

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC.,
Petitioner,

v.

AIP ACQUISITION LLC,
Patent Owner.

Case IPR2015-00307
Patent 7,269,247 B2

Before JAMESON LEE, HOWARD B. BLANKENSHIP, and
JUSTIN BUSCH, *Administrative Patent Judges*.

BUSCH, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. BACKGROUND

On November 26, 2014, Cisco Systems, Inc. (“Petitioner”) filed a Corrected Petition (Paper 3, “Pet.” or “Petition”) requesting *inter partes* review of all claims (claims 1–29) of U.S. Patent No. 7,269,247 B2 (“the ’247 patent”) under 35 U.S.C. §§ 311–319. On May 20, 2015, the Board instituted an *inter partes* review of claims 1–9, 11–24, and 26–29 (the “claims under review”) on asserted grounds of unpatentability. Paper 9 (“Dec. on Inst.”), 33. AIP Acquisition LLC (“Patent Owner”) filed a Patent Owner Response (“PO Resp.”) on August 10, 2015. Paper 13. On October 31, 2015, Petitioner filed a Reply (“Pet. Reply”) to the Patent Owner Response. Paper 17. Oral hearing was held on January 27, 2016.¹

The Board has jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–9, 11–24, and 26–29 are unpatentable.

A. *Related Proceedings*

Petitioner identified the following district court actions in which the ’247 patent is involved: *AIP Acquisition LLC v. Verizon Commc’ns Inc.*, Civ. Action No. 14-00516 (D. Del.); *AIP Acquisition LLC v. Sprint Corp.*, Civ. Action No. 14-00514 (D. Del.); *AIP Acquisition LLC v. AT&T Mobility LLC*, Civ. Action No. 14-00513 (D. Del.); and *AIP Acquisition LLC v. Vonage Holdings Corp.*, Civ. Action No. 14-00002 (D. Del.). Pet. 1.

¹ The record includes a transcript of the oral hearing (“Hr’g Tr.”). Paper 27.

B. The '247 Patent (Ex. 1001)

The '247 patent, which expired on October 11, 2014, relates to methods and systems for allowing “communication between otherwise incompatible communication networks in a manner that is transparent to the calling party.” Ex. 1001, 1:61–63. For example, claimed methods allow the Internet, or another data network, to function like a telecommunications network. *Id.* at 6:35–37. Calling parties may dial remote locations for the price of a local access and service fee to have voice conversations with called parties in those locations and to avoid using long distance carriers. *Id.* at 6:37–41. In order to make such calls, a local system may be dialed via computer access or a regular telephone, which prompts the calling party for the called party’s telephone number or other identification. *Id.* at 6:41–44. The calling party then is connected to the called party over the Internet or another data network, such as by connecting the parties via a node through a local call or through other networks. *Id.* at 6:44–46. For example, a calling party may access a node that converts the telephone transmission (e.g., the voice transmission) into data supported by the network chosen by the node. *Id.* at 6:47–49. In this example, a network may connect to another node proximate to the called party that then converts the data transmission back into a voice communication and converts the voice communication into a local call to the called party with the called party node operated by an independent service provider located elsewhere, such as in another country. *Id.* at 6:49–53.

A method, as recited in the claims under review, is illustrated by the conceptual block diagram in Figure 9, reproduced below:

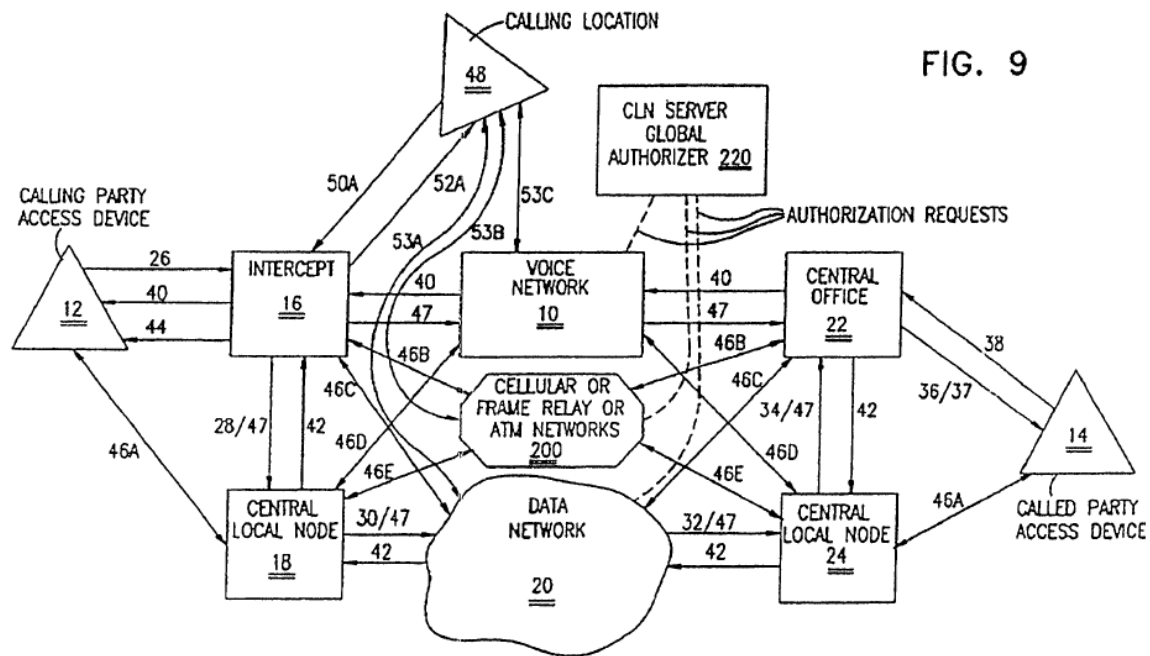


Figure 9 provides an overview of the transmission flow between a calling party and a called party. *See id.* at 6:35–55. In Figure 9 of the '247 patent, a conceptual block diagram depicts the principles of operation of the method, as recited in independent claim 1, for transmitting voice communications between a calling party and a called party over a data network or another network. *Id.* at 3:66–67, 14:41–60. The calling party at calling location 48 transmits a call to calling party access device 12 via intercept 16 over link 50A. *Id.* at 15:9–17. Intercept 16 may be part of central local node 18. *Id.* at 15:26–27. Local node 18 receives transmissions from access device 12, converts those transmissions from a first format (e.g., a telecommunication protocol) to an internet protocol for transmission over data network 20, and sends the converted transmissions over data network 20 in order to establish

and transmit voice communication for a phone call with called party access device 14. *Id.* at Fig. 9.

