NOTE: This disposition is nonprecedential.

## United States Court of Appeals for the Federal Circuit

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., CISCO SYSTEMS, INC., AVAYA, INC., LG ELECTRONICS, INC., TOSHIBA CORP., VIZIO, INC., HULU, LLC, VERIZON SERVICES CORP., VERIZON BUSINESS NETWORK SERVICES INC., Appellants

v.

STRAIGHT PATH IP GROUP, INC., Appellee

 $\begin{array}{c} 2016\text{-}2004\text{, } 2016\text{-}2008\text{, } 2016\text{-}2009\text{, } 2016\text{-}2019\text{, } 2016\text{-}2020\text{, } \\ 2016\text{-}2021\text{, } 2016\text{-}2112\text{, } 2016\text{-}2113\text{, } 2016\text{-}2114\text{, } 2016\text{-}2182\text{, } \\ 2016\text{-}2183\text{, } 2016\text{-}2184 \end{array}$ 

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2014-01366, IPR2014-01367, IPR2014-01368, IPR2015-00196, IPR2015-00198, IPR2015-00209, IPR2015-01006, IPR2015-01007, IPR2015-01011, IPR2015-01397, IPR2015-01398, IPR2015-01400.

Decided: June 23, 2017

SAMSUNG ELECTRONICS CO., LTD. v. STRAIGHT PATH IP GROUP, INC.

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Before PROST, *Chief Judge*, O'MALLEY and WALLACH, *Circuit Judges*.

PROST, Chief Judge.

Samsung Electronics America, Inc.; Samsung Electronics Co., Ltd.; Cisco Systems, Inc.; Avaya, Inc.; LG Electronics, Inc.; Toshiba Corp.; VIZIO, Inc.; Hulu, LLC; Verizon Services Corp.; and Verizon Business Network Services Inc. (collectively, "Appellants") appeal from the final written decisions of the Patent Trial and Appeal Board ("Board") in inter partes review proceedings of U.S. Patent Nos. 6,108,704 ("704 patent"); 6,009,469 ("469 patent"); and 6,131,121 ("121 patent").<sup>1</sup> In its final written decisions, the Board upheld the validity of all instituted claims reciting the limitation "is connected to the computer network" or the counterpart claim phrases that the parties agreed bear the same meaning. Because the Board did not err in its findings or conclusions, we affirm.

<sup>&</sup>lt;sup>1</sup> The Board joined IPR2015-00196 (the '121 patent), IPR2015-00198 (the '469 patent), IPR2015-00209 (the '704 patent), IPR2015-01397 (the '121 patent), IPR2015-01398 (the '704 patent), and IPR2015-01400 (the '469 patent) and issued an identical final written decision (LG Board Decision) in each case on May 9, 2016. The Board also joined IPR2014-01366 (the '704 patent), IPR2014-01367 (the '469 patent), IPR2014-01368 (the '121 patent), IPR2015-01006 (the '121 patent), IPR2015-01007 (the '469 patent), and IPR2015-01011 (the '704 patent) and issued an identical final written decision (Samsung Board Decision) in each case on March 4, 2016.

А

The '704 patent, entitled "Point-to-Point Internet Protocol," generally relates to establishing a point-to-point communication link. LG Elecs. Inc. v. Straight Path IP Group. Inc., Nos. IPR2015-00196, IPR2015-00198, IPR2015-00209. IPR2015-01397, IPR2015-01398. IPR2015-01400, 2016 WL 2640549, at \*2 (P.T.A.B. May 9, 2016) (LG Board Decision) (citing '704 patent col. 2 ll. 53-57).<sup>2</sup> The '469 patent and the '121 patent are continuations-in-part of the '704 patent. Id. The specifications for the three challenged patents are largely identical. Id. The '469 patent, entitled "Graphic User Interface for Internet Telephony Application," and the '121 patent, entitled "Point-to-Point Computer Network Communication Utility Utilizing Dynamically Assigned Network Protocol Addresses," both relate to facilitating audio communications over computer networks. Id. (citing '469 patent col. 1 ll. 54–57; '121 patent col. 1 ll. 55–57).

