UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

SIMPLEAIR, INC.	§	
	§	
	§	
vs.	§	CASE NO. 2:11-CV-0416-JRG
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	§	
MICROSOFT CORP., ET AL.	§	

MEMORANDUM OPINION AND ORDER

Before the Court are Plaintiff SimpleAir, Inc.'s Opening Claim Construction Brief (Dkt. No. 302), Defendants' Responsive Claim Construction Brief (Dkt. No. 329), and Plaintiff's Reply (Dkt. No. 359).

The Court held a hearing on April 26, 2013.

I.   BACKGROUND AND THE PATENTS-IN-SUIT

Plaintiff SimpleAir, Inc. ("SimpleAir") brings this action against nine defendant groups: Microsoft Corp.; Google Inc. and Motorola Mobility LLC; Nokia Inc.; Samsung Electronics Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC; Sony Mobile Communications (USA) Inc. f/k/a Sony Ericsson Mobile Communications (USA), Inc.; Ericsson Inc.; Futurewei Technologies, Inc. (d/b/a Huawei Technologies (USA)) and Huawei Technologies Co., Ltd.; HTC America, Inc., and HTC Corporation; and LG Electronics Mobilecomm U.S.A., Inc. (collectively "Defendants"). The action alleges infringement of U.S. Pat. No. 6,021,433 (the "'433 Patent") and U.S. Pat. No. 7,035,914 (the "'914 Patent") (collectively, the "patents-in-suit"). The '914 Patent is based on a continuation application of the

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'433 Patent.[1] Both patents assert a priority claim to multiple provisional applications filed in 1996. Both patents have been subject to reexaminations. Claims 1 and 69 of both patents are asserted.

A prior Eastern District of Texas case involved the two patents-in-suit (and two additional patents). A claim construction order was issued in that case on September 2, 2011. *SimpleAir Inc., v. Apple, Inc., et al.*, 2:09-cv-289-CE (Magistrate Judge Everingham) (referred to herein as the *AWS* Order). The parties currently dispute ten groupings of claim terms. Several of the claim disputes raise indefiniteness issues under 35 U.S.C. §112.   Many of the claim terms in dispute were addressed in the *AWS* Order.

In general, the '433 Patent and the '914 Patent relate to methods of processing and transmitting internet-based content and real time modifications (e.g., breaking news alerts, financial news, e-mail notifications, sports scores, weather alerts, etc.) to remote computing devices. *AWS* Order at 1. The '433 Patent Abstract explains the invention as follows:

> A system and method for data communication connecting on-line networks with on-line and off-line computers. The present system provides for broadcast of up to the minute notification centric data thereby providing an instant call to action for users who are provided with the ability to instantaneously retrieve further detailed information. Information sources transmit data to a central broadcast server, which preprocesses the data for wireless broadcast. The notification centric portions of data are wirelessly broadcast to wireless receiving devices that are attached to computing devices. Upon receipt of the data at the computing device, the user is notified through different multimedia alerts that there is an incoming message. Wirelessly broadcasted URL's, associated with the data, are embedded in data packets and provide an automated wired or wireless connection back to the information source for obtaining detailed data.

'433 Abstract.

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[1] The patents have substantially identical specifications. Citations to the specification will be as 'XXX col:lines.

## II.	LEGAL PRINCIPLES

### A.	Claim Construction Principles

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id*. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id*. "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee's invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp*., 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*,

34 F.3d 1048, 1054 (Fed. Cir. 1994).

This court's claim construction decision must be informed by the Federal Circuit's decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that "the <u>claims</u> of a patent define the invention to which the patentee is entitled the right to exclude." 415 F.3d at 1312 (emphasis added) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id*. The ordinary and customary meaning of a claim term "is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id*. at 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to and intended to be read by others skilled in the particular art. *Id*.

Despite the importance of claim terms, *Phillips* made clear 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*. Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of "a fully integrated written instrument." *Id*. at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id*. at 1314-17. As the Supreme Court stated long ago, "in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and

meaning of the language employed in the claims." *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

> 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. The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the Patent and Trademark Office ("PTO") understood the patent. *Id.* at 1317. Because the file history, however, "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes. *Phillips*, 415 F.3d at 1319-24. The approach suggested by *Texas Digital*—the assignment of a

limited role to the specification—was rejected as inconsistent with decisions holding the specification to be the best guide to the meaning of a disputed term. *Id*. at 1320-21. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of "focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent." *Id*. at 1321. *Phillips* emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.* What is described in the claims flows from the statutory requirement imposed on the patentee to describe and particularly claim what he or she has invented. *Id.* The definitions found in dictionaries, however, often flow from the editors' objective of assembling all of the possible definitions for a word. *Id*. at 1321-22.

Phillips does not preclude all uses of dictionaries in claim construction proceedings. Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id*. at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

B. Claim Indefiniteness

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. Whether a claim meets this definiteness requirement is a matter of law. *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1344 (Fed. Cir. 2007). A party challenging the definiteness of a claim must show it is invalid by clear and convincing evidence. *Id*. at 1345.

"Only claims 'not amenable to construction' or 'insolubly ambiguous' are indefinite."

Halliburton Energy Servs., Inc. v. M-I LLC, 514 F.3d 1244, 1250 (Fed. Cir. 2008) (quoting

Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005)). That is, the

"standard [for finding indefiniteness] is met where an accused infringer shows by clear and

convincing evidence that a skilled artisan could not discern the boundaries of the claim based on

the claim language, the specification, and the prosecution history, as well as her knowledge of

the relevant art area." *Halliburton,* 514 F.3d at 1249-50. The ultimate issue is whether someone

working in the relevant technical field could understand the bounds of a claim. *Haemonetics*

Corp. v. Baxter Healthcare Corp., 607 F.3d 776, 783 (Fed. Cir. 2010).

> In determining whether that standard is met, i.e., whether the claims at issue are sufficiently precise to permit a potential competitor to determine whether or not he is infringing, we have not held that a claim is indefinite merely because it poses a difficult issue of claim construction. We engage in claim construction every day, and cases frequently present close questions of claim construction on which expert witnesses, trial courts, and even the judges of this court may disagree. Under a broad concept of indefiniteness, all but the clearest claim construction issues could be regarded as giving rise to invalidating indefiniteness in the claims at issue. But we have not adopted that approach to the law of indefiniteness. We have not insisted that claims be plain on their face in order to avoid condemnation for indefiniteness; rather, what we have asked is that the claims be amenable to construction, however difficult that task may be. If a claim is insolubly ambiguous, and no narrowing construction can properly be adopted, we have held the claim indefinite. If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds. . . . By finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of patent validity . . . and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal.

Exxon Research & Eng'g Co. v. U.S., 265 F.3d 1371, 1375 (Fed. Cir. 2001) (citations and

internal quotation marks omitted).