As an alternative to communicating through data network 20, additional two-way direct link connections 46A–E are depicted. *Id.* at 14:43–50. Through these connections, calling party access device 12 may route communications to called party access device 14 via either communications network 10² or another network 200, such as a cellular, Asynchronous Transfer Mode (ATM), or frame relay network. *Id.*; *see id.* at 7:34–39. Access device 14 may receive the voice communication via central local node 24 and/or central office 22. *Id.* at 15:18–22. Central local node 24 and central office 22 may be separate components. *Id.* at 15:28–29. The transmissions are converted from the internet protocol (in the case where the transmission was transmitted over data network 20) to another format suitable for reception by access device 14, such as the telecommunications protocol from which the transmissions were converted originally. *See id.* at 4:29–37.

C. Illustrative Claims

Independent claims 1 and 16 are the only independent claims, 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

² In Figure 9 of Exhibit 1001, communications network 10 is identified as “voice network 10.”

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.

D. Asserted Grounds of Unpatentability

We instituted an *inter partes* review based on Petitioner’s assertion that claims 1–9, 11–24, and 26–29 are unpatentable on the following grounds of unpatentability under 35 U.S.C. § 103(a):

References	Basis	Claim(s) Under Review
Weinstein ³ and RFC1190 ⁴	§ 103(a)	1–8, 12, 15–23, and 27–29
Weinstein, RFC1190, and Gurrie ⁵	§ 103(a)	9, 11, 13, 24, and 26
Weinstein, RFC1190, and ISI ⁶	§ 103(a)	14

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms of an expired patent are given their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art, at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of

³ Clifford J. Weinstein and James W. Forgie, *Experience with Speech Communication in Packet Networks*, IEEE JOURNAL ON SELECTED AREAS IN COMMS., SPECIAL ISSUE ON PACKET SWITCHED VOICE AND DATA COMMS, vol. SAC-1, no. 6, 963–980 (1983) (Ex. 1010) (“Weinstein”).

⁴ Request for Comments 1190, “Experimental Internet Stream Protocol, Version 2 (ST-II),” C. Toplocic ed. (1990) (Ex. 1011) (“RFC1190”).

⁵ Michael L. Gurrie and Patrick J. O’Connor, *Voice/Data Telecommunications Systems: An Introduction to Technology*, PRENTICE-HALL (1986) (Ex. 1012) (“Gurrie”).

⁶ University of Southern California Information Sciences Institute, “1982 Annual Technical Report: A Research Program in Computer Technology,” Report No. ISI/SR-83-23, Chapter 7 (March 1983) (Ex. 1014) (“ISI”).

record. We review the expired patent claims according to the standard applied by the district courts. *See In re Rambus*, 694 F.3d 42, 46 (Fed. Cir. 2012). Specifically, we apply the principles set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). A “claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history.” *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). Any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a special definition or other consideration, “limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993). For purposes of this decision, we find it necessary to provide an express construction only for “internet protocol” and “Internet protocol.”

1. Prosecution History and Disclaimer of Scope

Patent Owner argues the patent applicant disclaimed a broader scope of “internet protocol” and “Internet protocol” that would encompass anything other than the proper noun “Internet Protocol” that is one of the two specific protocols that makes up TCP/IP (Transmission Control Protocol/Internet Protocol). PO Resp. 10–17. Specifically, Patent Owner contends that, in responses to office actions, the patent applicant amended the claims to remove the article “an” that originally preceded the recitation of both “internet protocol” and “Internet protocol,” in the claims that eventually issued as claims 1 and 16, respectively, of the ’247 patent. *Id.* In other words, Patent Owner argues that the deletion of the instances of the

article “an” that originally preceded “internet protocol” and “Internet protocol” changed these terms so that they refer “to a *specific* protocol, not just *any* internet protocol.” *Id.* at 10–11, 14–15 (emphases added). Patent Owner further argues *the* protocol referred to by both “Internet protocol” and “internet protocol” is “the Internet Protocol (IP) of ‘transmission control protocol/Internet protocol’ TCP/IP shown in Fig. 8 of the ’247 patent specification.” *Id.* at 12, 17.

Patent Owner also contends the patent applicant’s arguments, submitted with its amendments that deleted the article “an,” explain that the claims were amended to refer to a specific protocol. PO Resp. 11, 15–17. The patent applicant’s statements accompanying the amendments included the following:

[(1)] 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 transmission to a global network of high capacity data networks *including* the Internet TCP/IP; and

(2)] Claims 38 [(issued claim 1)], 41, 44, 58 [(issued claim 16)], 62, 70, and 71 are directed to aspects of the embodiment of the present invention . . . as each of these claims requires . . . the transmission is converted to Internet protocol and sent using Internet protocol.

Id. at 11 (quoting Ex. 1006, 81), 15 (quoting Ex. 1006, 33) (emphases, numbering, and formatting added). Patent Owner asserts the amendment and patent applicant’s accompanying arguments demonstrate a clear

disavowal of scope, such that no further amendment of the claim text was required. *Id.*; Tr. 33:7–18.

In response to Patent Owner’s disclaimer arguments, Petitioner asserts that the patent applicant’s claim amendments and arguments do not constitute a clear and unmistakable disavowal or disclaimer. Pet. Reply 4–5 (citing *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1366–67 (Fed. Cir. 2012); *01 Communique Lab. v. LogMeIn, Inc.*, 687 F.3d 1292, 1297 (Fed. Cir. 2012)). Petitioner argues the patent applicant’s arguments that accompanied the amendments were merely restatements of the claim language, which do not represent a clear and unmistakable disclaimer of scope. *Id.* at 5. Accordingly, Petitioner contends that there is no basis to limit the scope of “internet protocol” or “Internet protocol” to *the* Internet Protocol that is part of TCP/IP. *Id.* at 5.

Although it is possible for a patent applicant to disclaim scope of a recited term, Petitioner is correct that disclaimer requires a clear disavowal of that allegedly ceded scope. *Purdue Pharma L.P. v. Endo Pharm. Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006) (“a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution”); *cf. Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1375 (Fed. Cir. 2008) (“Prosecution disclaimer does not apply to an ambiguous disavowal.”). At oral argument, Patent Owner acknowledged that “if you just had the deletion of the article ‘an,’ it may – may or may not leave some confusion,” but asserted the arguments submitted with the amendments “made clear . . . that either the lower case I, lower case P or the upper case I, lower case p internet protocol/Internet protocol” refer to *the* “Internet Protocol,” which is a part of “TCP/IP.” Tr. 32:1–18. Patent

Owner further conceded that the patent applicant did not explicitly articulate that the claim terms “internet protocol” and “Internet protocol” referred to the specific protocol that was the industry standard “Internet Protocol.” *Id.* at 35:14–17. In response to questions about patent applicant’s statements accompanying the subject amendments that the claims *comprise* or *include* TCP/IP, which indicate a broader scope not limited to only TCP/IP, Patent Owner argues that an ordinarily skilled artisan would have looked at the specification and seen that the only protocol the specification mentions is TCP/IP. *Id.* at 32:22–33:6.

