

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
DALLAS DIVISION

WIRELESS HANDOVER OY,

Plaintiff,

v.

AT&T MOBILITY LLC,

Defendant.

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No. 3:13-CV-507-M

CLAIM CONSTRUCTION ORDER

On August 6, 2014, the Court held a hearing to determine the proper construction of the disputed claim terms in United States Patent No. 7,953,407 (“the ‘407 Patent”). Having reviewed the claims, specification, prosecution history, and submitted extrinsic evidence, and having considered the parties’ arguments and the applicable law, the Court issues this Claim Construction Order.

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I. BACKGROUND

The '407 Patent is titled "Centralized Management of Telecommunications Parameters" and issued on May 31, 2011. The application for the '407 Patent was filed on June 27, 2000, and claims priority to a Finnish application filed on June 28, 1999. The '407 Patent includes five independent claims, one of which is asserted in this lawsuit. The '407 Patent generally relates to a method and system for managing in a centralized manner the services and telecommunications parameters of various wireless telecommunications networks. '407 Patent at 1:7–12.¹

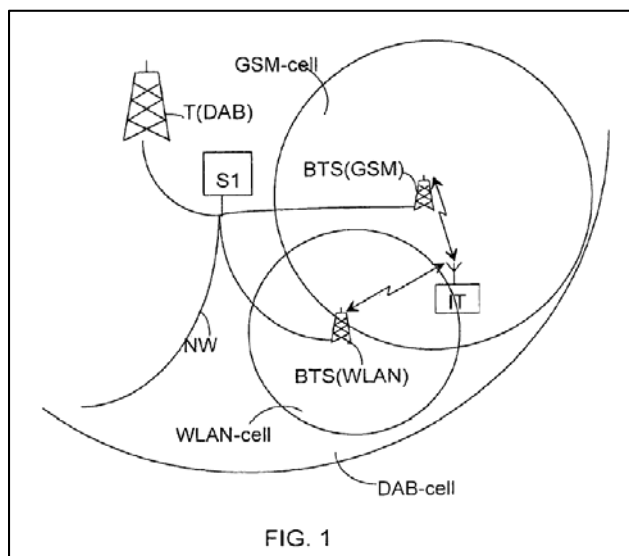
According to the specification, a problem with the prior art was that it required a user of a terminal (*e.g.*, cell phone) to select the desired parameters when connecting to different telecommunications networks. *Id.* at 2:1–5. The specification states that this required the user to "have information on the wireless networks available in each area and the values of the telecommunications parameters enabled by them." *Id.* at 2:5–8. In other words, connecting to different networks was "to a large extent dependent on the know-how of the terminal user." *Id.* at 2:8–10.

To address this problem, the specification describes the invention as "managing in a centralized manner the services and telecommunications parameters of various wireless telecommunications networks by means of a server or a fixed network." *Id.* at 3:7–12. Specifically, the specification describes a terminal that is capable of establishing a connection to several wireless networks by making service requests to a server or fixed network. *Id.* at 3:12–18. The specification states that the server or fixed network returns to the terminal the

¹ The Abstract of the '407 Patent follows:

A method of managing telecommunications parameters in a telecommunications system which comprises base transceiver stations of several wireless telecommunications networks and a terminal which is capable of establishing a wireless data transmission connection to said base transceiver stations wherein the base transceiver stations are connected to a fixed network which comprises a server for storing services and telecommunications parameters transmitted by the base transceiver stations of the telecommunications networks.

telecommunications parameters of the node of the wireless network supported by the terminal. *Id.* For example, Figure 1 illustrates an integrated wireless terminal (“IT”) that can be connected to different wireless communications networks (“GSM” or “WLAN”). *Id.* at 5:25–43.



The wireless communications networks (“GSM” and “WLAN”) are further connected to a fixed network (“NW”), which “comprises at least one server S1 where configuration data of the network and content services transmitted through said base transceiver stations [“BTS”] can be stored.” *Id.* at 5:55–56. The specification adds that “the network NW comprises program means for updating said configuration data in the server S1 and program means for requesting said configuration data by the terminal IT.” *Id.* at 5:56–60. Thus, according to the specification, “the invention significantly facilitates the configuration of an integrated terminal to various wireless networks and the services provided through them,” and eliminates the need for the user “to know the wireless networks available in the area or their configuration data.” *Id.* at 3:20–25.

Plaintiff brings suit alleging infringement of Claim 17 of the ‘407 Patent. Claim 17 recites the following elements (disputed terms in italics):

17. A telecommunications system which comprises *nodes* of at least two *different wireless telecommunications networks*

and a terminal which is arranged to establish a wireless data transmission connection to said *nodes*, wherein said *nodes* of at least two *different telecommunications networks* are connected to a fixed network which comprises a *server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks*, said terminal is arranged to make a service request through one of said *nodes* to said *server*, and said *server* is arranged to transmit to the terminal the telecommunications parameters of the node providing the service according to the service request.

II. LEGAL STANDARD

Claim construction is a question of law exclusively for the court. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 971–72 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996). “Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (internal citations omitted). Accordingly, the correct construction will be the one that “stays true to the claim language and most naturally aligns with the patent’s description of the invention.” *Id.* (internal citations omitted).

In construing disputed terms, a court looks first to the claim language, for “[i]t is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Id.* at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). Generally, the words of a claim should be given their “ordinary and customary meaning,” which is “the meaning that the term[s] would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.* at 1312–13.

In many cases, the meaning of a term to a person skilled in the art will not be immediately apparent, and a court must look to other sources to determine the term’s meaning. *See Phillips*,

415 F.3d at 1314. “Those sources include ‘the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” *Id.* at 1314 (internal citations omitted).