C. Construing Claim Terms that Have Previously Been Construed by This or Other Courts

As indicated above, it is worth noting that this is not the first opportunity for this Court to construe the patents-in-suit. *See AWS* Order. Although the disputes in this case present many of the same issues that have already been resolved in the case mentioned above, the Court still carefully considered all of the parties' arguments (both the new and repetitive arguments) in construing the claims in this case. *See Burns, Morriss & Stewart Ltd. P'ship v. Masonite Int'l Corp.*, 401 F. Supp. 2d 692, 697 (E.D. Tex. 2005) (describing that although a previous construction may be instructive and provide the basis of the analysis, particularly when there are new parties and those parties have presented new arguments, the previous construction is not binding on the court). As indicated by *Burns*, however, the previous constructions in those cases, and particularly from those in this District, are instructive and will at times provide part of the basis for the analysis. *See id.*

IV. CONSTRUCTION OF DISPUTED TERMS

A. "whether said computing devices are online or offline from a data channel associated with each device" ('914 Claim 1)

The parties propose a construction for portions of the term in question and for the entire term.[2]

"data channel"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more communication channels or paths for accessing or viewing a category or subcategory of information that is provided by an information source over a communications network	any path between the remote computing device and the Internet (or some other online service) through which information can flow to or from the remote computing device and that does not include the path

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[2] Defendants also seek construction of "offline from a data channel associated with each device" to mean "not connected to the Internet (or some other online service) via 'a data channel associated with each device.'" As Defendants' construction is repeated in their construction of the phrase as a whole, the Court shall address such dispute in context of the entire phrase.

	between the remote computing device and the attached receiver Microsoft's Compromise Construction: any communication path between the remote computing device and the Internet (or some other online service) that does not include the attached receiver

Whole term: "whether said computing devices are online or offline from a data channel associated with each device"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
whether the remote computing devices are or are not connected via the Internet or another online service to a data channel associated with each computing device at the time the preprocessed data is received by the receivers Additional clarification: A device is not online to an associated data channel merely because it is able to receive data transmissions (directly or indirectly) from the central broadcast server.	whether said devices are or are not connected to the Internet (or some other online service) via "a data channel associated with each device" Microsoft's Compromise Construction: whether the remote computing device are or are not connected to the Internet (or another online service) via a data channel associated with each computing device at the time the preprocessed data is received by the receivers Additional clarification: [Defendants: not necessary] Microsoft's Compromise Proposal: A device is online to an associated data channel if it is able to receive data transmissions through the data channel and is offline from an associated data channel if it is unable to receive data transmissions through the data channel.

There are several disputes between the parties with regard to these terms. First, the parties dispute whether the "data channel" may merely be the first connection point to the Internet (the first hop) that is used to access the Internet (Defendants) or whether the "data

channel" is the path to an information source (SimpleAir). Defendants also assert that the data channel cannot include the path through the receiver. The parties also dispute whether the standard Internet connection must be disconnected when receiving "pushed" data. For example if the data channel can be a web broadcasting channel (SimpleAir's position), the parties dispute whether the claim allows being connected to the Internet with a single connection (an always connected Internet connection for example) in which the user is just disconnected from one web broadcasting channel but is still pushed data from that channel through the Internet connection which is on. This dispute is manifested in the parties' "to" / "via" language as to whether the computing devices "are or are not connected to the Internet" (Defendants) verses "are or are not connected via the Internet to a data channel."

"data channel"

1. Parties' Positions

SimpleAir cites to its expert declaration to assert that a "data channel" invokes a television channel metaphor. SimpleAir asserts that Internet broadcasting of information is one of the specific fields of the invention and that the *AWS* Order recognized this. Dkt. 302 at 22-23 (citing '433 Abstract). SimpleAir objects to Defendants' construction of "data channel" as ignoring the specific sense that the term was known in the field of the invention. SimpleAir further asserts that Defendants' construction ignores the claim language which states the "data channel" is "associated with each device." Dkt. 302 at 25, n. 17. SimpleAir objects to Defendants' construction for merely reducing the invention to whether or not a device is connected to the Internet. SimpleAir asserts that this is the exact same result that the *AWS* defendants sought, a result which was rejected in the *AWS* Order. Dkt. 302 at 25-26 (citing *AWS* Order at 34).

Defendants assert that their construction clarifies that a "data channel" cannot encompass the alternative broadcast path between the remote computing device and the attached receiver. Dkt. 329 at 4. Defendants first note that "data channel" was never used in the specification and that, as agreed by the parties, the single use of "channel" refers to an unrelated kind of channel. Dkt. 329 at 5. Defendants assert because "data channel" is not defined or used in the specification, the Court should look to the context of the alleged invention to determine the construction. Defendants assert that the specification provides for two paths to the remote computing device, one path on the left of Figure 1 (such as through connection 24) and a second alternative path on the right of Figure 1 (such as through receiver 32). Defendants assert that the data channel corresponds to the data path on the left side of Figure 1. Defendants assert that this path is the standard internet connection that in 1996 could typically be "online" or "offline" by using dial-up modems. Dkt. 329 at 5-6. Defendants assert that the crux of the invention is that information can be received through receiver 32 through the always-available alternative path even when the remote computing device is "offline" through connection 24. Dkt. 329 at 6-7. Defendants assert that the second alternative route cannot be part of the recited "data channel" because the claims require the computer to receive data even when the "data channel" is offline.

Defendants object to equating "data channel" to a webcasting channel. Defendants assert that "internet broadcasting" or "webcasting" is never mentioned in the specification. Defendants further cite to SimpleAir's expert's admission that "data channel" being used in the context of "internet broadcasting" did not begin until after the patent filings. Dkt. 329 at 8. Defendants also assert that the term "data channel" was first added to the claims eight years after the priority data. Defendants assert that the disagreement of the experts and the variety of meanings in the

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extrinsic evidence renders the term ambiguous and indefinite under 35 USC §112. Dkt. 329 at 8-9.

In reply, SimpleAir asserts that Defendants' construction of "data channel" is simply a path that leads to the Internet. SimpleAir asserts that Defendants replace the claimed "from a data channel" with "via." SimpleAir asserts that Defendants are attempting to construe "data channel" as merely the initial hop from the device to the Internet. Dkt. 359 at 1. SimpleAir asserts that a data channel is a particular destination. SimpleAir also asserts that the *AWS* construction found that "a" may mean "one or more" and thus the device may be associated with more than one channel. SimpleAir asserts that the device may be online to one channel but not to another channel. Dkt. 359 at 2.

SimpleAir asserts that Defendants' construction of "data channel" renders the surrounding claim language superfluous. SimpleAir asserts that because the parties agree that "online or offline" refers to a device's Internet connection, the "from a data channel" language cannot simply refer, again, to whether a device is connected to the Internet. Dkt. 359 at 2. SimpleAir asserts that Defendants' proposal reduces the claim to "whether a device is or is not connected to the Internet through a connection to the Internet." Dkt. 359 at 2. SimpleAir similarly asserts that Defendants' construction of "data channel" renders superfluous the claimed "associated with each device" language. In addition, SimpleAir asserts that it expressly affirmed the SimpleAir construction in the reexamination record. Dkt. 359 at 4.

As to Defendants' contention that the data channel's path cannot include the "receiver," SimpleAir asserts that the '914 claims do not recite a "receiver." In addition, SimpleAir asserts that there is no disclaimer that precludes the "data channel" path from running through the receiver. Dkt. 359 at 5-6.

2. Analysis

The *AWS* Order explains how, in the context of the specification, a data channel is not

merely a network connection or path between the computing device and the Internet:

> The specification explains that "on-line services and other information sources,
> provide data feeds, including real time data feeds" to the central broadcast server
> regarding, for example, "news, sports, and financial stories." '433 Patent at 7:44-
> 54. "[A] user can register and subscribe to receive broadcasts" of these data feeds
> from the central broadcast server, which maintains a "subscriber database...to
> determine which subscribers receive which types of content." *Id.* at 8:20-25. The
> specification explains that the user is able to specify "preferences at information
> category or specific content levels" and can even select "subcategories of
> information within a particular information category." *Id.* at 21:21-32. Thus, when
> data for a particular feed is available, it is "broadcast to the preferred viewer"
> application on the user's remote computing device. *Id.* at 26-15-17.