Based on the facts and argument presented, there is not sufficient evidence to find a clear and unmistakable disavowal of claim scope. The only amendment to the claims pointed to by Patent Owner is the removal of the article “an,” which originally preceded each of the disputed phrases. Notably, the patent applicant did not elect to amend the claims to recite “the Internet Protocol.” With respect to the patent applicant’s argument in its responses to office actions, we agree with Petitioner that the phrasing appears to merely restate the language recited in the claims. We find nothing presented by Patent Owner clearly indicates the patent applicant intended to disavow any scope covered by the plain and ordinary meaning of the recited terms. Patent Owner has not pointed to any discussion by the patent applicant that “internet protocol” or “Internet protocol” was intended to be limited to one particular protocol (specifically the “Internet Protocol” that is part of TCP/IP). Accordingly, we find Patent Owner failed to demonstrate that the patent applicant disavowed any scope within the

ordinary and customary meaning of “internet protocol” or “Internet protocol.”

2. *Construction of “internet protocol” and “Internet protocol”*

As discussed above, Patent Owner has not demonstrated, on this record, that the patent applicant disavowed any scope of the ordinary and customary meaning of the phrases “internet protocol” and “Internet protocol” through amendment or argument in the prosecution history of the ’247 patent. Nevertheless, even if not disavowed, we look to the claims and specification to determine the proper scope of the ordinary and customary meaning of the recited phrases, as would be understood by a person of ordinary skill in the art, at the time of the invention.

Claim 1 recites converting a transmission from a first format to a second format, the second format being “internet protocol.” Claim 16 recites a “second format is Internet protocol.” In our Decision to Institute, we preliminarily 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.” Dec. on Inst. 12. We preliminarily construed “Internet protocol” as “a specific set of rules, procedures, or conventions relating to the format and timing of data transmission over the Internet.” *Id.* at 14.

Petitioner argues that the Board’s preliminary constructions of “internet protocol” and “Internet protocol” are the correct constructions, and should be maintained. Pet. Reply 3. Patent Owner urges the Board to construe both “internet protocol” and “Internet protocol” to have the same meaning. PO Resp. 23. Specifically, Patent Owner argues both terms

should be construed as “the ‘Internet Protocol (IP) of the ‘transmission control protocol/Internet protocol TCP/IP.’” *Id.*

Patent Owner’s primary argument for its proposed construction of both terms is that the deletion of the article “an” and the accompanying argument presented by the patent applicant during prosecution, as discussed above with respect to Patent Owner’s disclaimer argument, indicate that both “internet protocol” and “Internet protocol” are proper nouns referring to a specific protocol, namely the Internet Protocol that is a part of TCP/IP. PO Resp. 18–23. Patent Owner also asserts that a person having ordinary skill in the art would have understood “internet protocol,” recited in claim 1, to refer to the Internet Protocol (of TCP/IP) because that person “would understand that TCP/IP includes the Internet protocol (IP).” *Id.* at 19. Finally, Patent Owner argues the specification of the ’247 patent discloses that the Internet uses TCP/IP and, accordingly, supports Patent Owner’s proposed construction of “internet protocol” and “Internet protocol.” *Id.* at 19–20, 22.

The relevant portions of the specification of the ’247 patent identified by the parties state:

The Internet network differs from frame relay switching and asynchronous transfer mode by using transmission control protocol/Internet pro[tocol], which is a set of protocols developed by the Department of Defense to link dissimilar computers across a variety of other networks and protocols.

...

Both servers 60, 62 are networked using transmission control protocol/Internet pro[tocol] TCP/IP, which is a set of protocols that link dissimilar computers across a variety of other networks and protocols as conventionally used on local area networks,

minicomputers and mainframes, or are networked with a router in the case of an ATM.

Ex. 1001, 7:34–39, 7:45–51. Those portions of the specification refers specifically to “transmission control protocol/Internet pro[tocol] TCP/IP.” Other than the recitation in claim 1, the ’247 patent never references “internet protocol,” with a lowercase “i” and a lowercase “p.” The above-quoted sentences explain that TCP and IP, taken together, form a set of protocols that links dissimilar computers across various networks and protocols. Those sentences also explain that the Internet’s use of TCP/IP distinguishes the Internet from frame relay switching and ATM networks.

We find nothing, and neither Patent Owner nor Petitioner has pointed to anything, in the ’247 patent indicating that the inventor expressed a definition for “internet protocol” or “Internet protocol.” Additionally, the parties have not pointed to anything in the specification of the ’247 patent that adds clarity to the ordinary and customary meaning of “internet protocol” and “Internet protocol.” Therefore, we look to the extrinsic evidence submitted by the parties to aid our construction of “internet protocol” and “Internet protocol” according to their ordinary and customary meanings as would have been understood by an ordinarily skilled artisan at the time of invention of the ’247 patent.

According to Patent Owner, in 1996, internetworking was understood to be the transmission of data through different networks, using either “a connection-oriented concatenation of virtual circuit subnets [or] a datagram internet style.” Ex. 2013 ¶ 29 (quoting Ex. 2009, 401–403). Weinstein uses the terms “internet” and “internetwork” interchangeably. See Ex. 1010 *passim*. The evidence submitted in this proceeding explains that internetworking is communicating among dissimilar networks. See, e.g., Ex.

1010, 1 (“techniques have been developed for internetwork communication, among dissimilar nets”). Tanenbaum explains that, for internetworks comprised of concatenated virtual circuit networks, internetworking was accomplished through the use of multiprotocol routers (or gateways) between disparate virtual circuit networks. Ex. 2009, 8–9. The gateways convert the messages between the different protocols used by the disparate networks. *Id.* at 8. Datagram networks similarly use gateways between disparate networks and may translate protocols between networks. *Id.* at 9–10. Tanenbaum, however, explains that an alternate approach is to use “universal ‘internet’ packet[s]” that all routers would recognize and are “designed to be carried through many networks,” i.e., internet protocols. *Id.* at 10.

A “protocol” is “[a] specific set of rules, procedures or conventions relating to the format and timing of data transmission between two devices.” NEWTON’S TELECOM DICTIONARY 484 (11th ed. 1996) (Ex. 3001). Patent Owner argues that “TCP/IP protocols were developed in [the] 1970s to handle data communication over internetworks as more and more networks were connected to the ARPANET [Advanced Research Projects Agency Network].” Ex. 2013 ¶ 38.