A court should also consider the context in which the term is used in an asserted claim or in related claims in the patent, bearing in mind that “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.* at 1313. Indeed, the specification “is always highly relevant to the claim construction analysis” and “[u]sually . . . dispositive; it is the single best guide to the meaning of a disputed term.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Where the specification reveals that the patentee has given a special definition to a claim term that differs from the meaning it would ordinarily possess, “the inventor’s lexicography governs.” *Id.* at 1316. Likewise, where the specification reveals an intentional disclaimer or disavowal of claim scope by the inventor, the inventor’s intention, as revealed through the specification, is dispositive. *Id.*

A court may also consider the patent’s prosecution history, which includes the cited prior art references. *Id.* at 1317. When in evidence, the prosecution history “can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it otherwise would be.” *Id.* at 1317 (citing *Vitronics*, 90 F.3d at 1582–83).

Finally, a court is authorized to consider extrinsic evidence in construing claims, such as “expert and inventor testimony, dictionaries, and learned treatises.” *Id.* (citing *Markman*, 52

F.3d at 980). Expert testimony may be particularly useful in providing background on the technology at issue, explaining how an invention works, and ensuring that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or establishing that a particular term in the patent or the prior art has a particular meaning in the pertinent field. *Phillips*, 415 F.3d at 1318. Although a court may consider evidence extrinsic to the patent and prosecution history, such evidence is considered “less significant than the intrinsic record” and “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.* at 1317–18 (internal quotation marks and citations omitted).

Thus, while extrinsic evidence may be useful in claim construction, ultimately “it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Id.* at 1319. Any expert testimony “that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history” will be significantly discounted. *Id.* at 1318 (internal quotation marks and citation omitted). Finally, while the specification may describe a preferred embodiment, the claims are not necessarily limited to that embodiment. *Phillips*, 415 F.3d at 1323.

III. CONSTRUCTION OF AGREED TERMS

During the claim construction hearing, the parties agreed to the following constructions:

Claim Term/Phrase	Agreed Construction
“server is arranged to transmit to the terminal”	device or computer system capable of establishing with the mobile device a communication path through two or more different wireless telecommunications networks though not necessarily through both simultaneously
“fixed network”	network that is not wireless and whose physical

	location does not change
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In addition to the terms/phrases listed above, the parties agreed that any terms/phrases not listed for construction should be given their plain and ordinary meaning as understood by one of ordinary skill in the art. (Dkt. No. 37 at 1.)² In view of the parties' agreement on the proper construction of each of the identified terms/phrases, the Court hereby **ADOPTS AND APPROVES** the parties' agreed constructions.

IV. CONSTRUCTION OF DISPUTED TERMS

The parties' dispute focuses on the meaning and scope of five terms/phrases in the '407 Patent.

A. *“at least two different wireless telecommunications networks,” “at least two different telecommunications networks,” and “telecommunications networks”*

<u>Disputed Term</u>	<u>Plaintiff's Proposal</u>	<u>Defendant's Proposal</u>
“telecommunications networks”	“a system of computers, transmission channels, and related resources which are interconnected to exchange information.”	The term should be construed the same as the term “wireless telecommunications network”
“wireless telecommunications network”	“a telecommunications network in which a portion of the communications is conducted without a hardwired connection between a plurality of points of the network”	“a network with a particular radio access technology”
“different telecommunications network” “different wireless telecommunications network”	“wireless communications networks within which the terminal has different telecommunication and service settings”	No construction necessary

² All citations to documents filed with the Court are to the ECF page number assigned by the Court's filing system.

The parties dispute whether the terms “wireless telecommunications networks” and “telecommunications networks” are used interchangeably and therefore refer to the same networks. The parties also dispute whether the term “wireless telecommunications network” should be limited to “a particular radio access technology,” as Defendant proposes. Finally, the parties dispute whether the term “different” in the phrases “different telecommunications networks” and “different wireless telecommunications networks” requires construction.

Plaintiff contends that the terms “wireless telecommunications networks” and “telecommunications networks” are not used interchangeably in the ‘407 Patent, and proposes different constructions for each term. (Dkt. No. 40 at 19–20.) Plaintiff also argues that Defendant’s construction is incorrect, because it would require the different networks to have different radio access technologies. (Dkt. No. 40 at 18–19.)

Defendant responds that the terms “wireless telecommunications networks” and “telecommunications networks” are used interchangeably and do not require separate constructions. (Dkt. No. 45 at 23.) Defendant further argues that its construction is supported by the intrinsic record and that Plaintiff offers no support, intrinsic or otherwise, for its construction. (Dkt. No. 45 at 24.) Defendant also contends that after construing “wireless telecommunications network” and “telecommunications network,” no construction is necessary for “different wireless telecommunications networks,” because a lay juror would easily understand the meaning of “different.” (Dkt. No. 45 at 24.) Defendant also argues that Plaintiff’s construction is incorrect, because it imports the term “terminal” into its construction and defines characteristics of a terminal rather than what makes wireless telecommunications networks different. (Dkt. No. 45 at 25.)

Plaintiff responds that the reason that each of the terms require construction is because a

central issue is whether a handover is between different networks or portions of the same network. (Dkt. No. 48 at 11–12.) Plaintiff further argues, based on its analysis of the claim language, that the terms “wireless telecommunications networks” and “telecommunications networks” do not mean the same thing. (Dkt. No. 48 at 13.) According to Plaintiff, the difference between the terms “is obvious, based on the ordinary and customary meaning of those terms.” (Dkt. No. 48 at 13.)