AWS Order at 33. The information sources 12 may include a variety of categories of information

such as news feeds, email feeds, premium service feeds and graphic feeds. '433 Figure 1`, 6:28-

30. The patents are also directed toward the broadcasting of these feeds. '433 Abstract, 5:53-55.

In this context, data channel is not limited as Defendants seek. Rather, access to the content

within the information sources 12 is what is important. Thus, within the patents, the connection

24 provides the remote computer 14 access to the information sources 12. '433 30:55-31:14.

The connection 24 is not limited to a connection to the Internet but rather it is a "connection 24

back to the information source 12 to obtain more detailed information." '433 30:62-63. Thus, in

use, the connection is provided to "automatically establish a link back to the information source

12." '433 31:2-3. As such, the specification supports SimpleAir's construction and is not merely

limited to the first path or connection between the remote computer and the Internet as advocated

by Defendants. In addition, the claims themselves also provide support for SimpleAir's

positions. As described below, with regard to the construction of the whole phrase at issue,

Defendants' construction is further contradicted when placed in the context of the entire phrase. The Court adopts SimpleAir's construction, which matches the *AWS* construction.

The Court construes "data channel" as **"one or more communication channels or paths for accessing or viewing a category or subcategory of information that is provided by an information source over a communications network."**

"whether said computing devices are online or offline from a data channel associated with each device"

1. Parties' Positions

SimpleAir asserts that "offline" means "not connected to the Internet or some other on-line service" and "online" means "connected to the Internet or some other on-line service" quoting the specification passage:

> Another advantage of the present invention is that a remote computer 14 can receive information instantly even while it is off-line (i.e. not connected to the Internet or some other on-line service.)

Dkt. 302 at 22 (quoting '433 6:61-64). SimpleAir asserts that a device is not "online" to an associated data channel merely because it can receive data transmissions (directly or indirectly) from the central broadcast server. SimpleAir asserts that the *AWS* Court correctly found that such interpretation would not make sense. SimpleAir quotes the *AWS* Court as stating that the mere ability to receive transmissions from the central broadcast server cannot mean the device is "online" because that would "render the 'instantaneous notification' of both online and offline devices nonsensical." *AWS* Order at 37.

As to "on-line" and "off-line," Defendants cite SimpleAir's brief to note that SimpleAir agrees the terms mean "connected to the Internet or some other online service" and "not connected to the Internet or some other on-line service" respectively. Defendants assert that SimpleAir however changes its construction from "not connected **to**" to "not connected **via.**"

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Dkt. 329 at 9-10. Defendants assert this change conflicts with the specification quote noted by SimpleAir above. Dkt. 329 at 10 (citing '914 5:65-6:14, 7:6-7, 31:34-38). Defendants assert that SimpleAir's construction confusingly suggests that the user can use the Internet to connect to the data channel and that the data channel may also be a path involving the receiver. Dkt. 329 at 10. Defendants assert that SimpleAir's construction requires the computing device to be connected to the Internet to receive notifications, in contrast to the specification embodiments in which notifications are received when not connected to the Internet. Dkt. 329 at 10 (citing '914 7:4-13). Defendants assert that requiring the remote computing devices to be connected to the Internet is wholly inconsistent with the specification and cannot be correct.

Defendants object to SimpleAir's "explanatory sentence" within the construction. Defendants state that this sentence is not always correct because under SimpleAir's construction, Internet traffic and notification traffic both flow through the same path (the Internet connection). In such case, a remote computing device would not receive notification unless it was online. Defendants assert that SimpleAir's construction collapses both paths into a single connection so SimpleAir manufactures on "offline" condition with the explanatory sentence even when there is only one path (Internet connection) that is on-line and connected. Dkt. 329 at 12. Defendants assert that its construction affirms a core advantage of the patent: that data may be received by receivers whether or not the computing device is online or offline. Dkt. 329 at 12.

In reply, SimpleAir asserts that merely importing the verbatim definition of "online or offline" would have rendered the claim confusing. Dkt. 359 at 6. SimpleAir asserts the prior Court's use of "via" properly reflects that "online/offline" refers to the device's Internet connection and "from a data channel" refers to what that connection is being used to do (access a data channel). SimpleAir asserts that the clarification language is necessary to explain that a

connection to the central broadcast server (which sends notifications), is not the same as being online to a data channel. Dkt. 359 at 7. SimpleAir also asserts that Defendants' construction provides the same meaning to three sub-phrases that are found within the term at issue: "online or offline," "online or offline from a data channel," and "online or offline from a data channel associated with each device."

2. Analysis

The specification provides a statement as to the meaning of "online" and "offline."

> Another advantage of the present invention is that a remote computer 14 can receive information instantly even while it is off-line (i.e. not connected to the Internet or some other on-line service.)

'433 6:61-64). The parties acknowledge the importance of this passage but interpret the consequences differently. Under Defendants' positions, the data channel and the initial connection (first hop) to the Internet are one and the same. Under such a construction, when "online and offline" is combined with the additional subsequent claim language of "from a data channel associated with each device," no additional meaningful limitation is provided by the additional language. More particularly, Defendants construe online and offline to mean connected or not to the Internet and Defendants construe the data channel to merely be the device's connection to the Internet. Defendants' constructions thus render the additional language redundant.

Phillips counsels the importance of the claim language. Here, the claim language itself and the interaction of different portions of the claim language can provide significant guidance. The term in question includes both "online or offline" and "from a data channel associated with each device." As described above, the specification teaches that a data channel is the path to the information source which contains the content. It is in this context that the specification

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language at '433 6:61-64 must be considered. Combining the two concepts, the claim language

makes clear that what is claimed is that an Internet connection is or is not made to the data

channel. It is not merely a connection to the Internet that is being claimed but a connection with

the data channel (the path to the content of the information source). The *AWS* construction

accords recognition to the interplay of the claimed words and the resulting effect. Meaning is

provided to the combination of "online and offline" and "from a data channel associated with

each device." As to the "clarifying sentence", the specification is clear that data may be received

from the central broadcast server independent of a direct connection to the information sources

12. '433 5:20-7:3. The clarifying sentence ensures the understanding of this concept within the

construction. The Court adopts the *AWS* construction.

The Court construes "whether said computing devices are online or offline from a data

channel associated with each device" to mean **"whether the remote computing devices are or**

are not connected via the Internet or another online service to a data channel associated

with each computing device at the time the preprocessed data is received by the receivers."

A device is not online to an associated data channel merely because it is able to receive data

transmissions (directly or indirectly) from the central broadcast server.

B. **"receivers" ('433 Claim 1; '914 Claim 1)**

Plaintiff's Proposed Construction	Defendants' Proposed Construction
no construction necessary	a device attached to the remote computing device for receiving said preprocessed data even when said remote computing device is not connected to the Internet (or some other online service)

The primary dispute between the parties is whether the receiver and the remote computing device need to be in separate or different machines and whether the receiver receives data "even when said remote computing device is not connected to the Internet."