The extrinsic evidence of record indicates that the Internet is one example of internetworking and Internet Protocol is one specific “internet protocol.” Ex. 2009, 10; Ex. 1001, 7:34–39. Accordingly, we construe internet protocol to be “a specific set of rules, procedures, or conventions relating to the format and timing of data transmission between two devices on different networks.”

Neither side has pointed to persuasive evidence that the patent applicant's use of different capitalization in different claims was merely oversight or error. Therefore, because there is a meaningful and logical way to distinguish the constructions of "internet protocol" and "Internet protocol" based on the selected capitalization of each phrase, we construe "internet protocol" and "Internet protocol" differently from each other. We have already discussed our construction of "internet protocol." Accordingly, we construe "Internet protocol" to be "a specific set of rules, procedures, or conventions relating to the format and timing of data transmission between two devices over the Internet."

Our constructions of both "Internet protocol" and "internet protocol" include the Internet Protocol that is part of TCP/IP and, thus, are consistent with the specification of the '247 patent. Moreover, those constructions are the ordinary and customary meaning that a person having ordinary skill in the art would have attributed to the disputed claim terms, in part because that person would have understood that "internet protocol," "Internet protocol," and "the Internet Protocol" are distinct phrases of increasingly narrow scope.

B. Submitted Evidence

1. Weinstein (Ex. 1010)

Weinstein is an article published in the December 1983 issue of IEEE Journal on Selected Areas in Communications. Weinstein describes research work sponsored by the United States' Defense Advanced Research Projects Agency ("DARPA") which began with experiments conducted over the Advanced Research Projects Agency Network ("ARPANET"). Ex. 1010, 1. The work continued as the ARPANET was connected to additional networks, including the wide-band packet satellite network (WB SATNET).

Id. The relevant structural details of the interconnected networks may be better understood by referencing Figure 9 of Weinstein, which is reproduced below.

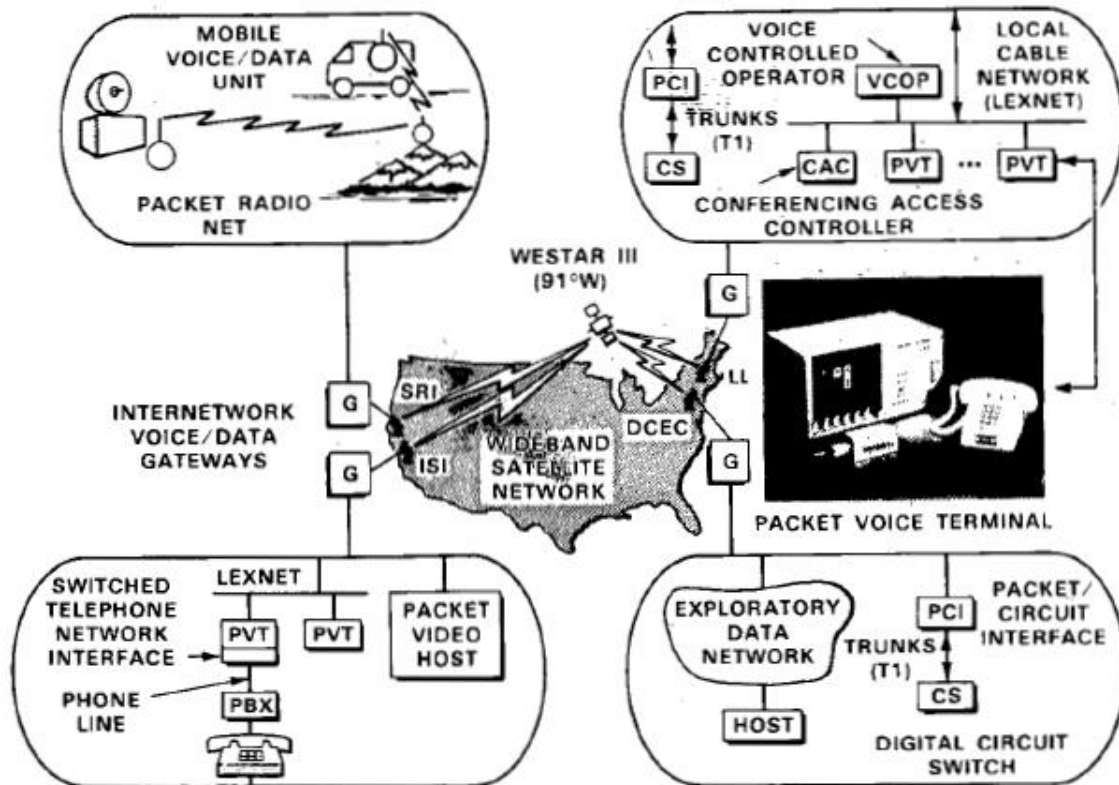


Figure 9 of Weinstein depicts a “[w]ide-band internetwork packet voice/data system, with illustration of primary local area facilities at each site.” *Id.* at 13.

In the lower left corner, Figure 9 depicts a telephone connected to a switched telephone network (STN). Figure 9 depicts three other separate networks (i.e., a packet radio network, an exploratory data network, and a local cable network), all of which are joined together, along with the STN, via a wide-band satellite network. *Id.* at 13–15. Weinstein discloses “significant benefits” for integrating voice with data including potential cost savings, enhanced service, voice communications among users on different

types of networks, control flexibility, and secure voice communications. *Id.* at 1.

Weinstein describes an Internet Stream Protocol (“ST”) which allows the interconnection of these four networks over a packet-based satellite network. *Id.* at 12. In the case of the STN, the signals used in the telecommunications network are converted into the ST protocol by the internetwork voice/data gateway. *Id.* at 11. The converted ST signal can then be transmitted through the wideband satellite network. *Id.* at 12.

2. RFC 1190 (Ex. 1011)

RFC1190 is a publication describing version two of the Internet Stream Protocol (“ST-II”), which is a revised version of the ST protocol used in Weinstein. RFC1190 is intended to be easier to implement and supports a wider range of applications. Ex. 1011, Abstract. By way of introduction, RFC1190 explains that the motivation for the original ST protocol was that internet protocol (“IP”) did not support voice applications. *Id.* at 7. RFC1190 states that ST “is an internet protocol at the same layer as IP” and “proved quite useful in several early experiments that involved voice conferences in the Internet.” *Id.*

RFC1190 explains that portions of the Internet support ST-II, and in areas where ST-II is not supported, the ST-II packets may be encapsulated in IP packets. *Id.* at 9. Encapsulating ST-II packets allows connections across Internet routers that do not support the ST protocol. *Id.* at 64. When encapsulating ST-II packets, performance on the Internet cannot be guaranteed. *Id.* at 65. However, Type-of-Service may be set to request specific service (e.g., low delay, high throughput, normal reliability). *Id.* at

64–65. Also, the Source Route Option may allow the originator of the data to pre-specify an explicit path to the target. *Id.* at 46.