On August 7, 2014, the Court provided the parties with the opportunity to file supplemental briefing regarding the disputed phrase “at least two different wireless telecommunications networks.” (Dkt. No. 51.) In its supplemental brief, Plaintiff contends that the parties have oversimplified the issue of what constitutes different radio access technologies. (Dkt. No. 53 at 2.) Plaintiff argues that the term “4G” can be thought of as a marketing term that encompasses a number of technologies. (Dkt. No. 53 at 2.) Plaintiff argues that the Court should not adopt a construction that would suggest to the jury that two networks are the same networks based simply on both being referred to as “4G” networks. (Dkt. No. 53 at 2–3.) Likewise, Plaintiff argues that the name of the service provider associated with a network does not say anything technical about the network. (Dkt. No. 53 at 3.) Plaintiff argues that the Court should not adopt a construction that would suggest to the jury that two networks are “different networks” only if they are owned by different service providers (*e.g.*, AT&T and Verizon). (Dkt. No. 53 at 3.) Plaintiff further provides a series of hypothetical scenarios that it contends illustrates different networks, based on the connections between them. (Dkt. No. 53 at 4–5.)

In its supplemental brief, Defendant modifies its proposed construction for the term “wireless telecommunications network” to add the words “a distinct” in front of “network with a particular radio access technology.” (Dkt. No. 56 at 1–2.) Regarding Plaintiff’s concerns about

the reference to “4G,” Defendant agrees that there can be different types of 4G networks (*e.g.*, WiMAX, LTE, etc.), but argues that they are not the “same” network under its modified construction because each 4G network uses a “particular” radio access technology. (Dkt. No. 56 at 3.) Regarding Plaintiff’s concerns related to the networks of different service providers, Defendant agrees that two wireless networks from two different service providers (*e.g.*, AT&T and Verizon) would be two different networks, because the providers have “distinct” networks (*e.g.*, AT&T’s LTE network is distinct from Verizon’s LTE network). (Dkt. No. 56 at 3.) Defendant further argues that if it bought another carrier that had its own network, that network would remain a distinct network from AT&T’s, unless and until AT&T combined those networks into a single carrier network. (Dkt. No. 56 at 3.)

Regarding Plaintiff’s hypothetical scenarios, Defendant argues that there is no support for Plaintiff’s argument that networks should be categorized based on the types of “direct connections” between different geographic locations. (Dkt. No. 56 at 4.) Defendant argues that the specification does not describe how a network is constructed or what types of connections are used (*e.g.*, the internet or the public telecommunications switching network). (Dkt. No. 56 at 4.) Defendant contends that the real question is whether a network functions as a single network, and not whether the connections between various locations create separate networks. (Dkt. No. 56 at 4.) Defendant further argues that Plaintiff’s construction is incorrect because it focuses on characteristics of mobile devices. (Dkt. No. 56 at 2.) Thus, according to Defendant, Plaintiff’s construction would permit it to define any single network as multiple networks as long as any mobile device connecting to the network uses a setting that is different from another mobile device connecting to the same network. (Dkt. No. 56 at 2.)

For the following reasons, the Court finds that the terms “**wireless telecommunications**

networks” and “telecommunications networks” are used interchangeably in the ‘407 Patent, and refer to the same networks. Accordingly, the Court will not construe these phrases/terms independently. Instead, the Court construes the phrase “at least two different wireless telecommunications networks” to mean “two or more distinct networks, each network requiring a radio access technology to establish a wireless connection with a node of the network.”

1. The Intrinsic Evidence

The term “telecommunications networks” appears in claims 1, 7, 12, 14, 17, 26, 28, 30, 33, 34, 36, 41, 43, 46, 48, and 49 of the ‘407 Patent. The term “wireless telecommunications networks” appears in claims 1, 7, 12, 17, 26, 28, 33, 34, 41, 46, 48, and 49 of the ‘407 Patent. The phrases “different telecommunications network” and “different wireless telecommunications network” appear in claims 1 and 17 of the ‘407 Patent. Contrary to Plaintiff’s position, the Court finds that the terms “wireless telecommunications networks” and “telecommunications networks” are used interchangeably and refer to the same elements, based on antecedent basis and a logical reading of Claim 17. Plaintiff provides no persuasive support for construing these terms differently.

Specifically, the phrase “nodes of at least two different wireless telecommunication networks” provides antecedent basis for “*said* nodes of at least two different telecommunications networks” and “*said* nodes of the telecommunications networks,” recited later in Claim 17. ‘407 Patent at 13:41–54 (emphasis added). These are the same “nodes,” which are the “nodes of at least two different wireless telecommunications networks.” The fact that the claim later recites that these “nodes” can be connected to a “fixed network” does not change the antecedent basis in the claim. Likewise, the issue of whether Defendant’s constructions for these terms is limited to

networks with different radio access technology will be resolved by the Court's construction for the entire phrase "at least two different wireless telecommunications networks."

Turning to the phrase "at least two different wireless telecommunications networks," the Court finds that the intrinsic evidence indicates that the wireless telecommunications networks are (1) distinct and (2) each require a radio access technology to establish a wireless connection with a node of the network. The claim language recites that the "nodes" are of "at least two different networks," and thus are "nodes" of distinct networks. Likewise, the specification indicates that a wireless telecommunications network includes a radio access technology to establish a wireless connection. For example, the specification discusses different radio access technologies in the context of a "3G" system:

One such 3G system is the Universal Mobile Telecommunications System (UMTS) and its radio access network, the UMTS Terrestrial Radio Access Network (UTRAN). In defining the UTRAN, several propositions have been made for the specifications of a uniform radio interface. The propositions differ from each other mainly in the many access technologies. Such network access technologies include the FDMA (Frequency Division Multiple Access), TDMA (Time Division Multiple Access) and CDMA (Code Division Multiple Access). All propositions are based on a combination of various technologies. These combination[s] are compared with the radio network requirements and the final decision on the technology to be used will be based on the results of these comparisons. It seems, however, that several different radio access technologies will be taken into use.

