.

IV. LEGAL STANDARDS APPLIED

12. In forming my opinions and considering the patentability of the claims of the '251 patent, I am relying upon legal principles that counsel has explained to me.

13. I understand that the patentability of each claim in a patent is evaluated independently of the other claims. For an invention claimed in a patent to be found patentable, it must be, among other things, both new and not obvious in light of what came before it. Patents and publications that predated the invention are generally referred to as “prior art.”

14. I understand that in this proceeding the burden is on the party asserting unpatentability to prove it by a preponderance of the evidence. I understand that “a preponderance of the evidence” is evidence sufficient to show that a fact is more likely than not. I also understand that certain aspects of patentability and patent claim interpretation rely on the perspective of a so-called “person of ordinary skill in the art.” I have been informed and understand that a person of ordinary skill in the art is a hypothetical person who is presumed to be aware of all the pertinent information that qualifies as prior art. A person of ordinary skill in the art thinks conventionally; this hypothetical person may make inferences, but has only ordinary creativity.

15. I understand that a claim of a patent, in order to be patentable, must recite a new invention in view of a single “prior art” reference. I understand that the

law governing anticipation is based on authority that precedes the America Invents Act (AIA), since the '251 patent was filed prior to the March 16, 2013. It is my understanding that “anticipation” requires a single prior art reference that discloses each and every element of a claimed invention, as those elements are arranged in each claim. The disclosure of the “prior art” is read as it would have been understood by a person of ordinary skill in the art at the time of the invention.

16. Based on explanations provided to me, I understand that a patent may be invalid over “prior art” that was publicly known or used in the United States by someone other than the inventor if it was in public use or on sale in the United States.

17. I have been instructed that a claim limitation is said to be “expressly disclosed” if a person of ordinary skill in the art would have understood the express disclosure (including but not limited to text and figures) of the reference as describing the subject matter of that limitation. If a limitation is not expressly disclosed, it may nevertheless be ‘inherently disclosed’ if the missing limitation would have been necessarily present in the allegedly anticipatory reference. To be “inherent,” I understand that the alleged “inherent” teachings of the art must necessarily be present; it is not enough that it is “merely probably or possibly present.” Further, I understand that a patent challenger may not rely on inherency to change the otherwise express statements in an alleged prior-art reference. Rather,

“inherency” is appropriate if the reference is silent as to the allegedly inherent disclosure.

18. I understand that a claim can be unpatentable in view of prior art if the differences between the subject matter claimed and the prior art are such that the claimed 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. I understand that patentability cannot be negated by the manner in which the invention was made. Patentable inventions can be the result of careful, deliberate experimentation; there need not be any flash of insight or “Eureka!” moment.

19. I also understand that the relevant inquiry into obviousness requires consideration of four factors: [A] The scope and content of the prior art; [B] The differences between the prior art and the claims at issue; [C] The knowledge and level of skill of a person of ordinary skill in the pertinent art; and [D] Objective factors indicating obviousness or nonobviousness which may be present in any particular case, such factors including commercial success of products covered by the patent claims; a longfelt need for the invention; failed attempts by others to make the invention; copying of the invention by others in the field; unexpected results achieved by the invention; praise of the invention by the infringer or others in the field; the taking of licenses under the patent by others; expressions of surprise by

experts and those skilled in the art at the making of the invention; and the patentee's proceeding contrary to the accepted wisdom of the prior art.

20. I understand that the obviousness standard is defined at 35 U.S.C. § 103(a). I understand that a first step in analyzing obviousness is to determine whether the prior art, including the knowledge of one skilled in the art at that time, discloses each and every element of the recited claim. I understand that, when combining two or more references, one should then also consider whether there was a teaching or suggestion, or whether there was a motivation, to combine the references so as to avoid impermissible hindsight. I have been informed that the application of the teaching, suggestion or motivation test should not be rigidly applied, but rather is an expansive and flexible test. For example, I have been informed that the common sense of a person of ordinary skill in the art can serve as motivation for combining references. I understand that where a proposed modification to a prior art reference would render its disclosure inoperable for its intended purpose or would fundamentally change its principle of operation, there may not be a sufficient motivation to combine the prior art references in the manner suggested.

21. I understand that the content of a patent or other printed publication (i.e., a reference) should be interpreted the way a person of ordinary skill in the art would have interpreted the reference as of the effective filing date of the patent

application for the '251 patent. Assertions of obviousness based on a single reference require proof that it would have been obvious to modify that reference to arrive at the patented invention unless the disclosure of the reference is sufficient to anticipate.