3. *Gurrie (Ex. 1012)*

Gurrie consists of excerpted pages from a book, which relates to the technology used for transmitting data and voice in telecommunications systems, published in 1986. Ex. 1012. Gurrie describes how a private telephone network may include “a single switch that connects calls from one station to another within an organization.” *Id.* at 9. That single switch is referred to as a private branch exchange, or PBX. *Id.* The PBX allows “all the telephones within [an] organization to call one another and to reach the public network outside the organization.” *Id.* Gurrie describes various features and benefits of a PBX, including automatic route selection, in which the PBX will “automatically select a trunk in the most economical trunk group” for making a call. *Id.* at 12.

4. *ISI (Ex. 1014)*

ISI is a report published in March 1983, a portion of which describes a wideband communication project that would transmit digitized voice over ARPANET. Ex. 1014, 9. While the project concentrated on voice communication, the wideband communication project worked on integrated communication of several media, such as video. *Id.* The goal was to develop real-time multimedia teleconferencing using wideband packet switched networks. *Id.* at 10. The report discusses the STN interface to allow the telephone network to communicate with a packet voice system. *Id.* at 14, 16–18. The report also discusses experimentation with other media including facsimile. *Id.* at 22.

C. Patent Owner's Motion to Exclude Evidence (Paper 20)

Patent Owner moved to exclude certain evidence submitted by Petitioner in support of its Reply. Paper 20. Petitioner filed an opposition and Patent Owner filed a reply in support of its Motion to Exclude Evidence. Papers 22, 24. Patent Owner argued that each of the exhibits it moved to exclude should have been filed as supplemental evidence, essentially arguing that the exhibits were not within the proper scope of a reply. Paper 20, 1, *passim*. We explicitly told the parties that a motion to exclude evidence “should not include arguments alleging that a reply exceeds the scope of a proper reply.” Paper 11, 2. At oral argument, we discussed the impropriety of Patent Owner including those arguments in its Motion to Exclude Evidence in direct contravention of our directions and order. Tr. 3:16–7:20. At that time, Patent Owner withdrew its Motion to Exclude Evidence. *Id.* at 7:13–18. Accordingly, Patent Owner’s Motion to Exclude Evidence is not before us. We reviewed Petitioner’s Reply and determined that Petitioner’s arguments were properly responsive to issues raised by Patent Owner in its Response.

D. Asserted Obviousness of Claims 1–8, 12, 15–23, and 27–29 in View of Weinstein and RFC1190

Petitioner challenges claims 1–8, 12, 15–23, and 27–29 under 35 U.S.C. § 103(a) as obvious over Weinstein and RFC1190. Pet. 15–48. Petitioner asserts that Weinstein discloses all of the limitations of claims 1–8, 12, 15–23, and 27–29. *Id.* Petitioner relies on RFC1190 for teaching that Weinstein’s ST is an internet protocol and, further, a second version of ST (i.e., ST-II), which is an internet protocol. *Id.* at 17–18. Petitioner also asserts that it would have been obvious to one of ordinary skill in the art to

replace Weinstein's ST protocol with RFC1190's ST-II protocol because ST-II was a revision to ST and provided benefits, such as ease of implementation, support for a wider range of applications, eliminating the need for an explicit Access Controller, simplifying traffic stream management, and providing robustness and recovery mechanisms. Pet. 18–20 (citing Ex. 1011, 1, 8, 57–59, Ex. 1023, 26, Ex. 1031, 20). Upon reviewing the papers and evidence submitted by both parties, Petitioner has demonstrated, by a preponderance of the evidence, that the subject matter of claims 1–8, 12, 15–23, and 27–29 would have been obvious in view of the combination of Weinstein and RFC1190. Specifically, we find Petitioner has demonstrated that each limitation of claims 1–8, 12, 15–23, and 27–29 is taught by a combination of Weinstein and RFC1190. We determine, based on the entirety of the evidence presented by the parties, including Patent Owner's evidence on secondary considerations, that a person having ordinary skill in the art would have combined the relevant teachings from the references in a manner that results in the recited system, arranged as claimed. Accordingly, the subject matter of claims 1–8, 12, 15–23, and 27–29 would have been obvious in view of Weinstein and RFC1190. We discuss the contested issues below in more detail.

1. Contested Limitations - “internet protocol,” “Internet Protocol,” Converting a Transmission From a First Protocol to Internet/internet protocol, and “the Internet”

Petitioner argues that ST, described in Weinstein, is an internet protocol because “[t]he ST protocol is ‘designed to be compatible with IP [Internet Protocol],’ and ‘operates at an internet level.’” Pet. 17 (quoting Ex. 1010, 966, 974). Weinstein explains that “[t]he lower level protocol, which

has come to be named ‘ST,’ provides an efficient internet transport mechanism [and] operates at the same level in the protocol hierarchy as IP, the DoD standard internet protocol for datagram traffic.” Ex. 1010, 4. Additionally, Petitioner challenges claims 1–8, 12, 15–23, and 27–29 as obvious in view of the *combination* of Weinstein and RFC1190, and asserts that, to the extent Weinstein’s ST is not considered an internet protocol, ST-II, which is the successor protocol to ST disclosed by RFC1190, teaches an internet protocol. Pet. 17–20. Petitioner argues ST-II is a revised and updated version of ST, and ST-II is an internet protocol for the same reasons that ST is an internet protocol. *Id.* at 17. Petitioner further argues ST-II is an internet protocol because RFC1190 explicitly “states that the revised ‘***ST is an internet protocol.***’” *Id.* (quoting Ex. 1011, 7).

Petitioner also argues ST and ST-II are Internet protocols because “ST operates as an extension of IP, the packet arrives at the same network service access point that IP uses to receive IP datagrams,” and, thus, an ordinarily skilled artisan would consider ST and ST-II Internet protocols. Pet. 42–43 (quoting Ex. 1011, 75). Petitioner asserts RFC1190 teaches transmitting voice using internet/Internet protocol because RFC1190 discloses encapsulating ST-II packets using Internet Protocol. *Id.* at 17–18 (citing Ex. 1011, 64), 42–43 (citing Ex. 1011, 9, 75).