1. Parties' Positions

SimpleAir asserts that the ordinary meaning of a receiver does not match Defendants' construction and that there is no disclaimer in the specification disavowing the full scope of the ordinary meaning of "receiver." SimpleAir asserts that Defendants' "a device attached to the remote computing device" is thus not supported. SimpleAir asserts that the specification states "the present invention may be implemented on other computer systems and configurations, including but not limited to Macintosh or Unix computers, televisions, telephones, appliances and so forth." '433 at 7:30-36. SimpleAir asserts that this passage supports configuring the computing device and receiver in the same device or product. SimpleAir asserts that it agrees that "the receiver and the remote computing device are separate structures and one is not a 'subcomponent' of the other." Dkt. 359 at 9. SimpleAir asserts that the actual dispute is whether the two structures must be in entirely different machines. SimpleAir asserts there is no disclaimer requiring such different machines. Dkt. 359 at 9.

Defendants assert that the claims themselves require the receiver and the computing device to be separate, as the claim states "transmitting preprocessed data to receivers communicating with said devices." Dkt. 329 at 13. Defendants assert that the patentee explicitly chose such language as opposed to "transmitting preprocessed data to said devices." Defendants cite to the specification which states "wireless receiving devices which are attached to computing devices" and "wireless receiving devices which are attached to personal computers." '914 Abstract and 2:62-66. Defendants also cite to Figure 1.

Defendants assert that SimpleAir's position is not supported by the claim language. Defendants assert that the specification citation provided by SimpleAir refers to alternative embodiments for the computing device 14, not the receiver 32. Defendants assert that the specification consistently refers to separate devices. Defendants assert that SimpleAir's construction excludes the preferred embodiment because the receiver could not receive information if the receiver is in the computing device and the computing device is offline. Dkt. 329 at 16. Defendants assert that the language "even when said remote computing device is not connected to the Internet" is central to the claimed invention. Defendants assert that such language clarifies that the receiver may receive data whether the remote computing device is online or offline. Dkt. 329 at 15.

2. Analysis

The parties do not assert that "receiver" is ambiguous or that the term does not have an ordinary meaning known to one in the art. The parties do not dispute that the "receiver" and the "remote computing device" as presented in the claims are separate devices. Defendants have pointed to passages in the specification that indicate that the devices in the disclosed embodiments are in different structures. Defendants assert that the claimed receiver must thus be limited to the disclosed embodiment. However, Defendants have not pointed to a disclaimer or disavowal that the separate devices must be formed in entirely different structures. *See Phillips*, 415 F.3d at 1316 (claim scope may be limited by a disclaimer or disavowal). Moreover, the specification refers to the wireless receiver 32 interacting with a receive card in the remote computing device or through the use of the computer serial port. '433 7:27-30. The next sentence in the specification then describes that "the invention" is not limited to the "particular configuration discussed above" and the specification then states that the invention may be implemented in other configurations such as televisions, telephones, appliances and so forth.

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'433 7:30-35 ("Rather, the present invention may be implemented on other computing systems and configurations, including but not limited to Macintosh or Unix computers, televisions, telephones, appliances and so forth.") Thus, the specification itself implies that configurations other than the illustrated remote computing device and wireless receiver are contemplated. As such, not only is there no disavowal requiring the limitations sought by Defendants, the specification provides support for rejecting Defendants' limitations.

Moreover, the claims themselves describe the relationship between the receiver and the remote computing devices. The claims state the receivers "communicating with said computing devices [said devices]. '433 Claim 1 ['914 Claim 1].

As to the connection to the Internet language, some claims themselves provide for what must be "online" and "offline." In particular, other claim language relating to the computer devices explicitly references the limitations as to the computer devices being online or offline from the data channel. '914 Claim 1 ("whether said computing devices are online or offline from a data channel"). Thus, the claims themselves counsel against incorporating Defendants' limitation within the otherwise understandable plain meaning of "receiver."

The Court finds that "receiver" needs no construction.

C. Remote Computing Device Terms[3] ('433 Claim 1; '914 Claim 1)

Plaintiff's Proposed Construction	Defendant's Proposed Construction
no construction necessary	a consumer electronics device such as a computer, television, telephone, or appliance.

The underlying dispute between the parties has some overlap with the issues with regard to "receivers." In addition, the parties dispute whether the device is limited to a consumer

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[3] The parties agree that "remote computing devices," "remote devices," "selected remote devices," "devices," and "computing devices" should be treated similarly, and that the term "remote computing device" shall represent all of these terms. Dkt. 363 at 1.

electronics device. At the claim construction oral argument, Defendants also emphasized that the remote computing device could not be subcomponent such as a microprocessor.

1. Parties' Positions

SimpleAir objects to Defendants' construction as being an attempt to construe the term in a manner that would preclude SimpleAir from identifying separate components in items such as smartphones as being the "remote computing device." For example, SimpleAir asserts the remote computing device may be the phone CPU and the receiver, which is the radio and Wi-Fi receiving circuitry. Dkt. 302 at 20. SimpleAir asserts that it is undisputed that the ordinary meaning of "remote computing device" is broader than Defendants' construction. SimpleAir also asserts that it is well known that a device may be a subcomponent within another device. SimpleAir also asserts that there is no reason to substitute "consumer electronics" for "remote computing." SimpleAir asserts that there is nothing in the specification that precludes the remote computing device and the receiver from being subcomponents of the same device. SimpleAir asserts that the specification quote 7:30-36 supports a reading that the "other configurations" may be televisions, telephones and appliances and such devices are not "computer systems" (thus supporting a computer system being a subcomponent of such configurations).

Defendants assert the specification teaches that the "remote computing device" is a device, not a sub-component of another device. Defendants cite to the disclosure of a personal computer and the alternative "Macintosh or Unix computers, televisions, telephones, appliances and so forth." '433 at 7:35-36. Defendants assert that the specification discloses the "remote computing device" as having sub-components (processor, memory, and disk), not the computing device being a sub-component itself: "The user computer 14 of the present invention includes a microprocessor connected to a system bus and supported by a read only memory (ROM) and random access memory (RAM)." '433 7:4-7. Defendants further assert that the claims include

limitations that indicate a microprocessor alone would not be the remote computing device. In particular, Defendants note that '433 claim 1 includes a data channel associated with the remote computing device and includes the concept of a remote computer device being "online" to the Internet. Defendants assert that a microprocessor alone is incapable of making such connections. Defendants also point to the limitations of '433 claim 12 which requires a user to "click on said computing device"; '914 claim 26 which requires "providing an alert panel on a display of each of said devices"; and '433 claim 69 which requires "displaying contextual graphics on said computing device."

2. Analysis

As described above with regard to "receiver," the passage at '433 7:30-35 is broader than Defendants interpret it. The passage makes no limitation that the "remote computing device" need be limited to a consumer electronics device. Rather, the specification citation in question references the invention being encompassed in a "Unix computer." Defendants have provided no evidence that Unix computers are limited to consumer devices. Defendants have not pointed to any disclaimer or disavowal that limits the term to consumer devices or to the particular devices listed in the passage.

The specification provides a very broad reference to a remote computing device: "The user computer 14 of the present invention includes a microprocessor connected to a system bus and supported by read only memory (ROM) and random access memory (RAM) which are also coupled to the system bus." '433 7:4-7. As noted, "the present invention is not limited to the particular configuration discussed above." '433 7:31-32. Thus, the computing device as described in the specification is described in the simple terms of a processor and memory, which may be configured differently. There is no disavowal or disclaimer in the specification stating that the various computing components must be formed in separate structures. It would seem

natural that integration could be another "configuration" of the various computer components. Further, the passage describes the availability of alternative "configurations" after a description of the computer 14 and receiver 32. 7:4-36. Thus, those alternative configurations are not merely limited to alternative configurations of the computer but other configurations for the computer and receiver. As to the other elements of claim 1, Defendants' arguments are arguments focused on infringement, not the meaning of "remote computing device." As to the dependent claims, the fact that the dependent claims call out additional features such as a clicking function or a display does not support the proposition that such elements must be read into the independent claims. Such logic contradicts the very purpose of dependent claims. Defendants have not pointed to evidence in the intrinsic record supporting the incorporation of the specification embodiments sought in Defendants' construction.

