

NOTE: This disposition is nonprecedential.

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

AIP ACQUISITION LLC,
Appellant

v.

CISCO SYSTEMS, INC.,
Appellee

**JOSEPH MATAL, PERFORMING THE FUNCTIONS
AND DUTIES OF THE UNDER SECRETARY OF
COMMERCE FOR INTELLECTUAL PROPERTY
AND DIRECTOR, U.S. PATENT AND TRADEMARK
OFFICE,**
Intervenor

2016-2371

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. IPR2015-
00307.

Decided: November 30, 2017

FRANCISCO ARTURO VILLEGAS, Cohen & Gresser LLP,
New York, NY, argued for appellant. Also represented by
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NATHAN K. KELLEY, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, for intervenor. Also represented by SARAH E. CRAVEN, MICHAEL SUMNER FORMAN, THOMAS W. KRAUSE.

Before MOORE, PLAGER, and STOLL, *Circuit Judges*.

STOLL, *Circuit Judge*.

AIP Acquisition LLC appeals from the Patent Trial and Appeal Board's decision invalidating as obvious several challenged claims of its U.S. Patent No. 7,269,247 in an inter partes review proceeding. According to AIP, the Board erred by relying on extrinsic evidence to conclude that the claim terms "internet protocol" and "Internet protocol" were not limited to the Internet Protocol of TCP/IP. Because both the intrinsic and extrinsic evidence support the Board's construction, we affirm.

I.

AIP owns the '247 patent,¹ which relates generally to systems and methods for interconnecting otherwise incompatible telephone networks using the Internet. *See* '247 patent col. 1 ll. 61–63 ("One objective of the invention is to provide communication between otherwise incompatible communication networks . . ."). The specification explains that the "Internet network" differs from other

¹ The '247 patent expired on October 11, 2014.

networks that use “frame relay switching and asynchronous transfer mode by using transmission control protocol/Internet program [TCP/IP], which is a set of protocols developed by the Department of Defense to link dissimilar computers across a variety of other networks and protocols.” *Id.* at col. 7 ll. 34–39; *see also id.* at col. 7 ll. 45–51. Both parties agree that the specification should refer to “Internet protocol” instead of “Internet program.” *See* Oral Arg. at 1:31–48, 20:52–21:16, <http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2016-2371.mp3>.

One application of the invention enables the Internet or other data network to function like a telecommunications network by permitting callers “to dial anywhere in the world for the price of a local access and service fee and avoid using long distance carriers.” ’247 patent col. 6 ll. 35–39. To make such a call, the calling party dials a local system, which prompts the calling party to enter the called party’s number or identification. The calling party is then connected to the called party “over the Internet or other data network, such as by connecting them via a node through a local call or through other networks.” *Id.* at col. 6 ll. 44–46. For instance, “a calling party may access a node that converts the [voice] transmission into data to support the network that it chooses [I]t may [then] connect to another node that converts the transmission [back] into voice and then connects the communication into a local call to the called party” *Id.* at col. 6 ll. 47–53.

Representative claims 1 and 16 recite these improvements and are reproduced below:

1. A method for communication between two access devices via one or more networks, comprising the steps:

- receiving a transmission in a first format through a first communication network from a first access device, the

first format comprising a telecommunication protocol for establishing and transmitting voice communication for a phone call in one of a digital telephone network, an analog telephone network, and a cellular network;

performing a first conversion converting the transmission from the first format to a second format, *the second format being internet protocol*;

sending the converted transmission through a second communication network, the second communication network being the Internet, for reception by a second access device; and

performing a second conversion further converting the converted transmission from the second format to a further format suitable for the second access device, wherein the first access device and the second access device comprise telecommunication nodes, and said further format comprises said first format or another telecommunication protocol.

....

16. A system for transmitting communications from a calling party to a called party, comprising a communication node accessible by the calling party using a first network, said node being a telecommunication node configured for receiving a transmission in a first format from the calling party, converting the transmission received from the calling party from the first format to a second format, and transmitting the converted transmission through the Internet to a further

node capable of connecting to the called party on a further network, wherein said first format comprises a telecommunication protocol for establishing and transmitting voice communications for phone calls in one of a digital telephone network, an analog telephone network, and a cellular network, and *wherein said second format is Internet protocol.*

Id. at col. 15 ll. 39–61, col. 16 ll. 38–52 (emphases added).