'407 Patent at 2:2–38. Thus, a person of ordinary skill in the art would understand that each of the claimed "wireless telecommunications networks" requires radio access technology. Indeed, during the claim construction hearing, and in the supplemental briefing, the parties agreed that wireless telecommunications networks that utilize different radio access technologies would be considered "different" or distinct networks. Plaintiff, however, contends that in certain situations, networks utilizing the same radio access technology can be different networks. (Dkt. No. 53 at 2.) The Court agrees, because the specification explicitly states that the disclosed

particular radio access technologies are examples and are not limiting:

In the above, the invention has been described by way of example and in a simplified manner by limiting it to three wireless networks, the cellular radio network GSM, wireless local area network WLAN and digital audio broadcasting network DAB. It is obvious that the invention can be applied to the management of any wireless network services and telecommunications parameters. It is obvious to a person skilled in the art that while technology advances, the basic idea of the invention can be implemented in many different ways. The invention and its embodiments are thus not limited to the above examples, but may vary within the scope of the claims.

‘407 Patent at 12:6–17. Accordingly, the Court finds that although the networks must be distinct, and that each network requires a radio access technology, the claims do not require that the distinct networks have different radio access technologies as Defendant’s construction could potentially require.

However, the Court finds that Plaintiff’s construction for “different telecommunications networks” and “different wireless telecommunications networks” is not supported by the evidence. Plaintiff’s construction defines characteristics of a terminal rather than what makes the wireless telecommunications networks different. Thus, Plaintiff’s construction could potentially cover a single network where a phone (terminal), instead of the network, has and uses different telecommunication and service settings. This is contrary to the plain language of Claim 17, which requires at least two distinct networks. Plaintiff has failed to provide any persuasive reason why the Court should in effect redraft the claim to remove this limitation.

Finally, although the Court finds that Claim 17 does not require the “distinct” networks to have different radio access technologies, the claim is not broad enough to encompass a single network that uses a single radio access technology. The Court understands that there may be factual issues on what constitutes “distinct” networks and is open to refining its construction as the case proceeds if it appears that the refinement would more accurately reflect the meaning of

the claims or assist the jury in understanding them.³

2. Court's Construction

In light of the intrinsic evidence, the Court construes the phrase **“at least two different wireless telecommunications networks”** to mean **“at least two distinct networks, each network requiring a radio access technology to establish a wireless connection with a node of the network.”**

B. “server”

<u>Disputed Term</u>	<u>Plaintiff's Proposal</u>	<u>Defendant's Proposal</u>
“server”	“one or more computers or programs or processes that provides services to other computers or programs or processes” ⁴	“a device or computer system dedicated to providing specific facilities”

The parties originally disputed: (1) whether the server may be a “program or process,” as Plaintiff initially proposed; (2) whether the server is “dedicated” to providing specific services or “facilities,” as Defendant initially proposed; and (3) whether the server may be “one or more” computers, as Plaintiff initially proposed. During the claim construction hearing, the parties modified their previous positions. Regarding the “program or process” issue, Defendant agreed that a computer system would include a program, and that “process” did not need to be included. Regarding the “dedicated” issue, Defendant represented to Court that it did not intend for

³ The Federal Circuit has made clear that a district court may adopt an “evolving” or “rolling” claim construction, in which the court’s construction of claims evolves as the court better understands the technology and the patents at issue. *See Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1316 (Fed. Cir. 2010) (“[D]istrict courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.”) (quoting *Pfizer, Inc. v. Teva Pharm., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005)).

⁴ Plaintiff’s original proposal for the term “server” was “one or more computers or programs or processes, whether singular or a distributed system, that provides services to other computers or programs or processes.” During the claim construction hearing, Plaintiff modified its position and dropped “whether singular or a distributed system” from its proposed construction.

“dedicated” to mean that the server must have only one purpose, and agreed with the Court’s suggestion of changing “dedicated to providing” to “that provides” in its proposed construction. Regarding the “one or more” computers issue, Defendant conceded that the server could be more than one computer if each computer was in communication with each of the different wireless telecommunications networks.⁵

For the following reasons, the Court finds that the term “**server**” should be construed as **“at least one computer or program that centralizes management of information by communicating with at least two different wireless telecommunications networks.”**

1. The Intrinsic Evidence

The term “server” appears in claims 1, 2, 4, 5, 7, 12, 14, 17, 18, 20, 21, 26, 28, 30–36, 41, 43, 46, and 48 of the ‘407 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same meaning in each of the independent claims. The Court also finds that the claims and specification state that the primary function of the “server” is to centralize management of information. Specifically, Claim 17 recites that the “server” stores “services and telecommunications parameters supported by said nodes of the telecommunications network.” Likewise, in the “Field of the Invention” section, the specification states that “[t]he invention relates to *centralized management of telecommunications parameters* in various wireless telecommunications networks and to their distribution to terminals in the various networks.” ‘407 Patent at 1:7–10 (emphasis added). Similarly, in the “Summary of the Invention” section, the specification states that “[t]he invention is based on *managing in a centralized manner the services and telecommunications*