The Court finds that "remote computing device" needs no construction.

D. "whether said remote computing devices are on or off" ('433 Claim 1)

Plaintiff's Proposed Construction	Defendant's Proposed Construction
no construction necessary	whether said remote computing devices are powered on or powered off.

The parties' dispute focuses on whether the construction should explicitly reference "powered" on or off.

1. Parties' Positions

SimpleAir asserts that the *AWS* Order rejected SimpleAir's assertion that "on" or "off" was shorthand for "online" and "offline." SimpleAir asserts that it accepts the prior Court ruling and agrees with the *AWS* Order that no construction is needed. SimpleAir asserts that "on" or "off" may include "powered on and off" but is not so limited. Dkt. 302 at 26. SimpleAir asserts that Defendants are merely adding limitations ("powered") to the existing claim language. At

the claim construction hearing SimpleAir acknowledged that the term related to the powered

status but expressed concerning that Defendants' construction required the act of powering.

Defendants assert that the *AWS* Order stated "the patentees intended the words 'on or off'

to mean powered 'on or off.'" *AWS* Order at 31. Defendants assert that SimpleAir's statement

that "on or off" is not limited to "powered on or off" contradicts the intrinsic record. SimpleAir

cites to the '914 Patent prosecution in which the May reference was distinguished on the basis

that the remote computing device does not need "to be turned on" to receive a notification. Dkt.

329 at 26.

2. Analysis

The *AWS* Order provides a discussion as to the Examiner's rejection based on the May

reference. *AWS* Order at 30-31. The applicants attempted to distinguish the reference based on

argument that "[t]he claimed invention does not require the remote computing device to be

turned on upon receipt of preprocessed data, whereas May does require the remote device to be

turned on upon receipt of preprocessed data." '914 Amendment Dated 12/12/2002 at 15. The

AWS Court's conclusion was that such prosecution history shows that "these statements make

clear that the patentee used the term 'on or off' consistent with the ordinary meaning of 'on' and

'off' – that is, powered on or off." *AWS* Order at 31. The *AWS* Court's analysis applies to the

parties' current dispute. This Court finds such conclusion still applicable. Moreover,

reexamination statements made after the *AWS* Order are consistent with such a conclusion. In

the '433 Reexamination, the patentees stated in their Declaration of Prior Inventorship with

regard to the notification received by the computing devices:

> That notification would occur whether the computing device was on or off
> because the receiver card had its own power source (batteries). In other words,
> the receiver did not rely upon the power from the remote computing device and

therefore the receiver was able be on [sic] to receive messages and notify the computing device of their receipt even when the computing device was off.

'433 Reexamination, Declaration of Prior Inventorship Dated February 1, 2013 at 38. During oral argument, SimpleAir provided no explanation as to anything else the claim term could mean. However, through SimpleAir's "no construction," SimpleAir apparently intends to provide some other meaning to the term. The *AWS* Order found that the ordinary meaning of on and off included the powered on and off concept, thus no further construction was required. However, given the dispute presented by the parties in the pending action, the Court shall adjudicate the competing constructions. *See O2 Micro Intern. v. Beyond Innovation Technology,* 521 F. 3d 1351, 1361-62 (Fed. Cir. 2008).

The Court construes "whether said computing devices are on or off" to mean **"whether said computing devices are powered on or powered off."**

E. "information source" ('433 Claim 1; '914 Claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more content or on-line service providers that provide data to the central broadcast server, such as an online source of news, weather, sports, financial information, games, personal messages or e-mails.	the Internet or one more content or online service providers that provide data to the central broadcast server, such as an online source of news, weather, sports, financial information, games, personal messages or e-mails.

The parties' dispute focuses on whether the proper construction should include the "Internet" as an information source or whether the Internet is merely the network where sources may be found, not a source itself.

1. Parties' Positions

SimpleAir asserts that Defendants add "the Internet" to the beginning of the *AWS* Court's construction. SimpleAir asserts that Defendants' construction would be improper as it would be satisfied by merely pointing to the Internet rather than a content provider or service provider on

the Internet. SimpleAir asserts that the specification teaches that information sources are located

on the Internet rather than a source being the Internet itself. SimpleAir points to the specification

passage "extending the reach of existing information sources, such as Internet and on-line

services." '433 3:17-22. SimpleAir also points to Figure 2 which includes "Internet on-line

services & information providers." SimpleAir indicates that these passages use Internet as a

modifier as to the source, not that the source itself is the Internet. Dkt. 302 at 4. SimpleAir also

points to the citations which provide that notifications include Internet addresses that allow the

remote computing device to connect to the relevant information source. Dkt. 302 at 4-5 (citing

'433 3:32-36, 30:64-31:3). Additionally, SimpleAir points to Figure 12 which references "the

information source on the Internet," and the '914 dependent claim 9, which describes the

"information source" as something located on the network at "an Internet address." SimpleAir

thus asserts that the Internet is not an information source, but rather the communication network

or medium over which data may be transmitted. SimpleAir cites to '433 1:53-56 as stating that

the Internet provides "a linkage of interconnected computer systems which can share information

almost instantaneously" and '433 8:64-9:1 which states "the information to be transmitted over

another medium, such as the Internet.

Defendants assert that the prior Court did not address this dispute. Defendants assert

their construction is supported in the specification: "[as] is illustrated in FIG. 1, information

sources 12, such as the Internet, on-line services and other information sources" and "such as

news headlines from information sources 12, such as Internet, on-line services and other

information providers." '914 7:54-55, 31:24-27. Defendants assert that these passages teach that

the Internet may also be an information source. Defendants assert that although the specification

sometimes refers to content providers as an information source, the specification does not restrict

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the term to only "content providers" as the passages cited above demonstrate. Dkt. 329 at 17-18. Defendants also point to the legend in the information sources 12 block of Figure 2 which reads "INTERNET ON-LINE SERVICES & INFORMATION PROVIDERS." Finally, Defendants cite to the '914 prosecution in which the patentee stated that "some other on-line services" are "some other service that is online (i.e. a service that is not the Internet but is like it), such as AOL or CompuServe." Dkt. 329 at 18 (quoting Ex. 7 at 9-10).

2. Analysis

The specification uses the term "Internet" in somewhat differing manners. Thus, passages such as at '433 1:53-56 and '433 8:64-9:1 (and others cited by SimpleAir) reference the Internet in the context of the physical medium, wires or "linkage of interconnected computer systems." This is a meaning that emphasizes the context of the hardware itself. Elsewhere, the specification uses the term Internet more as a description of an information source: "information sources 12, such as the Internet, on-line services and other information sources" ('433 7:43-45) and "such as news headlines from information sources 12, such as Internet, on-line services and other information providers" ('433 at 30:58-60). However, in the context of the intrinsic record as a whole, it is clear that passages at '433 7:43-45 and 30:58-60 are not equating the physical medium itself to being an information source of data. To clarify, the network by itself is not information, but rather the content on the network is the information. Thus, in context of '433 30:58-60, "news headlines" is content found on the Internet. The physical medium of the Internet, absent content, is not a source of "news headlines." The term in question is "information source." To include "Internet" in the term "information source" and then allow an interpretation of "Internet" to extend to a mere network connection (without any access to a source of information), would eviscerate the meaning of "information source."