Each patent explains that a first processing unit automatically transmits its associated e-mail address and IP address to a connection server. *Id.* The connection server stores the addresses in a database and, in so doing, establishes the first processing unit as an active on-line party available for communication. *Id.* The first processing unit sends a query to the connection server, which searches the database to determine whether a second processing unit is active and on-line. *Id.* If the callee is active and online, the connection server sends the IP address of the

<sup>&</sup>lt;sup>2</sup> See also Samsung Elecs. Co., Ltd. v. Straight Path IP Group, Inc., Nos. IPR2014-01366, IPR2014-01367, IPR2014-01368, IPR2015-01006, IPR2015-01007, IPR2015-01011, 2016 WL 861393, at \*2 (P.T.A.B. Mar. 4, 2016) (Samsung Board Decision).

callee from the database to the first processing unit, i.e., performs a point-to-point Internet protocol communication. *Id.* The first processing unit then directly establishes the point-to-point Internet communication with the callee using the retrieved IP address. *Id.* 

Claim 1 of the '704 patent, which is representative of the claims at issue in this appeal, recites:

1. A computer program product for use with a computer system, the computer system executing a first process and operatively connectable to a second process and a server over a computer network, the computer program product comprising:

a computer usable medium having program code embodied in the medium, the program code comprising:

program code for transmitting to the server a network protocol address received by the first process following connection to the computer network;

program code for transmitting, to the server, a query as to whether the second process *is connected to the computer network*;

program code for receiving a network protocol address of the second process from the server, when the second process *is connected to the computer network*; and

program code, responsive to the network protocol address of the second process, for establishing a point-to-point communication link between the first process and the second process over the computer network.

'704 patent col. 11 ll. 2–22 (emphases added to highlight the claim limitation at issue).

In an earlier-filed petition for inter partes review, Sipnet EU S.R.O. challenged claims of the '704 patent over the same prior art references that are at issue in this appeal. J.A. 34745–807. In the Sipnet IPR, the Board concluded that claim 1 of the '704 patent, among others, was unpatentable as anticipated by each of the prior art references. J.A. 42873. Straight Path appealed that decision on the grounds that the Sipnet Board misconstrued the claim term "is connected to the computer network" to mean "active and on-line at registration." Straight Path IP Grp., Inc. v. Sipnet EU S.R.O., 806 F.3d 1356, 1360 (Fed. Cir. 2015). This court rejected the Board's claim construction and construed "is connected to the computer network" to mean "is connected to the computer network at the time that the query is transmitted to the server." Id. at 1363. We then remanded for the Board to apply this claim construction in considering the prior art. Id.

In construing the disputed claim limitation, this court first looked to the plain meaning of the claim language and concluded that "[t]he present tense 'is' in 'is connected to the computer network' plainly says that the query transmitted to the server seeks to determine whether the second unit is connected *at that time*, i.e., connected at the time that the query is sent." *Id.* at 1360 (emphasis added). The query, we explained, does not seek to determine "whether [the device] was connected or whether it is still registered as being connected even if that registration information is no longer accurate." *Id.* We thus concluded that the claim language is not satisfied by "a query that asks only for registration information, regardless of its current accuracy." *Id.* 

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The court concluded that the specification does not provide a basis for adopting a construction that contradicts the plain meaning of the claim language. Id. at We determined that the specification "does not 1361. expressly or implicitly redefine 'is connected' to mean 'is still registered, once was connected, and may or may not still be connected," and thus, it does not override the plain meaning of the claim language. Id. The plain meaning is, however, "positively confirmed by the prosecution history." Id. at 1362. We noted that the assignee of the '704 patent made the very distinction that was at issue on appeal-between still being registered and actually being online-to overcome a rejection during reexamination. Id. at 1362–63. Specifically, the court relied on the assignee argument that:

[The prior art] does not teach that an active name in [the prior art server] is synonymous with "whether the second process is connected to the computer network." An active name simply refers to a name that has been registered and that has not yet been de-registered, independent of whether the associated computer is or is not connected to the computer network.

*Id.* at 1363 (citing Reply to Office Action of August 27, 2009, Re-examination of Patent No. 6,108,704, Control No. 90/010,416 (dated Nov. 27, 2009) at 14–15). The examiner adopted the assignee's argument and confirmed the claims. *Sipnet*, 806 F.3d at 1363.