22. I have been informed and understand that obviousness should be analyzed from the perspective of a person of ordinary skill in the relevant art.

V. LEVEL OF ORDINARY SKILL IN THE ART

23. Petitioner's declarant, David B. Lett, expressed the opinion that:

“a person of ordinary skill in the art of the '251 Patent at the time of the alleged invention of the '251 Patent would have a degree in computer or electrical engineering, computer science, information systems, or a similar discipline, along with three-to-four years of experience with the design and/or implementation of network-based content delivery systems, such as video-on demand (VOD), cable systems, and Internet video streaming.”

Ex. 1002, 16–17. For the purposes of this declaration I have been asked to apply this definition of a person of ordinary skill in the art. I have not been asked to offer an opinion on the level of ordinary skill in the art at this time, and if asked to do so in the future, I may offer a different opinion than the one I apply here.

VI. SUMMARY OF PETITIONER'S GROUNDS

24. It is my understanding Petitioner asserts 12 grounds against the challenged claims. As relevant here, each ground relies on Redford or the combination of Redford and Gonze. In particular, each ground relies on Redford and/or Gonze for the step of “converting, by the server system, the universal playback control command into corresponding programming code.” ’251 patent 11:43–45; Pet. 33–35. In my opinion these references do not disclose this limitation. The other independent claims of the ’251 patent likewise require the server system to convert playback control commands to programming code and are similarly not taught by Redford or Gonze. ’251 patent, 12:50–60 (independent claim 11), 14:5–15 (independent claim 22).

VII. THE CHALLENGED CLAIMS WOULD NOT HAVE BEEN OBVIOUS OVER REDFORD OR GONZE

25. It is my opinion that neither Redford nor Gonze teach “converting, by the server system, the universal playback control command into corresponding programming code.” ’251 patent, 11:43–45.

26. The Redford Reference teaches a method, system, and non-transitory computer-readable storage comprising instructions for responding to video requests by displaying information on a TV remote and video on the TV. It describes a handheld device and television, wherein the television automatically displays a series of frames, and the handheld device displays information based on the video. Ex. 1005, Abstract. The “frames” are still images. Ex. 1005, 16:40–47, 21:20–37. A

computer system, separate from the handheld device and television, keeps track of each frame in order to synchronize the display of related content on the handheld device, such as an advertisement for a product shown in the content on the television. Ex. 1005, Fig. 6A.

27. The Gonze Reference discloses a system and method for media player playlist creation and editing within a browser-interpretable document. The browser-interpretable document comprises a user interface area and a display window, and a plurality of content entries. Ex. 1006, Abstract. The browser-interpretable document facilitates control of media players by a graphical user interface, for example through a “JPEG-encoded image” or a “collection of textual elements, such as, without limitation, ‘<--’, ‘<-’, ‘Stop’, ‘Play’, ‘||’, ‘->’, ‘-->’.” Ex. 1006, [0053].

28. I have reviewed the Petition arguments, and Mr. Lett’s opinion, that Redford discloses the limitations of the “converting” step of claim 1 (referred to as step [1.G]). *See* Pet., 33–35; Ex. 1002 § 11.1.7. I disagree with Petitioner’s and Mr. Lett’s conclusion. The cited teachings of Redford do not teach that the claimed “converting” is performed in the computer system 250 that Petitioner identifies as the “server system” of the claims.

29. Mr. Lett points to Redford’s teachings about an “iLook set-top SDK API” for this limitation. Ex. 1002 ¶¶ 222–224. In particular, Mr. Lett relies on Redford’s description of “a function VideoPlay” in the iLook set-top SDK API that

supports various streaming protocols. *See id.*; Ex. 1005, 40:56–58. Mr. Lett asserts that “a ‘VideoPlay’ command” is the “corresponding programming code” of the claims. Ex. 1002 ¶ 223.

30. These teachings cannot support Mr. Lett’s conclusion that Redford discloses the required “converting, by the server system” because Redford expressly discloses that the API that comprises the “function VideoPlay” is running somewhere else. Redford teaches that the iLook set-top SDK API runs on circuitry of the set top box device in the user’s home. Ex. 1005, 40:21–27, 30:23–41, 11:66–12:8. Mr. Lett identifies Redford’s internet-enabled television 303, which comprises the set top box that runs the API in question, as the “display device” of the ’251 patent claims. Ex. 1002 ¶ 161 (display device identification); Ex. 1005, 11:66–12:8 (internet-enabled television 303 comprises set top box); *see also* Pet., 11–12. On the other hand, Mr. Lett identifies the computer system 250 of Redford as the “server system.” Ex.1002 ¶ 184 (server system identification); *see also* Pet., 11–12. Moreover, the name of the iLook ***set-top*** SDK API clearly indicates that it operates on the ***set-top*** box. Nothing in Redford’s teachings supports a different conclusion.