The Court construes "information source" to mean **"one or more content or online**

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service providers that provide data to the central broadcast server, such as an online source of news, weather, sports, financial information, games, personal messages, or e-mails."

F. **"parsing said data with parsers corresponding to said [central broadcast server] / [servers]" ('914 Claim 1; '433 Claim 1)**

Plaintiff's Proposed Construction	Defendant's Proposed Construction
"parsing said data with parsers": using computer software to break or divide data received from an information source into components whose content or format can be analyzed, processed, or acted upon Note: In SimpleAir's Reply at 10, n. 8 SimpleAir proposed: using multiple computer software programs, routines, or functions to break or divide data received from an information source into components whose content or format can be analyzed, processed or acted upon.	breaking up or dividing information received from an information source using filters that each respectively correspond to the type of information that was received (examples of parsers include stock quote parser, weather parser, lotto parser and mail parser)".

To address Defendants' assertions that the claims require "parsers" plural, SimpleAir has proposed modifying the *AWS* construction by adding to the beginning of the construction "using multiple computer software programs, routines or functions." The remaining disputes focus on whether "parsers" are limited to "filters" and whether the parsers correspond to the server or to the type of information.

1. **Parties' Position**

SimpleAir objects to Defendants' replacement of the term "parsers" with "filters." SimpleAir asserts that the ordinary meaning of "parsers" is not "filters." Dkt. 302 at 6-7. SimpleAir also asserts that the use of an example in the specification does not limit "parsers" to "filters." SimpleAir objects to Defendants' inclusion of the phrase "that each respectively

corresponds to the type of information that was received." SimpleAir asserts that Defendants' construction conflicts with the claim language that requires "parsers corresponding to said servers [central broadcast server]." Thus, SimpleAir asserts the correspondence of the parsers is to the servers, not to the type of information received. SimpleAir also asserts that Defendants' construction limits the term to a preferred embodiment in the specification ("stock quote parser, weather parser, lotto parser and mail parser"). SimpleAir asserts that the relevant passage in the specification that recites such embodiments explicitly states "the present invention is not limited to the information sources or parsers described herein." '433 8:10-11. SimpleAir further asserts that the prior Court's use of "into components whose content or format can be analyzed, processed or acted upon" more accurately reflects the ordinary meaning. Dkt. 302 at 9 (citing dictionary definitions).

As to the correspondence of the parser to the information, Defendants assert that the full quote at '433 8:10-14 states: "The present invention is not limited to the information sources or parsers described herein. Rather, any type of information source and corresponding parser may be used." Defendants assert that the "corresponding parser" language makes clear that parsers correspond to the type of information. Dkt. 329 at 22-23.

Defendants also assert that the intrinsic record teaches that parsers are "filters." Defendants quote '914 12:31-34: "the central broadcast server 34, which processes the incoming data packets by parsing the feeds 16 against specific filters, encoding the data and creating the desired broadcast feeds." Defendants also cite to a declaration in the reexamination which stated that "the '651 provisional's written description refers to parsers as 'filters'" and "filters that were used by the AirMedia commercial embodiment to parser." Dkt. 329 at 24, (quoting Ex. 1 at 5, 9)

2. Analysis

The citations in the specification describe parsing with filters, but the use of filters appears as an embodiment. Caution should be taken to merely limiting claims to a disclosed embodiment. *See Phillips*, 415 F.3d at 1323. However, Defendants have not pointed to language indicative that the specification as a whole limits all parsers to filters. Moreover, the specification explicitly states that "[t]he present invention is not limited to the information sources or parsers described herein." '433 at 8:10-12. Moreover, the prosecution history statement cited by Defendants does not stand for the proposition that "parsers" are limited to filters. Rather, the prosecution statement referenced by Defendants was in a declaration of prior invention. In that statement, the inventors were demonstrating prior reduction to practice of the claimed inventions. To show evidence of prior use of "parsers," the declaration points to the use of filters. '914 Reexamination, Declaration of Prior Inventorship at 5, 9. Though such prosecution history emphasizes that there is support for the concept of parsers in the priority document and that filters are parsers, the prosecution statement does not stand for the proposition that "parsers" are limited to "filters." *Phillips* guides courts to use caution with the prosecution history as the prosecution history often lacks clarity. *See Phillips*, 415 F.3d at 1317. Here, the prosecution history does not equate to a statement that parsers are limited to filters. When viewed in the entirety, the intrinsic evidence does not limit parsers to only filters.

As to the "corresponding" concept, *Phillips* notes that the claim analysis must start with the claims. '914 Claim 1 explicitly states "parsers corresponding to said central broadcast server" and '433 Claim 1 explicitly states "parsers correspond to said servers."[4] The specification makes clear that these parsers are within what is described as "a block diagram 100 of the software architecture for communications between the information sources and central

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[4] The "servers" in '433 Claim 1 refers to the earlier recited "servers in said central broadcast server."

broadcast server 34." '433 Figure 1, 2, 7:57-59. These parsers are also clearly described as components of the central broadcast server 34. '433 7:43-8:14. Thus, the specification provides explicit support for the parsers corresponding to the central broadcast server / the servers. Though the specification includes an embodiment in which the parsers are matched to the information source (stock quote, weather, email, etc.), the claim language is explicitly not so limited. Instead, the claim language requires a correspondence to the central broadcast server / the servers. Having rejected the Defendants proposed modified "correspondence" language in favor of the explicitly recited correspondence, the Court finds that no further construction is needed for the "corresponding to said central broadcast server [to said servers]" limitation. Based on the rationale presented here and in the *AWS* Order, the Court maintains the general concepts of the construction from the *AWS* Order with the modification to reflect that the claim term references parsers (plural).

The Court construes "parsing said data with parsers" to mean **"using multiple computer software programs, routines, or functions to break or divide data received from an information source into components whose content or format can be analyzed, processed or acted upon."**

G. Gateway Terms

"gateway" ('433 Claim 1; '914 Claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
no separate construction for "gateway" required.	hardware or software that connects two or more different networks

The primary dispute between the parties is whether a gateway must connect two or more different networks.

1. Parties' Position

SimpleAir asserts that the gateway is software and points to Figure 2 and the text which describe the "information gateway" 134 as part of the "software architecture" of Figure 2. Dkt. 302 at 13-14 (citing '433 Figure 2, 7:57-60). SimpleAir asserts that the claim requires the "information gateway" to "build data blocks and assign addresses to the data blocks" and that such functions cannot be done by hardware alone, software is required.

SimpleAir also asserts that the "information gateway" does not connect two or more different networks. SimpleAir asserts that the claim does not state this and that the preferred embodiment does not disclose this. SimpleAir asserts that the preferred embodiment as shown in Figure 2 depicts the information gateway as a component of the central broadcast server. SimpleAir asserts that the information gateway merely interfaces with components of the central broadcast server such as the content manager, content budget rules, subscriber database and the wireless gateway. Dkt. 302 at 14-15.