Patent Owner argues that neither Weinstein nor RFC1190 discloses “internet protocol,” as recited in claim 1, or “Internet protocol,” as recited in claim 16, or the conversion of voice transmissions into those protocols. PO Resp. 26–30. Patent Owner’s argument, however, relies on constructions of “internet protocol” and “Internet Protocol” that we have not adopted. Patent Owner acknowledged that ST-II is an internet protocol under our

preliminary construction provided in the Decision to Institute. Tr. 36:13–17. Our construction now is the same as our preliminary construction. Accordingly, after reviewing Petitioner’s arguments and in consideration of Patent Owner’s acknowledgment that ST-II is an internet protocol, as we have construed it, we find ST-II meets both the recited “internet protocol” and “Internet protocol.” We further find that “internet protocol” and “Internet protocol,” as we have construed them, also read on Weinstein’s ST protocol. Moreover, even under Patent Owner’s proposed construction, we find Petitioner has demonstrated that the combination of Weinstein and RFC1190 teaches using the Internet Protocol of TCP/IP at least because discloses encapsulating ST-II in IP packets.

Petitioner argues Weinstein discloses converting a signal from any one of a digital telephone network, an analog telephone network, and a cellular network to ST format, which is then transmitted over ARPANET and a wide-band satellite network. *Id.* at 22–29. Petitioner asserts that a person of ordinary skill in the art would have understood ARPANET and the wide-band satellite network to constitute a portion of the Internet. *Id.* at 16, 17 (citing Ex. 1008, 14–16; Ex. 1019, 57). Thus, Petitioner asserts Weinstein teaches “sending the converted transmission through . . . the Internet,” as recited in claim 1 and “a telecommunication node configured for . . . transmitting the converted transmission through the Internet,” as recited in claim 16. *Id.* at 16, 17, 42.

Patent Owner asserts RFC1190’s disclosure of encapsulating ST-II in IP packets does not meet the recited conversion of voice packets into internet protocol or Internet protocol. PO Resp. 30–31. Notably, however, Petitioner does not argue the encapsulation alone meets the recited

conversion. Rather, Petitioner argues conversion from various telecommunications transmissions into a packetized format and optional encapsulation in IP packets meets the recited conversion. Pet. 26–29; Pet. Reply 9–11. We agree with Petitioner that, under our construction of “internet protocol” and “Internet protocol,” the conversion from the various voice protocols to ST meets the recited conversion. Moreover, even under Patent Owner’s proposed constructions of “internet protocol” and “Internet protocol,” the steps in Petitioner’s proposed Weinstein-RFC1190 combination of converting the voice protocols to ST-II and encapsulating those packets into IP packets meets the recited conversion because the proposed combination converts voice transmissions from various telecommunication protocols to Internet Protocol (of TCP/IP) packets, using the two-step process of generating ST packets and encapsulating those packets in IP packets. Ex. 1010, 4; Ex. 1011, 7, 64.

Patent Owner also argues Weinstein does not disclose “the Internet.” PO Resp. 33–37. Once again, it is notable that Petitioner’s challenge to the claims relies on a combination of Weinstein and RFC1190, not Weinstein alone. Petitioner asserts there is no dispute that RFC1190 discloses encapsulation of ST-II packets into IP packets, which are sent over the Internet. Pet. Reply 17. Petitioner further argues Weinstein discloses sending data over networks that an ordinarily skilled artisan in 1982 would have understood to be the Internet. *Id.* at 17–18. Petitioner notes that each of the networks depicted in Weinstein “used the Internet Protocol [(of TCP/IP)] and was part of the Internet in the early 1980s.” *Id.* at 18. Petitioner also points to RFC1190’s disclosure that “the original ST protocol supported ‘voice conferences in the Internet,’” and “[t]he IP encapsulation

feature of ST-II enabled ‘interconnections across Internet routers that might not support the ST protocol.’” *Id.* (quoting Ex. 1011, 7; Ex. 1008, 57).

We agree with Patent Owner that, based on the evidence presented, the ARPANET did not exist at the time of invention of the ’274 patent and, therefore, did not become the Internet of that time. Nevertheless, a determination of what an ordinarily skilled artisan would have considered obvious at the time of invention of the ’274 patent must take into account the relevant teachings that Petitioner relies upon from Weinstein. The evidence of record indicates that a skilled artisan would have understood the specific networks making up the Internet at any particular point in time may change and that the Internet has evolved over time. Specifically, Weinstein explains that its networks used the Internet Protocol, and RFC1190 discloses encapsulating ST-II packets into IP packets. In light of the evolving nature of the Internet, we are persuaded that ARPANET and the wide-band satellite network, as disclosed in Weinstein, would have been understood by an ordinarily skilled artisan at the time of invention of the ’247 patent to be a part of the Internet. Thus, the evidence as a whole demonstrates that the combination of Weinstein and RFC1190 teaches sending voice packets over the Internet to a person having ordinary skill in the art. Accordingly, an ordinarily skilled artisan would have known to take Weinstein’s teachings of sending messages over networks, which comprised the Internet at the time Weinstein was published, and adopt and adapt those teachings as appropriate based on the networks comprising the Internet at the time of invention of the ’247 patent.

Accordingly, we are persuaded Weinstein discloses converting voice transmissions into internet/Internet protocol and sending those transmissions

over the Internet. RFC1190 provides evidence that artisans in the field understood ST packets were sent over *the Internet*. Compare Ex. 1011, 7 (“ST proved quite useful in several early experiments that involved voice conferences in *the Internet*”) (emphasis added), *with id.* (“ST incorporates the concept of streams across *an internet*”) (emphasis added). Moreover, the specific combination Petitioner proposes includes encapsulating ST packets in IP packets. A person having ordinary skill in the art would understand that the IP packets would then be sent over the Internet, because that is the stated purpose of encapsulating the data in IP packets. Ex. 1011, 64 (“ST packets may be encapsulated in IP to allow them to pass through routers that don’t support the ST Protocol.”).

2. *Petitioner’s Rationale for Combining the Teachings From Weinstein and RFC1190*

Petitioner asserts an ordinarily skilled artisan would have combined RFC1190’s ST-II protocol with the aspect of Weinstein involving transmission of voice over a data network because it would be merely applying a known technique (ST-II) to a known system (Weinstein) to yield predictable results. Pet. 17–19. Alternatively, Petitioner argues its proposed “combination is merely the simple substitution of one known element (ST protocol) for another (ST-II taught by RFC1190) to obtain predictable results (such as the ability to run over an un-modified Internet system).” *Id.* at 19.