⁵ During the claim construction hearing, Defendant’s attorney created a drawing that he labeled “The Invention,” which illustrated two “common servers” in communication with two networks (“Net 1” and “Net 2”). (Dkt. No. 52-1 at 2.) The Court admitted the drawing into evidence on August 15, 2014. (Dkt. No. 54 at 1.)

parameters of various wireless telecommunications networks.” *Id.* at 3:7–9 (emphasis added). The specification further adds that “[a]ccording to the basic principles of the invention, the terminal receives from said centralized server, according to the telecommunications parameters, connection information to the server of the desired telecommunications network...” *Id.* at 4:37–40 (emphasis added). Finally, the title of the ‘407 Patent is “Centralized Management of Telecommunications Parameters.” Thus, the claims and specification indicate that the claimed “server” centralizes management of information.

Indeed, the specification describes an embodiment where the server is a directory agent (“DA”), which collects “the service data provided by the service agents SA into one place, whereby the directory agents DA have information on all available services.” *Id.* at 6:16–19. The specification further states that the “directory agent DA acts as a kind of dynamic service portal through which terminals gain access to the services they want.” *Id.* at 6:19–21. Accordingly, a person of ordinary skill in the art would understand that the recited server is at least one computer or program that centralizes management of information. Moreover, to be able to centralize the management of information, the server must be in communication with at least two different wireless telecommunications networks. An example of this is illustrated in Figure 1 by the server labeled “S1,” which is in communication with a “GSM” network and a “WLAN” network. A second example of this is illustrated by the directory agent “DA” in Figure 2, which is in communication with “Service 1,” “Service 2,” and “Service 3.”

Turning to the parties’ constructions, the intrinsic and evidence supports construing “server” as a “computer or program,” as Plaintiff proposes. This does not appear to be disputed, because Defendant agreed that its proposed “computer system” would include a “program.” In addition, the specification discusses “program means for updating said configuration data in the

server SI and program means for requesting said configuration data by the terminal IT.” ‘407 Patent at 5:56–60. However, the intrinsic evidence does not refer to the “server” as a “process,” and thus the Court will not construe the “server” as a “process,” as Plaintiff initially proposed.

Regarding Defendant’s “dedicated” proposal, the specification does not use the word “dedicated” to describe the server. Furthermore, the Court’s construction captures the primary purpose of the server by requiring it to “centralize management of information.” Likewise, the Court’s construction states the “specific facilities” that the server must provide. Thus, the Court does not adopt Defendant’s “dedicated” proposal.

Regarding the “one or more” computers issue, Defendant conceded that the server could be more than one computer as long as each computer was in communication with each of the different wireless telecommunications networks. *See, e.g.*, Dkt. No. 52-1 at 2. In addition, the specification contemplates that there could be multiple servers. ‘407 Patent at 5:54–56 (“The fixed network NW preferably comprises *at least one server* SI where configuration data of the network and content services transmitted through said base transceiver stations can be stored.”) (emphasis added). Furthermore, Plaintiff correctly notes that “a” or “an” typically means “one or more.” (Dkt. 48 at 7) (quoting *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342-43 (Fed. Cir. 2008)) (“That ‘a’ or ‘an’ can mean ‘one or more’ is best described as a rule, rather than merely as a presumption or even a convention.”).

Finally, although the Court finds that the recited server may be “one or more computers,” the Court’s construction requires the server or servers to centralize management of information by having each server in communication with at least two different wireless telecommunications networks. In other words, the server is not a “distributed system” with portions of the “system” only in communication with one of the different networks, as Plaintiff originally appears to have

proposed. Indeed, this would not resolve the prior art problem that required the mobile user of a wireless terminal to have information on the wireless networks available in each area and the values of the telecommunications parameters enabled by them. ‘407 Patent at 2:5–9.

2. The Extrinsic Evidence

The extrinsic evidence is consistent with the Court’s construction that a server is a “computer or program.” The Authoritative Dictionary of IEEE Standards Terms defines “server” as “[t]he software component on one device that provides services for use by clients on the same or another device.” (Dkt. No. 46-2 at 6 (The Authoritative Dictionary of IEEE Standards Terms at 1031 (7th ed. 2000))). Similarly, the Microsoft Computer Dictionary defines “server” as “[o]n the Internet or other network, a computer or program that responds to commands from a client.” (Dkt. 41-4 at 7 (Microsoft Computer Dictionary at 474 (5th ed. 2002))). Both of these definitions indicate that a person of ordinary skill in the art would understand that a “server” can be a “computer or program.”

3. Court’s Construction

In light of the intrinsic and extrinsic evidence, the Court construes “**server**” to mean “**at least one computer or program that centralizes management of information by communicating with at least two different wireless telecommunications networks.**”

C. “services and telecommunications parameters”

<u>Disputed Term</u>	<u>Plaintiff's Proposal</u>	<u>Defendant's Proposal</u>
"services and telecommunications parameters"	parameter - "characteristic or property" telecommunications parameters - "telecommunication characteristics or properties" services and telecommunication parameters - "service types and telecommunication characteristics or properties"	"service types and data values specific to one of the different wireless telecommunications networks"

The parties agree that "services" means "service types." The parties disagree on whether the recited "parameters" must be "data values specific to one of the different wireless telecommunications networks," as Defendant proposes. Plaintiff contends that the specification provides examples of "telecommunications parameters," and that the examples are properties or characteristics of the network. (Dkt. No. 40 at 13–14.) Plaintiff further argues that Defendant's construction is contrary to the specification because it would require the data values to be specific to the network with a particular access technology (*e.g.*, TDMA (Time Division Multiple Access), FDMA (Frequency Division Multiple Access), or CDMA (Code Division Multiple Access)). (Dkt. No. 40 at 14.)