31. I also disagree with Mr. Lett’s suggestion that, because the display device uses “varying implementations” of RTSP (Real Time Streaming Protocol) players, “a POSITA would have known from reading Redford that computer system 250 converts the ‘PlayVideo’ command, which was sent from handheld device 200,

to a particular ‘VideoPlay’ command.” Ex. 1002 ¶ 224. Redford contradicts this assertion. Redford only teaches “varying implementations” of RTSP and corresponding “several implementations of VideoPlay” on the set top box. Ex. 1005, 40:56–41:2. It is my opinion a POSITA would have known from reading the Redford Reference the “PlayVideo” command would only be correlated to a particular implementation of “VideoPlay” by the “iLook set-top SDK API” on the set top box of the internet-enabled television.

32. In addition, the claims require that the “corresponding programming code” be stored in a database associated with the server system for transmission to or retrieval by the display device. Redford never discloses the function VideoPlay being stored for transmission to or retrieval by the alleged “display device” because that function is part of an SDK API already running on the set top box, which is part of Redford’s “internet-enabled television 303,” the alleged “display device,” as I discuss above.

33. Mr. Lett does not even assert that Redford discloses that the function VideoPlay (which he incorrectly calls a “command”) is stored for transmission to or retrieval by the display device. Ex. 1002 ¶¶ 227–228. Instead, Mr. Lett asserts that this limitation is met by storing a URL. *Id.* ¶ 228. A URL (universal resource locator) is a text string that specifies the location of a resource. The function VideoPlay is not a URL; it is a function executed by an SDK API running on the processor of a

set-top box. Redford does not disclose converting any command into the URL that Mr. Lett identifies as the “programming code” in the “storing” step, nor does Mr. Lett assert that such a disclosure exists. Ex. 1002 ¶¶ 227–228. Based on this and my review of Redford, it is my opinion that Redford does not disclose any “programming code” that is the product of the “converting” step and that is also stored in accordance with the “storing” step.

34. I also disagree with Mr. Lett’s suggestion that Gonze teaches “converting, by a server system.” Gonze teaches a browser-interpretable document on a single device—the client. Mr. Lett places Gonze’s browser-interpretable document on three devices of Redford, which is inconsistent with Gonze. First, he suggests Gonze’s browser-interpretable document is on a *playback device*, which would be the *television* of Redford: “Gonze discloses a system of using a playlist to make content available such that a playback device can request, receive, and present the content.” Ex. 1002 ¶ 225. Second, he suggests “Gonze’s playlist is received by *computer system* 250 from handled device 200, and the playlist include [sic] a universal playback control command.” Ex. 1002 ¶ 225. And third, he suggests the browser-interpretable document would be on the *handheld device* the user is interfacing with: “[t]he user’s interactions with the universal user interface elements (e.g., ‘<--’, ‘<-’, ‘Stop’, ‘Play’, ‘||’, ‘->’, ‘-->.’, Ex. 1006, [0053]) may be monitored and commands associated with the interactions may be sent to the loaded media

player.” Ex. 1002 ¶ 225. He thus places Gonze’s browser-interpretable document on Redford’s handheld device 200, its computer system 250, and its television 303. A POSITA would have understood that Gonze proposes a solution within the client device, and neither Petitioner nor Mr. Lett offers any reason or motivation for modifying Gonze’s solution by duplicating the browser-interpretable document on two other devices.

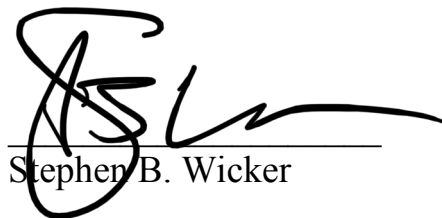
35. Moreover, nothing in Gonze teaches that conversion would occur on a specific part of a three-part architecture. Thus, a POSITA would not have understood where such conversion occurs in the Petitioner’s alleged combinations with Gonze.

VIII. CONCLUSION

36. The Redford Reference and Gonze Reference do not render obvious the ’251 Patent.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on April 24, 2024, in Chicago, IL.



Stephen B. Wicker