Cisco petitioned for IPR of claims 1–29 of the '247 patent. The Board instituted review of claims 1–9, 11–24, and 26–29 on three grounds: 1) obviousness of claims 1–8, 12, 15–23, and 27–29 in view of Weinstein² and RFC 1190³; 2) obviousness of claims 9, 11, 13, 24, and 26 in view of Weinstein, RFC 1190, and Gurrie⁴; and 3) obviousness of claim 14 in view of Weinstein, RFC 1190, and ISI⁵. *See Cisco Sys., Inc. v. AIP Acquisition LLC*, IPR2015-307, 2016 WL 2909189, at *3 (P.T.A.B. May 18, 2016) (“*Board Decision*”). In its Final Written Decision, the Board concluded that the asserted grounds rendered all of the instituted claims unpatentable.

² Clifford J. Weinstein & James W. Forgie, *Experience with Speech Communication in Packet Networks*, 1 IEEE Journal on Selected Areas in Communications 963 (1983) (“Weinstein”).

³ Request for Comments 1190, *Experimental Internet Stream Protocol, Version 2 (ST-II)*, C. Topolcic ed. (1990) (“RFC 1190”).

⁴ Michael L. Gurrie & Patrick J. O’Connor, *Voice/Data Telecommunications Systems: An Introduction to Technology* (1986) (“Gurrie”).

⁵ Univ. of S. Cal. Info. Scis. Inst., 1982 Annual Technical Report: A Research Program in Computer Technology (1983) (“ISI”).

The Board began by attributing different constructions to “internet protocol” in claim 1 and “Internet protocol” in claim 16 based on the terms’ differing capitalization. It construed “internet protocol” as “a specific set of rules, procedures, or conventions relating to the format and timing of data transmission between two devices *on different networks*.” *Id.* at *7 (emphasis added). The Board then construed “Internet protocol” as “a specific set of rules, procedures, or conventions relating to the format and timing of data transmission between two devices *over the Internet*.” *Id.* (emphasis added). In reaching these constructions, the Board noted that the intrinsic evidence neither demonstrated the inventor’s intent to ascribe a certain definition to either claim term nor clarified the terms’ ordinary and customary meanings. The Board also noted that the extrinsic evidence made clear that neither term should be limited to a specific protocol. In addition, the Board rejected AIP’s arguments that various claim amendments and accompanying statements during prosecution of the patent were sufficient to disavow the claim scope that the Board attributed to the claims.

With respect to the first instituted obviousness ground, AIP argued that the Weinstein and RFC 1190 references did not disclose four separate claim limitations. The Board disagreed, noting that several of AIP’s arguments were based on claim construction positions that were not adopted by the Board. AIP’s remaining arguments did not persuade the Board because they focused on the failure of an individual reference to disclose a limitation when Cisco’s grounds for unpatentability relied on a combination of references to meet the claim limitations.

AIP also contended that an ordinarily skilled artisan would not have been motivated to combine Weinstein with RFC 1190. The Board disagreed, noting that RFC 1190 disclosed an updated version of the particular inter-

net protocol taught by Weinstein, which would have motivated a person of ordinary skill to combine Weinstein with RFC 1190 at the time of the invention.

AIP did not raise any other arguments for the claims beyond those presented for independent claims 1 and 16. After considering the entirety of the evidence, including AIP's arguments with respect to objective indicia, the Board held unpatentable all claims of the '247 patent for which it instituted review.

AIP appeals from the Board's Final Written Decision. We have jurisdiction pursuant to 35 U.S.C. § 141(c) and 28 U.S.C. § 1295(a)(4)(A).

II.

The Board construes claims of an expired patent pursuant to the standard articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1279 (Fed. Cir. 2017). *Phillips* requires that claim terms be given their ordinary and customary meaning as would be understood by an ordinarily skilled artisan at the time of the invention. *See* 415 F.3d at 1312–13. We review the Board's ultimate claim construction de novo and any underlying factual determinations that involve extrinsic evidence for substantial evidence. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1236 (Fed. Cir. 2016). 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, 229 (1938).