Defendant responds that the key point of the invention is that the server stores parameters of multiple wireless telecommunications networks. (Dkt. No. 45 at 18.) Defendant further contends that the claim language and the specification indicate that the parameters are specific to one of the different wireless telecommunications networks. (Dkt. No. 45 at 18–19.) Finally, Defendant argues that Plaintiff misinterprets the specification, because the portion of the specification relied on by Plaintiff has nothing to do with either the telecommunications parameters themselves or the radio access technology. (Dkt. No. 45 at 20.)

Plaintiff replies that the claim language makes clear that the parameters are parameters

supported by the node—not necessarily parameters of the network, as Defendant proposes. (Dkt. No. 48 at 8.) According to Plaintiff, some of the parameters may be parameters of the network (for example, the type of radio access technology used), but other parameters may not. (Dkt. No. 48 at 8.) Plaintiff also contends that Defendant’s construction is wrong because it construes “parameters” as “data values.” (Dkt. No. 48 at 8–9.) Finally, Plaintiff contends that Defendant misrepresented the extrinsic evidence and that the evidence is consistent with Plaintiff’s construction. (Dkt. No. 48 at 9.)

For the following reasons, the Court finds that **“services and telecommunications parameters”** should be construed to mean **“service types and telecommunication properties or values specific to each network or a node of each network.”**

1. The Intrinsic Evidence

The phrase “services and telecommunications parameters” appears in claims 1, 17, and 18 of the ‘407 Patent. The Court finds that the phrase is used consistently in the claims and is intended to have the same meaning in each claim. The Court further finds that Claim 17 recites that “telecommunication parameters” are specific to each network or a node of each network. Specifically, Claim 17 recites that the “nodes” are “of at least two different wireless telecommunications networks” and that the server stores “services and telecommunications parameters supported by said nodes of the telecommunications networks.” Claim 17 further recites that the “server is arranged to transmit to the terminal the telecommunications parameters of the node providing the service according to the service request.” Thus, the Court finds that the “services and telecommunication parameters” may be specific to each network or specific to a node of each network.

The specification further provides examples of the “telecommunication parameters.” For

example, the specification states “[t]elecommunications parameters preferably also contain the quality *properties*, such as connection quality parameters and their limit *values*, of the service provided in the node.” ‘407 Patent at 3:28–32 (emphasis added). Similarly, the specification describes a “telecommunication parameter” as a value:

For the software of the terminal, an application, for instance, to be able to search for the services of all kinds of networks with the same service request, the service models must contain general attributes, such as, in the case of the QoS *parameters*, the allowed bit error ratio, data transmission delay and data transmission capacity, *i.e. the basic telecommunications parameters*. The parameter range and the possibility to affect the parameter *values* naturally varies according to the network type and the technical implementation of the node.

‘407 Patent at 7:17–26 (emphasis added). Accordingly, in light of the intrinsic evidence, a person of ordinary skill in the art would understand that a “telecommunications parameter” is a “property or value.”

Regarding Plaintiff’s construction, Plaintiff failed to provide any intrinsic support for construing a “telecommunication parameter” as a “characteristic.” Thus, given that the intrinsic evidence describes the “telecommunication parameters” as properties or values, the Court does not adopt Plaintiff’s construction. Likewise, the Court does not adopt Defendant’s construction, because it would require the “telecommunications parameters” to be specific to “one of the different wireless networks” without consideration for the recited nodes of the different wireless networks.

2. The Extrinsic Evidence

Defendant submitted extrinsic evidence that defines “parameter” as “a variable that is given a constant value for a specified application.” (Dkt. 46-2 at 5 (The Authoritative Dictionary of IEEE Standards Terms at 793 (7th ed. 2000))). Defendant contends that this indicates that the data values have to be specific to something, in this case, specific to different wireless

telecommunications networks. (Dkt. No. 45 at 19.) For the reasons discussed above, the Court agrees with Defendant that the “parameters” have to be specific to something, but disagree that the parameters cannot be specific to a node of the network.

3. Court’s Construction

In light of the intrinsic and extrinsic evidence, the Court construes **“services and telecommunications parameters”** to mean **“service types and telecommunication properties or values specific to each network or a node of each network.”**

D. “node”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“node”	“any device within or connected to a network”	“base transceiver station”

The parties dispute whether the term “node” should be construed broadly as “any device,” as Plaintiff proposes, or more narrowly as a specific type of node (*i.e.*, “base transceiver station”), as Defendant proposes. Plaintiff contends that the specification does not provide an explicit definition for “node,” and looks to the extrinsic evidence to support its construction. (Dkt. No. 40 at 15–16.) Plaintiff further argues that Defendant’s construction improperly limits the claims to a particular embodiment and that Defendant’s argument relies on claim limitations that were removed during the prosecution of the ‘407 Patent. (Dkt. No. 40 at 15–16.)

Defendant responds that the claims and specification describe the functions of a node, and that they align with what one of ordinary skill in the art would understand as a base transceiver station. (Dkt. No. 45 at 20–21.) Defendant also argues that the patentee made his intentions clear that a node is a base transceiver station by repeatedly, consistently, and exclusively describing “nodes” as base transceiver stations. (Dkt. No. 45 at 21.) Finally, Defendant argues that during the prosecution of the ‘407 Patent, the claims repeatedly referred to nodes as “BTS” or base transceiver stations, and that the removal of the reference to “BTS” was not to remove the limitation equating “node” with “BTS.” (Dkt. No. 45 at 22.)