Defendants cite to several technical dictionaries to assert that "gateway" has a specific meaning in the art that corresponds to hardware or software that connects different networks. Dkt. 329 at 29. Defendants assert that this conforms to Figures 2 and 4 which illustrate the connection between the information gateway and the wireless gateway. Defendants assert that the gateways operate as connection points between the networks, also citing to Figures 12, 13 and 15. Defendants assert the specification describes the gateways as transforming the data in a manner which allows the data to transfer between different networks. Dkt. 329 at 28-29 (citing '914 11:32-41). Defendants assert that the information gateway is not a component of the central broadcast server but its own server, thus rebutting SimpleAir's argument that the gateways may all be in one server. Defendants point to the reexamination in which the patentee stated: "It is the second server…that serves as the 'information server'." Dkt. 329 at 29-30 (quoting '914

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Reexamination Interview Agenda Dated 10/21/12 at 2). Defendants further assert that even if the gateways were in the same server, the information gateway still connects to the wireless gateway, thus connecting different networks.

As to the reexamination statement cited by Defendants, SimpleAir asserts that the patentees merely pointed out that the information gateway was supported in the provisional application because SimpleAir cited to one of the servers in the central broadcast server of Figure 1 as being an example information gateway. With regard to the dictionary definitions, SimpleAir cites to one of Defendants' dictionaries in which alternative definitions include a definition that describes connecting systems that may have the same communication protocol and a definition that describes machines and programs that provide address translation. Dkt. 329 Ex. 16 at 295-96 (IBM Dictionary of Computing).

2. Analysis

Though the parties debate the scope of the extrinsic evidence, the specification provides an understanding as to the use of the term in the patents-in-suit. Figure 2 and the associated description clearly include the information gateway 134 and wireless gateway 136 within what is described as "a block diagram 100 of the software architecture for communications between the information sources and central broadcast server 34." '433 Figure 2, 7:57-59. As noted in Figure 4, the information gateway "builds data block and assigns real and virtual capcodes to a data block as required based on information in the subscriber database" and the wireless gateway "performs packetization compression, encryption, etc. to prepare data block for transmission over the wireless broadcast network." '433 Figure 4; *See also* '433 Figure 15. Similarly, with regard to Figure 12, the information gateway 134 "attaches URL tag to the message." '433 Figure 4. These tasks are described in the context of being performed within the network of

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servers 33 of the central broadcast server 34. '433 Figures 1 and 2, 7:43-9:14. Though the "wireless gateway 136" is described as preparing "data blocks for transmission over a wireless broadcast network," the communications between the information gateway and other portions of the software architecture 100 of Figure 2 and communications between the information gateway and wireless gateway are not described in the context of connecting two different networks. Rather, such connections are described in the context of software components of the central broadcast server. Thus, though Defendants point to extrinsic evidence for the proposition that "gateway" as known in the art may connect different networks, the intrinsic record demonstrates that within the patents, the term "gateway" is used in a broader context that includes connections between different software components. A construction which excludes a disclosed embodiment is rarely proper. *SanDisk Corp. v. Memorex Products, Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005). As such, the term "gateway" should not be so limited. It is noted that though the *AWS* Order did not construe "gateway" as a separate construction, the findings herein are consistent with the *AWS* Order which described a "transmission gateway" in the context of software. Consistent with the discussion herein, the term "gateway" shall be construed within the context of the larger "information gateway" and "transmission gateway" terms below.

"an information gateway for building data blocks and assigning addresses to said data blocks" ('433 Claim 1; '914 Claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more software programs (or a portion of a program) that build data blocks and assign addresses to the data blocks	gateway that builds data blocks and determines addresses for the data blocks based on the type of information in the data blocks

Having resolved the underlying meaning of "gateway," the primary disputes left between the parties are whether information gateway "assigns" or "determines" addresses and whether the information gateway's actions are based upon the type of information of the data blocks.

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1. **Parties' Position**

SimpleAir asserts that Defendants change the claimed "assigning" to "determining." SimpleAir asserts that the words have a different meaning and that the words were not used interchangeably in the specification. SimpleAir asserts that "determining" was used elsewhere in the specification for determining how data is handled, indicating that when the patentees wanted to use "determine," they did so. Dkt. 302 at 15. SimpleAir also asserts that Defendants' inclusion of "based on the type of information in the data blocks" is contrary to the claim language which just calls out building and assigning, not what the building and assigning must be based on. Dkt. 302 at 15-16. Further, SimpleAir asserts that Defendants' construction does not match the embodiment in the specification because the citations Defendants provide teach that the addresses are assigned based on information in a subscriber database. Dkt. 359 at 13.

Defendants assert that its construction explains what is actually done. Defendants assert that its construction reflects what the specification teaches: (1) that the information gateway determines address ('914 22:27-31); (2) based on the type of information in the data block ('914 11:32-36); (3) assigns the addresses based on the information in the database ('914 22:27-31) and (4) builds the data blocks based on the information ('914 22:27-31). Defendants assert that without first determining the addresses, there is nothing to assign and that the determination must be based on something. Dkt. 329 at 30. Defendants assert that their construction thus explains to the jury what the phrase means.

2. **Analysis**

Phillips counsels the importance of the actual claim language as a starting point for the claim construction analysis. Here, the claim term in question is "assigns." There appears to be no dispute that "assigns" and "determines" have non-identical meanings. Defendants are correct

that the specification in one passage states "data blocks are built in the information gateway 134 and all applicable real and virtual addresses are determined based on the type of information in the data block and user subscription data from the subscriber database 130." '433 21:67-22:4. However, the specification also notes that the information gateway "assigns real and virtual capcodes" and "attaches URL tags." '433 Figure 4 and Figure 12. In this context, the information gateway is described as processing address information in a manner other than just "determining." Moreover, the claim language in question is "assigns." Defendants have acknowledged that "determining" is another step in the process separate from assigning. Dkt 329 at 30. The method claims in question do not include this separate determining step.

Defendants have not pointed to any disavowal in the specification mandating that the information gateway determine addresses in addition to the claimed "assigning." That the specification may describe additional steps in the disclosed embodiment does not mandate adding additional steps to the claimed steps.

Similarly, Defendants have not pointed to any disavowal in the specification mandating that the information gateway determine addresses based on the type of information in the data block. Moreover, even the disclosed embodiment in the specification describes the determination of addresses including a basis in addition to the type of information. In particular, the specification describes an embodiment in which "the information gateway 134 (step 115) which resolves its logical destination address to a physical wireless address based on information in the subscriber database (step 117)." '433 11:20-23; *See* '433 22:1-4. With that frame of reference, dependent claim 2 recites "building data blocks and assigning addresses to said data block based on information in a subscriber database." Defendants' construction would exclude

such embodiments. In the context of the specification, the claim language itself most accurately describes the term in dispute.

The Court construes "an information gateway for building data blocks and assigning addresses to said data blocks" to mean **"one or more software programs (or a portion of a program) that build data blocks and assign addresses to the data blocks."**

"a transmission gateway for preparing said data blocks for transmission to receivers"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more software programs (or a portion of a program) that prepare the data blocks for their transmission to receivers and interface with other resources used to transmit the preprocessed data	Indefinite Alternatively: a gateway that performs compressing, encrypting, packetizing, and forward error correction on the data blocks.

The parties dispute whether this term is definite and, in the alternative, whether the "transmission gateway" should include the particular functions of the disclosed wireless gateway 136.

1. Parties' Position

SimpleAir asserts that inclusion of "software" was proper in the prior *ASW* construction because a type of transmission gateway (the wireless gateway 136) is part of the "software architecture" of Figure 2. '433 Figure 2, 7:57-60. SimpleAir further asserts that the actual words of the claim describe what the transmission gateway is used for: "preparing said data blocks for transmission to receivers." SimpleAir asserts this language is unambiguous and needs no further construction.