At issue are the Board's constructions of “internet protocol” and “Internet protocol.”⁶ AIP contends that both

⁶ These terms are referred to collectively as “I/internet protocol” or the “terms.”

terms should receive the same construction and urges us to conclude that the specification and prosecution history confine the terms' scope to a single protocol: the Internet Protocol, or "IP," of TCP/IP. We decline to do so for the reasons explained below.

A patent's claims are "of primary importance[] in the effort to ascertain precisely what it is that is patented," *Phillips*, 415 F.3d at 1312 (quoting *Merrill v. Yeomans*, 94 U.S. 568, 570 (1876)), and the claim language here supports the Board's construction. Claim 1, for example, recites converting the transmission from a first format to a second format, "the second format being internet protocol." '247 patent col. 15 ll. 48–49. Claim 16 is similar and requires converting the transmission from a first format to a second format, "wherein said second format is Internet protocol." *Id.* at col. 16 ll. 51–52. The patent applicant could have claimed a specific protocol, such as the IP of TCP/IP, perhaps by capitalizing the "i" in "internet" and the "p" in "protocol" in both claims or, more definitively, by reciting the "Internet Protocol of TCP/IP." It did not, however, and the use of lowercase letters suggests that "I/internet protocol" is not confined to any particular protocol.

The specification further supports the Board's conclusion that "I/internet protocol" should not be not limited to the IP of TCP/IP. Neither claim term is mentioned in the specification, which refers instead to "transmission control protocol/Internet program" and "transmission control protocol/Internet program TCP/IP." *Id.* at col. 7 ll. 36, 46. The specification explains that these phrases refer to a set of protocols developed by the Department of Defense that "link dissimilar computers across a variety of other networks and protocols." *Id.* at col. 7 ll. 37–39, 47–49. The specification's reference to a specific protocol—TCP/IP—stands in stark contrast to the claims' recitation of the generic terms "I/internet protocol," and confirms that the claims have a broader scope.

Extrinsic evidence can also inform the meaning of a claim term, and the extrinsic evidence cited by the Board here provides substantial evidence to support its factual determinations regarding the meaning of “I/internet protocol.” The Board recognized that the Weinstein prior art reference used “internet” and “internetwork” interchangeably. *Board Decision*, 2016 WL 2909189, at *7 (citing J.A. 1608–23). The Board further explained that internetworking referred to the transmission of data through different networks. *Id.* (citing J.A. 3437–39). Two common styles of internetworking were a connection-oriented concatenation of virtual circuit subnets and a datagram internet. J.A. 3437. In a virtual circuit network, multiprotocol routers—also referred to as gateways—were positioned between the disparate virtual circuit networks to convert the messages between the different protocols used by the disparate networks, J.A. 3437–38; similarly, in datagram networks, gateways were used between disparate networks to translate protocols between networks, J.A. 3438.

An alternative approach used an internet protocol, which is a “universal ‘internet’ packet” that all routers would recognize. *Board Decision*, 2016 WL 2909189, at *7 (citing J.A. 3439). An “IP” packet is described as one such packet “designed to be carried through many networks.” J.A. 3439. The Board relied on these teachings and the distinction drawn by the ’247 patent’s specification between the Internet and other types of internetworking, ’247 patent col. 7 ll. 34–39, to conclude that the “Internet is one example of internetworking and Internet Protocol is one specific ‘internet protocol.’” *Board Decision*, 2016 WL 2909189, at *7. And, although it was not relied on by the Board, the prior art expressly acknowledges the existence of more than one internet protocol at the time of the invention. *See, e.g.*, J.A. 1632 (noting that Internet Stream Protocol “is an internet protocol”). The Board also relied on Newton’s Telecom Dictionary, which defined a

“protocol” as “[a] specific set of rules, procedures or conventions relating to the format and timing of data transmission between two devices.” *Board Decision*, 2016 WL 2909189, at *7. Although a copy of the pertinent dictionary page was not included in the record, neither party disputes this definition on appeal.