Patent Owner asserts an ordinarily skilled artisan would not have combined ST-II with the Internet Protocol because ST-II over IP did not work. PO Resp. 48–56. Specifically, Patent Owner contends IP-encapsulated ST-II “packets fail to operate for its intended purpose,

namely, the transmission of intelligible audio/video communication.” *Id.* at 48–49. In support, Patent Owner cites testimony, from a witness who tested IP-encapsulated ST-II, that the quality of audio and video conferencing “was too poor to carry on a conversation of more than one or two random words or syllables and the video displayed was not moving frames but frozen picture images.” *Id.* at 49 (citing Ex. 2023 ¶¶ 73–75). Patent Owner also cited a document identifying certain deficiencies of using IP-encapsulated ST-II. *Id.* (quoting Ex. 2015, 137–38). Patent Owner further asserts the proposed combination of Weinstein and RFC1190 does not yield predictable results because Weinstein, which disclosed ST, was not compatible with RFC1190’s ST-II. *Id.* at 51–56. Patent Owner’s incompatibility argument can be broken down into two concepts: (1) because ST-II is not backward-compatible (i.e., nodes utilizing the original ST protocol could not communicate with nodes utilizing the ST-II protocol), the results of combining ST-II with the teachings from Weinstein are unpredictable (*id.* at 51–53); and (2) at the time of invention of the ’247 patent, a person having ordinary skill in the art would not have resurrected the then-defunct ARPANET hardware to implement ST-II on that hardware and, to the extent it was attempted, it would yield unpredictable results because of deficiencies in ST-II, which Patent Owner argues would require undue experimentation. *Id.* at 53–56.

To the extent Patent Owner’s arguments could be construed as a non-enablement argument, Patent Owner was unable to point to any clear articulation of such an argument in its Patent Owner Response. Tr. 41:3–43:24. Furthermore, at oral argument, Patent Owner removed any doubt by

conceding that it had no argument that RFC1190, which discloses ST-II, was non-enabled. *Id.* at 44:7–20.

To the extent Patent Owner is arguing that an ordinarily skilled artisan would have lacked motivation to combine ST-II with the Internet Protocol, that argument fails at least because the use of ST-II over IP is described within a single reference, RFC1190. Thus, no combination of references is required to provide the teaching of using ST-II over IP, and, accordingly, any argument against combining ST-II with the Internet Protocol is unfounded. Moreover, Petitioner's various references describing implementations of using ST-II over the Internet to transmit voice provide evidence in favor of a finding that it would have been obvious to transmit voice over the Internet using ST protocol.

That leaves, at most, an argument by Patent Owner that an ordinarily skilled artisan would not have combined Weinstein's asserted teachings (i.e., converting a voice transmission from a telecommunication protocol to ST, transmitting the ST packets over a data network, and converting the voice transmission back to a telecommunication protocol) with RFC1190's asserted teaching (using the ST-II protocol, either alone or encapsulated in IP packets, to transmit packets across a data network).

As discussed above, Petitioner has submitted evidence that internet engineers near the time of invention of the '247 patent were implementing and considering implementing ST-II in various systems for voice communication across the Internet. Ex. 1023, 1–4; Ex. 1031, 20–21; Ex. 1032, 20–21. Moreover, RFC1190 clearly indicates that ST-II is a revised version of ST, notwithstanding ST-II's lack of backward compatibility with the original ST protocol. Ex. 1011, 1; *see* Pet. 17. Petitioner also argues an

ordinarily skilled artisan would have been motivated to upgrade Weinstein's ST with RFC1190's ST-II because RFC1190 identifies various improvements and benefits of ST-II over ST. Pet. 18–19 (citing Ex. 1011, 1, 8). Petitioner asserts combining RFC1190 with Weinstein is merely the application of a known technique to a known system yielding predictable results. *Id.* at 19.

We are persuaded by Petitioner's arguments that an ordinarily skilled artisan would have considered upgrading ST to ST-II, the version available at the time of invention of the '247 patent. The fact that ARPANET no longer existed at the time of invention of the '247 patent does not render all of Weinstein's teachings unavailable to the hypothetical person of ordinary skill in the art. One would not have needed to "resurrect" the defunct ARPANET to take advantage of Weinstein's teachings regarding combining voice networks with data networks. Rather, one would have gleaned the knowledge necessary to create a system using a data network to transport voice communication as a bridge between conventional telephony networks. We also agree with Petitioner that the submitted evidence regarding other systems adopting ST-II supports a conclusion that a person having ordinary skill would have been capable of making any hardware changes required to implement ST-II.

3. Secondary Considerations – Long Felt Need and Failure of Others

Finally, Patent Owner argues the evidence "demonstrates that there were [sic] widespread efforts of skilled workers having knowledge of the prior art had failed to find a solution to the problem of transmitting voice communications in the Internet using an Internet protocol." PO Resp. 37–

38. Patent Owner further argues the decommissioning of ARPANET, Weinstein, and ST-II demonstrates “a long felt need and failure of others to produce the inventive system of the ’247 Patent.” *Id.* at 38.

Specifically, Patent Owner contends the failure of any particular system or user community to adopt ST-II demonstrates that it was a failure. PO Resp. 38–41. Patent Owner asserts that the ST-II specification was “difficult to implement” (*id.* at 42), “IP encapsulated ST2 could not support intelligible voice call” (*id.* at 43), and “IP encapsulation of ST2 packets did not support video conference call because the video displayed was not moving frames but random frozen images of a participant.” *Id.* at 44. Patent Owner argues that ST-II was never deployed over the Internet and that IP-encapsulated ST-II did not function sufficiently to carry on conversations of more than a few words or syllables but, notably, Patent Owner acknowledges that some voice transmissions were successfully transmitted as IP-encapsulated ST-II packets over the Internet. *Id.* at 43 (“he could not carry on a conversation of *more than* one or two random words or syllables”) (emphasis added). Thus, notwithstanding the evidence that some IP-encapsulated ST-II packets were successfully transmitted over the Internet, Patent Owner essentially argues that not enough packets were transmitted in sequence to carry on a meaningful conversation.

Patent Owner acknowledges it must demonstrate a long felt need and failure of others to “find a solution *for the problem solved by the appellant*” in order to show the failure of others. *See* PO Resp. 37 (quoting *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540 (Fed. Cir. 1983)). Importantly, Patent Owner has not shown persuasively that the claims under review require a certain quality or length of transmission or the ability to “carry on a

conversation.” Even accepting Patent Owner’s assertion that ST-II never was widely implemented in commercial systems, that fact does not demonstrate ST-II failed as a technological solution to the identified problem. Moreover, assuming the efforts regarding development of ST-II failed, such a failure represents only a single failed attempt and not widespread failure in the industry. Patent Owner has not submitted evidence of attempts, other than attempts using ST-II protocol, that allegedly failed.

Accordingly, Patent Owner fails to persuasively explain how either the poor quality or the asserted distinction between implementation, testing, and deployment phases of software development and, particularly, the asserted failure of ST-II to be deployed over the Internet, demonstrates the failure of others to find a solution for the problem the ’247 patent allegedly solved—i.e., converting a voice transmission from a telecommunications protocol to internet/Internet protocol, sending the transmission over the Internet, and converting the transmission back to a telecommunications protocol.