Plaintiff replies that the specification makes clear that a base station is just an example of a node, and that it would be improper to limit the claims based on a few examples. (Dkt. No. 48 at 10.) Plaintiff concludes that at the time of the invention a network node was understood to be a device within or connected to a network. (Dkt. No. 48 at 11.)

For the following reasons, the Court finds that **“node”** should be construed to mean a

“device located within a wireless telecommunications network that is capable of wirelessly connecting to a terminal.”

1. The Intrinsic Evidence

The term “node” appears in claims 1, 2, 12, 17, 18, 26, 30, 31, 32, 33, and 36 of the ‘407 Patent. The Court finds that the term is used consistently in the claims and is intended to have the same meaning in each claim. The Court further finds that the claims and specification describes the function of a node. Specifically, Claim 17 recites that the “nodes” are “of at least two different wireless telecommunications networks,” and that the terminal “is arranged to establish a wireless data transmission connection to [the] nodes” and make a service request through one of the nodes to the server. Likewise, the specification states that the nodes provide network services to the terminal. *See, e.g.*, ‘407 Patent at 4:58–61 (“This kind of a network server is in the new telecommunications network preferably located in the node, such as base station, which will provide network services to the terminal.”); *id.* at 6:61–65 (“Said transceivers and transmitters act as service provision nodes for the terminal and through them the terminal can receive the desired service wirelessly and preferably also make service requests to service providers in different networks.”). Accordingly, a person of ordinary skill in the art would understand that the recited “node” is a “device located within a wireless telecommunications network that is capable of wirelessly connecting to a terminal.”

Turning to the parties’ constructions, the Court finds that Plaintiff’s construction is too broad and could be argued to cover any device in a network, including the recited “terminal.” During the claim construction hearing, Plaintiff represented to the Court that it did not intend to argue that the “terminal” could function as the recited “node.” Notwithstanding, Plaintiff’s construction is still too broad, and inconsistent with the intrinsic evidence, because it would provide no meaningful claim limitation. As discussed above, the node is not just “any device,”

but instead is a “device located within a wireless telecommunications network that is capable of wirelessly connecting to a terminal.”

Defendant’s construction, on the other hand, is too narrow and would limit the claims to a disclosed embodiment. *Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246, 1254 (Fed. Cir. 2011) (“[E]ven where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words of expressions of manifest exclusion or restriction.”) (quoting *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1381 (Fed. Cir. 2009)). The specification does refer to a node as a “base transceiver station,” and states that a base transceiver station is an example of a node. But these references are in the context of a preferred embodiment or included as an example. *See, e.g.*, ‘407 Patent at 4:58–61 (“This kind of a network server is in the new telecommunications network preferably located in the node, *such as* [a] base station, which will provide network services to the terminal.”) (emphasis added). Likewise, the prosecution history indicates that the patentee removed the limitation that could be argued as equating the “node” with a “BTS (Base Transceiver Station).” Accordingly, the Court finds that the patentee did not demonstrate a clear intention to limit the scope of the claims to these examples.

2. The Extrinsic Evidence

The Court reviewed the extrinsic evidence submitted by the parties and finds that it indicates that a person of ordinary skill in the art would understand that a node is “a device.” *See, e.g.*, Dkt. 41-4 at 5 (Microsoft Computer Dictionary at 366 (5th ed. 2002)) (“In networking, a device, such as a client computer, a server, or a shared printer, that is connected to the network and is capable of communicating with other network devices.”). However, as discussed above, it would be inconsistent with the intrinsic evidence to construe the recited “node” as simply “any

device.”

3. Court’s Construction

In light of the intrinsic and extrinsic evidence, the Court construes “**node**” to mean “**device located within a wireless telecommunications network that is capable of wirelessly connecting to a terminal.**”

E. “server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks”

<u>Disputed Term</u>	<u>Plaintiff’s Proposal</u>	<u>Defendant’s Proposal</u>
“server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks”	“server that is configured to store the service types and telecommunication characteristics that are supported by devices within the telecommunications networks”	“device or computer system for retaining data values specific to base station transceivers of two or more different wireless telecommunications networks”

The parties dispute whether the server stores information “specific to base station transceivers of two or more different wireless telecommunications networks.” The parties also dispute whether “for storing” should be redrafted as “that is configured to store,” as Plaintiff proposes, or whether it should be redrafted as “for retaining,” as Defendant proposes. The parties also dispute whether “supported by” should be redrafted as “that are supported by,” as Plaintiff proposes, or whether it should be redrafted as “specific to,” as Defendant proposes.

Plaintiff contends that the primary dispute is not the difference between “store” and “retain,” but instead is Defendant’s requirement of a current act of storage/retention (*i.e.*, “retaining”). (Dkt. No. 40 at 20.) Plaintiff further argues that Defendant’s construction imports limitations from one embodiment of the specification by requiring a single server to store values for at least two different networks. (Dkt. No. 40 at 21.) Plaintiff contends that this is not a requirement for every embodiment and that Defendant’s construction would exclude preferred

embodiments of the '407 Patent. (Dkt. No. 40 at 21.)