The Board’s constructions of “I/internet protocol” flow logically from its fact findings. The Board combined its understanding of “internet” with the definition of “protocol” to construe “internet protocol” as “a specific set of rules, procedures, or conventions relating to the format and timing of data transmission between two devices *on different networks*.” *Id.* (emphasis added). Because the Board understood the capital-letter “i” in “Internet” to narrow the scope of “Internet protocol” relative to “internet protocol,” the Board construed it as “a specific set of rules, procedures, or conventions relating to the format and timing of data transmission between two devices *over the Internet*.” *Id.* (emphasis added).

AIP argues that the Board’s constructions are erroneous because a person of ordinary skill, interpreting the disputed terms in light of the intrinsic evidence, would have understood their ordinary meaning to be the IP of TCP/IP. To support its position that “I/internet protocol” is not broad enough to cover any protocols other than the IP of TCP/IP, AIP notes that the claims recite “I/internet protocol” instead of “an I/internet protocol.” According to AIP, the absence of an indefinite article in the claim language signifies that these terms are proper nouns referring to a specific protocol. AIP also relies on portions of the prosecution history to show that claims 1 and 16 each recited “an I/internet protocol” but were subsequently amended to remove the “an.” *See* J.A. 1080, 1126, 1128.

While the claim amendments might seem to weigh in AIP’s favor, the patent applicant’s arguments accompanying the claim amendments cut the other way. One por-

tion of the argument corresponding to the claim amendments states:

Independent claim 38 [issued claim 1] further recites that the transmission is converted to a second format *comprising* Internet protocol and sent via the Internet to a second access device. Support for this is shown in Fig. 8 which depicts converters A–F in a central node that sends transmissions to a global network of high capacity data networks *including* the Internet TCP/IP.

J.A. 1132 (emphases added). The use of “comprising” and “including” when discussing the claimed protocol casts significant doubt on AIP’s contention that “I/internet protocol” would have been understood by a person of ordinary skill as only referring to the IP of TCP/IP.

Next, AIP argues that the ’247 patent references TCP/IP every time it discusses protocols that can be used for Internet transmissions and, accordingly, the claim terms “I/internet protocol” should be limited to TCP/IP. *See* ’247 patent col. 7 ll. 34–39, 45–49; Fig. 8. As we explained above, the specification does not define “I/internet protocol” as the IP of TCP/IP, and we decline to commit “one of the cardinal sins of patent law—reading a limitation from the written description into the claims.” *Phillips*, 415 F.3d at 1320 (quoting *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001)). We are particularly reluctant to import a limitation from the specification into the claim language here because a parent application to the ’247 patent expressly claimed a method “wherein the selected data network uses Transmission Control Protocol/Internet Protocol.” J.A. 933.

For all these reasons, we agree with the claim construction adopted by the Board.

III.

AIP also claims that the Board violated the Administrative Procedure Act by raising a new invalidity theory on Cisco's behalf in its Final Written Decision. Whether the Board relied on a new ground of invalidity is a legal question subject to de novo review. *In re NuVasive, Inc.*, 841 F.3d 966, 970 (Fed. Cir. 2016).

Our examination of the record reveals no APA violation. Here, Cisco asserted that a person of ordinary skill would have been motivated to combine Weinstein with RFC 1190, to which AIP provided a counterargument in its Patent Owner Preliminary Response, J.A. 250, and its Patent Owner Response, J.A. 370–72. The Board's Final Written Decision explained that it was persuaded by Cisco's arguments regarding motivation to combine and rejected AIP's counterargument. *Board Decision*, 2016 WL 2909189, at *14. Therefore, the Board did not raise a new argument on Cisco's behalf. The Board's position with respect to AIP's counterargument also was not new: the Board's Institution Decision contained the exact same language that AIP complains about here. *Compare id.*, with *Cisco Sys., Inc. v. AIP Acquisition LLC*, IPR2015-307, 2015 WL 2441511, at *11 (PTAB May 20, 2015). This put AIP on notice and allowed it to respond both in its Patent Owner Response and during the oral hearing. Thus, we conclude that the Board did not commit an APA violation.

IV.

We have considered AIP's remaining arguments, including its obviousness arguments, and find them unpersuasive. The Board did not err in construing the disputed claim terms, and its rejection of AIP's counterargument did not violate the APA. Accordingly, we affirm.

AFFIRMED

COSTS

Costs to Appellee.