Having reviewed the entirety of the evidence before us, including Patent Owner’s evidence on secondary considerations, we are persuaded Petitioner has demonstrated, by a preponderance of the evidence, that the combination of Weinstein and RFC1190 renders the subject matter of claims 1–8, 12, 15–23, and 27–29 obvious.

E. Asserted Obviousness of Claims 9, 11, 13, 24, and 26 in View of Weinstein, RFC1190, and Gurrie

Petitioner challenges claims 9, 11, 13, 24, and 26 under 35 U.S.C. § 103(a) as obvious over Weinstein, RFC1190, and Gurrie. Pet. 48–54. Claims 9 and 24 depend from claims 1 (via claim 8) and 16 (via

claim 23), respectively, and further recite that the “at least one criteria [recited in claims 8 and 23] comprises a specified level of transmission quality.” Claims 11 and 26 depend from claims 1 (via claim 8) and 16 (via claim 23), respectively, and further recite “wherein the at least one user criteria [recited in claims 8 and 23] comprises cost of routing.” Claim 13 depends from claim 1 and recites the method “further comprising the step of storing at least one of subscriber information, rate schedules, and call details.” Petitioner relies on the same combination of Weinstein and RFC1190 for teaching the limitations common between claim 1 and claims 9, 11, and 13 as well as the limitations common between claim 16 and claims 24 and 26.

Petitioner asserts that Gurrie discloses automatic route selection for a private branch exchange. *Id.* at 49. Petitioner further asserts that it would have been obvious to combine Gurrie with the Weinstein-RFC1190 system or method because Weinstein “suggests connecting its packet network to other voice communication systems, such as a PBX” and “illustrates in Fig. 9 that a PBX is part of the packet voice/data system deployed at USC-ISI.” *Id.* (citing Ex. 1008, 105, Ex. 1010, Figs. 5, 9). Petitioner contends that, because Weinstein describes users connecting to the system through a PBX, it would have been obvious to use Weinstein’s system as one potential route available for the PBX to direct a call to its destination. *Id.* at 50–51. Petitioner further argues that both Gurrie and Weinstein discuss connecting respective communication systems to T1 connections, and, thus, it would have been within the knowledge of an ordinarily skilled artisan to incorporate a PBX into Weinstein’s system. *Id.* at 51. Finally, Petitioner contends that a skilled artisan would have been motivated to combine

Weinstein and Gurrie to reduce long-distance calling costs. *Id.* (citing Ex. 1010, 15, Ex. 1012, 15).

With regard to dependent claims 9, 11, 13, 24, and 26, we similarly are persuaded by the arguments and evidence presented by Petitioner. Patent Owner does not present any argument apart from those it presents for independent claims 1 and 16. PO Resp. 56. We consider Patent Owner to have admitted those aspects of the ground of unpatentability that are uncontested by Patent Owner and are material facts. *See* 37 C.F.R. § 42.23(a); *see also* Paper 10, 3 (“The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived.”). Based on the evidence and arguments submitted, Petitioner has shown that the combination of Weinstein, RFC1190, and Gurrie teaches the limitations recited in claims 9, 11, 13, 24, and 26. Pet. 48–54; PO Resp. 37–48. Thus, having reviewed the entirety of the evidence before us, including Patent Owner’s evidence on secondary considerations, we are persuaded Petitioner has demonstrated, by a preponderance of the evidence, that the combination of Weinstein, RFC1190, and Gurrie renders the subject matter of claims 9, 11, 13, 24, and 26 obvious.

F. Asserted Obviousness of Claim 14 in View of Weinstein, RFC1190, and ISI

Petitioner challenges claim 14 under 35 U.S.C. § 103(a) as obvious over Weinstein, RFC1190, and ISI. Pet. 57–60. Claim 14 depends from claim 1 and further recites that the “transmission is related to a fax transmission.” Petitioner relies on the same combination of Weinstein and RFC1190 for teaching the limitations common between claims 1 and 14.

Petitioner further asserts that it would have been obvious to combine Weinstein's network to send facsimiles as suggested by ISI, because ISI "further describes the same packet-voice communication project as Weinstein," "Weinstein cites to an earlier report produced by ISI," and an ordinarily skilled artisan "would have been led to review all of the reports submitted by ISI for further details regarding the systems described in Weinstein." *Id.* at 57–58. Petitioner also points to ISI's statement that packet switching "must also expand to support media which have not been accommodated in the past." *Id.* at 58 (quoting Ex. 1014, 13) (internal quotation marks omitted). Finally, Petitioner points to ISI, which describes "experimentation not only with several voice channels but also with other media, such as . . . facsimile." *Id.* (quoting Ex. 1014, 22) (internal quotations marks omitted). In addition, Petitioner asserts that Weinstein describes channel capacity savings when using a packet-based system for transmitting voice and that one of ordinary skill in the art would have recognized that similar savings would occur when sending a facsimile because it is largely a one-sided communication. *Id.* at 59.

With regard to dependent claim 14, we similarly are persuaded by the arguments and evidence presented by Petitioner. Patent Owner does not present any argument apart from those it presents for independent claim 1. PO Resp. 56. We consider Patent Owner to have admitted those aspects of the ground of unpatentability that are uncontested by Patent Owner and are material facts. *See* 37 C.F.R. § 42.23(a); *see also* Paper 10, 3 ("The patent owner is cautioned that any arguments for patentability not raised in the response will be deemed waived."). Based on the evidence and arguments submitted, Petitioner has shown that the combination of Weinstein,

RFC1190, and ISI teaches the limitations recited in claim 14. Thus, having reviewed the entirety of the evidence before us, including Patent Owner's evidence on secondary considerations, we are persuaded Petitioner has demonstrated, by a preponderance of the evidence, that the combination of Weinstein, RFC1190, and ISI renders the subject matter of claim 14 obvious.

III. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–8, 12, 15, 16–23, and 27–29 are unpatentable over Weinstein and RFC1190; claims 9, 11, 13, 24, and 26 are unpatentable over Weinstein, RFC1190, and Gurrie; and claim 14 is unpatentable over Weinstein, RFC1190, and ISI.

IV. ORDER

In consideration of the foregoing, it is

ORDERED that claims 1–9, 11–24, and 26–29 of the '247 patent are held *unpatentable*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2015-00307
Patent 7,269,247 B2

For Patent Owner:

David McCombs
David.mccombs.ipr@haynesboone.com

Thomas King
ipr.thomas.king@haynesboone.com

Theo Foster
ipr.theo.foster@haynesboone.com

For Petitioner:

Chi Eng
chi@englawfirm.com

Alfred Froebrich
afroebrich@lmiplaw.com