Defendant responds by modifying its construction to replace “retaining” with “for retaining.” (Dkt. No. 45 at 13.) Thus, according to Defendant, the only dispute is whether the server stores information for “two or more different wireless telecommunications networks.” (Dkt. No. 45 at 13.) Defendant contends that its construction reflects the requirement in Claim 17 that the server stores parameters of “at least two telecommunications networks.” (Dkt. No. 45 at 13–14.) Defendant contends that Plaintiff’s construction would improperly read this limitation out of the claim. (Dkt. No. 45 at 14.) Defendant further argues that Plaintiff’s understanding of Figure 2 is not accurate and that Defendant’s construction captures Figure 2, because the figure illustrates a device (directory agent DA) that collects the service data in one place. (Dkt. No. 45 at 15.)

Plaintiff replies that Defendant’s modified construction for “for retaining,” addresses the parties’ differences, and “there is no need to delve deeper into that issue.” (Dkt. No. 48 at 15.) Thus, according to Plaintiff, the construction of this term requires simply inserting the prior constructions for the terms that have already been construed. (Dkt. No. 48 a 15.)

For the following reasons, the Court finds that the phrase “**server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks**” should be given its **plain and ordinary meaning** as understood by one of ordinary skill in the art.

1. The Intrinsic Evidence

The phrase “server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks” appears only in Claim 17 of the '407 Patent. The Court has construed the terms “server,” “services and telecommunications parameters,”

“nodes,” and “telecommunications networks.” Thus, the only terms not construed by the Court in this disputed phrase are “for storing” and “supported by.” In light of the Court’s construction of the other terms in this phrase, the Court finds that these terms do not require construction, because these terms are unambiguous, and are easily understandable by a jury, and should be given their plain and ordinary meaning. Indeed, the parties have not provided any persuasive argument as to why these terms require construction. Neither party provided any reason why the Court should redraft “for storing” to “for retaining.” Likewise, neither party provided any reason why the phrase “supported by” requires construction.

Moreover, the parties’ proposed constructions for this phrase would only confuse the jury, because the constructions include partial constructions of other disputed terms or constructions that have been rejected by the Court. For example, Defendant’s construction for the disputed phrase redrafts “nodes” as “base transceiver stations.” As indicated above, the Court has rejected this construction for “node.” Likewise, the parties’ dispute on whether the server stores information for “two or more different wireless telecommunications networks” is resolved by the Court’s construction.

Finally, the Court disagrees with Plaintiff that requiring the “server” to store values for at least two different networks would result in excluding preferred embodiments of the ‘407 Patent. (Dkt. No. 40 at 21.) First, Plaintiff ignores the claim language that recites “[a] telecommunications system which comprises nodes *of at least two different wireless telecommunications networks,*” and that the recited server stores parameters of “said nodes of the telecommunications networks.” ‘407 Patent at 13:42–54 (emphasis added). Thus, the claim language requires “at least two different wireless telecommunications networks.”

Second, Plaintiff ignores the specification’s statement that the directory agents “DA,”

illustrated in Figure 2, “collect the service data provided by the service agents SA into one place, whereby the directory agents DA have information on all available services.” ‘407 Patent at 6:16–19. Similarly, the specification states that the user agent in Figure 3 “transmits the service request (unicastSR, 35) defined by the user of the terminal preferably to the directory agent DA, which searches for a service description defined in said service request from the services registered by different service agents SA at the directory agent DA.” ‘407 Patent at 8:21–25. Thus, the embodiments cited by Plaintiff disclose a server storing service data for multiple services (i.e., networks). ‘407 Patent at 8:36–41 (“This way, it is possible to easily utilize the properties of an integrated wireless terminal for receiving services through several wireless networks without the user of the terminal needing to have knowledge of the networks available in his location area or their properties and the telecommunications parameters required for establishing a connection.”). Accordingly, the Court concludes that the disputed phrase “server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks” does not require construction.

2. Court’s Construction

In light of the Court’s construction for “server,” “services and telecommunications parameters,” “nodes,” and “telecommunications networks,” the Court concludes that the disputed phrase “server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks” is unambiguous, is easily understandable by a jury, and requires no construction. Therefore, the phrase will be given its **plain and ordinary meaning** as understood by one of ordinary skill in the art.

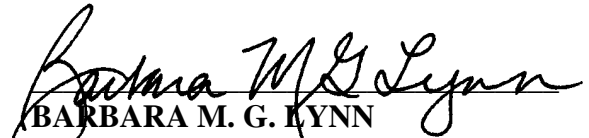
V. CONCLUSION

For the foregoing reasons, the Court hereby **ADOPTS** the claims constructions as set forth above. For ease of reference, the Court’s claim interpretations are set forth in Appendix A.

The parties may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning in the presence of the jury any portion of this opinion, other than the actual definitions adopted by the Court.

SO ORDERED.

August 28, 2014.


BARBARA M. G. LYNN
UNITED STATES DISTRICT JUDGE
NORTHERN DISTRICT OF TEXAS

APPENDIX A

Claim Term	Court's Construction
"server is arranged to transmit to the terminal"	[AGREED] device or computer system capable of establishing with the mobile device a communication path through two or more different wireless telecommunications networks though not necessarily through both simultaneously
"fixed network"	[AGREED] network that is not wireless and whose physical location does not change
"at least two different wireless telecommunications networks"	two or more distinct networks, each network requiring a radio access technology to establish a wireless connection with a node of the network
"server"	at least one computer or program that centralizes management of information by communicating with at least two different wireless telecommunications networks
"services and telecommunications parameters"	service types and telecommunication properties or values specific to each network or a node of each network
"node"	device located within a wireless telecommunications network that is capable of wirelessly connecting to a terminal
"server for storing services and telecommunications parameters supported by said nodes of the telecommunications networks"	plain and ordinary meaning, given the construction for "server," "services and telecommunications parameters," "nodes," and "telecommunications networks"