## В

Returning to the case before us, Appellants requested inter partes review of claims 1, 11–12, 14, 16, 22–23, 27, and 30–31 of the '704 patent, claims 1–3, 5–6, 9–10, 14, and 17–18 of the '469 patent, and claims 3–4, and 6–14 of the '121 patent.<sup>3</sup> LG Board Decision at \*3. The Board instituted inter partes review on all of the challenged claims. *Id.* at \*1.

Appellants challenged the claims at issue under 35 U.S.C. § 103(a) over a combination of references. The two references at issue here are the Microsoft Windows NT 3.5, TCP/IP User Guide (1994) ("WINS") and The Open Group, Technical Standard, Protocols For X/Open PC Interworking: SMB, Version 2.0 (1992) ("NetBIOS"). Id. at \*8. The Board made a number of undisputed findings as to the scope and content of the prior art. The Board found that WINS and NetBIOS both describe name server technology. Id. at \*9-10. In particular, NetBIOS is a software interface that allows applications on different computers to communicate within a computer network, such as a local area network or the Internet. Id. at \*10. The NetBIOS name service is a collection of procedures through which nodes of a network acquire, defend, and locate the holders of NetBIOS names. Id. A node registers a name with the NetBIOS Name Server, which stores the registered name in a database. Id. A name query transaction can be initiated by an end-node in an attempt to obtain the IP address associated with a NetBIOS name. Id. If the NetBIOS Name Server has information regarding a queried node, the NetBIOS Name Server transmits a positive response. Id. If the NetBIOS Name Server does not have information regarding a queried node, the NetBIOS Name Server transmits a negative response. Id. Once the IP addresses have been found for a target name. a NetBIOS session service begins. Id. The NetBIOS session service involves directed (point-to-point) communications. Id.

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<sup>&</sup>lt;sup>3</sup> In the related inter partes reviews, petitioners challenged claims 6, 8, 10–11, and 13–14 of the '121 patent. Samsung Board Decision at \*3.

WINS is an implementation of NetBIOS. Id. at \*10. When a computer's name is registered with the Windows Internet Name Service ("WINS") server (which is a Net-BIOS server), the server accepts the entry with a timestamp, an incremental unique version number, and other information. Id. at \*9. "[O]nce a computer is registered with the WINS server . . . as active and on-line, the WINS server maintains a database of names and addresses as active and on-line by (1) releasing names once a computer is shut down properly, and (2) requiring a renewal time period in which a computer must reregister." Id. at \*10. WINS, however, also discloses that in response to name queries, "a mapping in the database does not ensure that the related device is currently running." J.A. 2336; LG Board Decision at \*10. WINS further explains that a "local WINS database should periodically be cleared of released entries and old entries that were registered at another WINS server but did not get removed from this WINS database for some reason." J.A. 2411: LG Board Decision at \*10.

Similar to the WINS reference, the Board found that the NetBIOS reference also discloses mechanisms for maintaining the accuracy of its name server database. LG Board Decision at \*11. In particular, the NetBIOS name server maintains a database of resource names through explicit name deletion, where the node specifies a deletion function, and implicit name deletion, which occurs when a node ceases operation. Id. NetBIOS also discloses a mechanism where the name server may correct the information stored after an incorrect response is provided to a requesting node. Id. In sum, the Board determined that the references disclose that the servers have information that a process "was" connected to the computer network, but that information may no longer be accurate, i.e., the process may no longer be connected to the computer network. *Id.* at \*10.

In its final decision, the Board adopted this court's prior claim construction of the phrase "is connected to the computer network" and construed it to mean "is connected to the computer network at the time that the query is transmitted to the server." *Id.* at \*5 (citing *Sipnet*, 806 F.3d at 1363). The Board determined that neither the WINS reference nor the NetBIOS reference discloses the claimed "is connected to the computer network" limitation. *Id.* at \*11. Accordingly, the Board concluded that Appellants failed to show by a preponderance of the evidence that any of the instituted claims reciting the limitation "connected to the network" (or the counterpart claim phrases) are unpatentable.<sup>4</sup> *Id.* at \*11.

Appellants timely appealed to this court. We have jurisdiction under 28 U.S.C. 1295(a)(4)(A).

Π

"The ultimate judgment of obviousness is a legal determination" based on underlying factual findings. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 427 (2007). This court reviews the Board's ultimate obviousness determinations de novo, and the underlying factual determinations for substantial evidence. Ariosa Diagnostics v. Verinata Health, Inc., 805 F.3d 1359, 1364–65 (Fed. Cir. 2015). The underlying factual findings include findings as to the scope and content of the prior art and the differences between the prior art and the claimed invention. Id. at 1364.

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<sup>&</sup>lt;sup>4</sup> Claims 1–2 and 5 of the '469 patent and claim 3 of the '121 patent do not have the disputed claim limitation and were cancelled by the Board. *Id.* at \*16. In the Samsung Board Decision, the Board also cancelled claim 10 of the '469 patent because it depends from a cancelled claim. Samsung Board Decision at \*13. These cancelled claims are not at issue on appeal.

On appeal, Appellants do not dispute the Board's claim construction of "is connected to the computer network." They do argue, however, that the Board's application of the claim construction was impermissible as a matter of law because the Board added a limitation not found in the claim when it purportedly required that the prior art references demonstrate "perfect accuracy" when querying whether a process is connected to the computer network. Appellants' Br. 36. In particular, they contend that the Board found that the prior art did not satisfy the disputed limitation only "because of a possible circumstance in which the WINS database 'may no longer be accurate,' and in which 'the NBNS may be incorrect." Id. at 39 (citing J.A. 96). Straight Path counters that "the Board understood that the problem with [the prior art] system is not that it is not 'perfectly accurate.' The problem is that it does not teach the ['is connected to the computer network'] limitation at all." Appellee Br. 41. The Board's determination is supported by substantial evidence, Straight Path argues, because "not only is the prior art not designed to keep track of current online status, it is not designed to check online status when responding to a query for a user's IP address." Id. We agree with Straight Path.

As an initial matter, the Board did not import an additional perfect accuracy limitation; it properly applied our construction of the "is connected to the computer network" limitation from *Sipnet* to the WINS and Net-BIOS references, concluding that neither reference tracks a user's online status. The Board determined that neither WINS nor NetBIOS will "determine whether the second process *is connected* to the [computer] network *at the time the query is transmitted to the server*," i.e., whether a user is on-line at the relevant time. LG Board Decision at \*10 (discussing WINS); *see id.* at \*11 (discussing NetBIOS). This is exactly what *Sipnet* requires. *See* 806 F.3d at 1363. Indeed, the Board never used the phrase "perfect accuracy." See generally LG Board Decision. Four of the Board's five references to "accuracy" or its variants appear in quotations of Sipnet that explain the errors of the Board's reversed construction, see *id.* at \*5, \*10, and the fifth immediately follows such a quotation and explains how our reasoning applies to WINS, *id.* at \*10. We will not fault the Board for following precedent.

The Board's findings that neither WINS nor NetBIOS determines whether a computer "is connected to the computer network at the time that the query is transmitted to the server" are supported by substantial evidence. The Board determined that the references disclose that the name servers have information that a process "was" connected to the computer network. *Id.* at \*10–11. This does not meet the claim limitation. In *Sipnet*, this court specifically rejected that "is connected" could mean "is still registered, once was connected, and may or may not still be connected." 806 F.3d at 1361. Accordingly, the Board correctly concluded that the references do not teach the claimed "is connected to the computer network."

Appellants also argue that the Board ignored teachings of the prior art, and its own findings, when it concluded that WINS and NetBIOS did not satisfy the "is connected to the network" limitation. They maintain that, because the Board found that both WINS and Net-BIOS disclose mechanisms for maintaining the accurate databases of names and addresses as active and on-line after registration, it was error for the Board to conclude that the references do not query whether a process "is connected to the computer network at the time that the query is transmitted to the server." We disagree.

WINS and NetBIOS both disclose querying a name server for the registered address of the callee computer. LG Board Decision at \*9–10. Although the Board found that both references disclose mechanisms for maintaining the accuracy of the addresses registered in these name server databases, *id.* at \*10–11, this is not sufficient. We have already explained that "a query that asks only for registration information, regardless of its current accuracy," will not satisfy the claim limitation. *Sipnet*, 806 F.3d at 1360. Thus, again, the Board's findings that neither WINS nor NetBIOS determines whether a computer "is connected to the computer network" are supported by substantial evidence.

We have considered Appellants' remaining arguments but find them to be unpersuasive. For the foregoing reasons, we affirm the Board's decision.

## AFFIRMED