SimpleAir asserts that indefiniteness is not shown merely by stating the term is not used in the specification. Rather, SimpleAir asserts that Defendants must "demonstrate by clear and convincing evidence that one of ordinary skill in the relevant art could not discern the boundaries

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of the claim." Dkt. 359 at 13 (quoting *Haemonetics Corp. v. Baxter,* 607 F.3d 776, 783 (Fed. Cir. 2010). SimpleAir asserts that Defendants' alternative construction seeks to import the preferred embodiment functions of the wireless gateway (packetizing, compressing, encrypting and error correction). Dkt. 302 at 18. SimpleAir asserts that the claim merely requires preparing blocks for transmission and that the claim should be entitled to its full scope, not limited to the preferred embodiment.

Defendants assert that "transmission gateway" is never used in the specification, which at most refers to "wireless gateway." Defendants assert that unless one construes transmission gateway to be the specific wireless gateway embodiment, there is no disclosure as to the term so the term is indefinite. Defendants assert that the dispute as to including the wireless gateway specific functions was not considered in *AWS*. Defendants assert that the packetizing, compressing, encrypting, and error correction steps are the only steps disclosed in the specification for preparing blocks for transmission. Dkt. 329 at 32 (citing '914 9:63-10:2, 11:36-40, Figs. 4, 15). Defendants assert that the SimpleAir construction merely parrots the claim language and provides no help to the jury.

2. Analysis

"Only claims 'not amenable to construction' or 'insolubly ambiguous' are indefinite." *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1250 (Fed. Cir. 2008) (quoting *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005)). That is, the "standard [for finding indefiniteness] is met where an accused infringer shows by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area." *Halliburton*, 514 F.3d at 1249-50. SimpleAir has proposed a construction

for a term that the *AWS* Court and even *AWS* Defendants found sufficiently definite to construe. Moreover, in light of the specification, it is clear that the wireless gateway is an embodiment of a transmission gateway that prepares data blocks for transmission to receivers. '433 Figures 2, 4, and 15 and associated text. Defendants seek to incorporate the particular details as to how the gateway prepares data for transmission. However, Defendants have not pointed to language of disavowal or other importance of the particular mechanisms of the preparation. The claim language merely recites preparing the data blocks for transmission, not particular specific ways for preparation. For these reasons and the rational presented in the *AWS* Order at 24-26, the Court adopts the *AWS* construction.

The Court construes "a transmission gateway for preparing said data blocks for transmission to receivers" to mean **"one or more software programs (or a portion of a program) that prepare the data blocks for their transmission to receivers and interface with other resources used to transmit the preprocessed data."**

H. "central broadcast server" ('433 Claim 1; '914 Claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more servers that are configured to receive data from a plurality of information sources and process the data prior to its transmission to one or more selected remote computing devices	one or more servers that receive data transmitted by a plurality of information sources and process the data prior to its transmission to one or more selected remote computing device

The parties' dispute whether the server must be configured to receive data or must actually receive data.[5] Defendants also assert that "transmitted by a plurality of information sources" more closely tracks the claim language.

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[5] At the claim construction hearing, the parties announced agreement as to the term "server" to mean "one or more pieces of computer equipment and the software running on the equipment used to provide services for one or more other computers or computing devices."

1. Parties' Position

SimpleAir asserts that its construction matches the *AWS* Order and that Defendants are changing, without justification, the "are configured to receive data from a plurality of information sources" language of the prior construction to "receive data transmitted by a plurality of information sources."

Defendants assert that the issue in dispute was not raised to the *AWS* Court since, in *AWS*, the parties focused on the meaning of "central." Defendants assert that the server must actually receive data from the information sources. Defendants assert that SimpleAir's construction reads out of the claims the requirement that the server receive information and only requires a server to be "configured to" do so. Dkt. 329 at 34-35. Defendants assert this issue is similar to SimpleAir's attempt to limit "content manager" to software that "can" determine how data is handles instead of "actually determine." Dkt. 329 at 35 (citing *AWS* Order at 23, n.5). Defendants assert the specification discloses a server that actually receives data from multiple sources, not just one that is "configured" to do so. Defendants assert the specification does not teach simply "configuring" the servers. Dkt. 329 at 35.

2. Analysis

The disputed term is "central broadcast server." The claim term is found in the claimed step of "transmitting data from an information source to a central broadcast server." Thus, the surrounding claim limitations describe what is necessary as to the transmission of data: "transmitting data from an information source to a central broadcast server." Defendants' construction of the server structure provides needless redundancy as to the other claim language. Transmitting data is a limitation of the claimed step itself.

The Court construes "central broadcast server" to mean **"one or more servers that are configured to receive data a plurality of information sources and process the data prior to its transmission to one or more selected remote computing device."**

I. "a content manager for determining how said data is handled" ('433 Claim 1)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
one or more software programs (or a portion of a program) that determine how different types of information received from an information source are handled or processed	Term is governed by 35 USC § 112 ¶ 6. *function*: determining how said data is handled: *corresponding structure*: one or more servers programmed to determine priorities for different types of information, decide which pieces of information will be transmitted and which will be rejected, apply scheduling rules, determine what format the information should be sent in, determine what compression method to use, and determine who should receive the information.

The parties' dispute focuses on whether the term is a means plus function term or not.

1. Parties' Positions

SimpleAir asserts the context of the claim language demonstrates that "content manager" is software as it must be something that can make "determinations." SimpleAir also cites to the Figure 2 "software architecture" which includes the content manager. '433 Fig. 2, 7:57-60. SimpleAir quotes the passage "the content manager 114 determines how different types of information are handled." '433 8:26-27.

SimpleAir asserts that the term is not a means plus function term because the absence of the word "means" creates a strong presumption against the term being construed as means plus function "that is not readily overcome." Dkt. 302 at 10 (citing *Flo Healthcare Solutions, LLC v.*

Kappos, 697 F.3d 1367, 1373-4 (Fed. Cir. 2012)). SimpleAir asserts that to overcome the presumption, the element must be devoid of anything that can be construed as structure. *Id.* SimpleAir asserts that the *AWS* Court recognized that "content manager" was structure within the central broadcast server, namely one or more software programs. *AWS* Order at 23-24. SimpleAir asserts that the standard is not whether a term is generally understood in the art, but rather, whether the term "essentially is devoid of anything that can be construed as structure." Dkt. 359 at 12 (quoting *Flo Healthcare*, 697 F.3d at 1374). SimpleAir also cites to three Eastern District of Texas cases that have found "software" recites sufficiently definite structure to avoid application of §112.[6] SimpleAir asserts that the specification merely provides a preferred embodiment that lists out seven determinations made by the content manager. '433 8:27-47. SimpleAir asserts that Defendants' construction imports six of these determinations. SimpleAir asserts it is incorrect to limit the claims to specific embodiments. Further, SimpleAir asserts that even if the claim term were a means plus function limitation, it is improper to import functional limitations that are not recited in the claim. Dkt. 302 at 12 (citing *Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001). SimpleAir asserts that the structure that Defendants seek to add is only necessary to perform the various un-claimed functions that the preferred embodiment discloses.

Defendants assert that it is black letter law that the term "means" is not required for a limitation to be a means plus function limitation. Dkt. 329 at 36 (citing *MIT v. Abacus Software,* 462 F.3d 1344, 1353 (Fed. Cir. 2006)). Defendants assert that the presumption is overcome because "content manager" has no generally understood structure. Defendants point to the reexamination proceeding in which the patentee stated that "content manager" was a "coined"

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[6] *Aloft Media, LLC v. Adobe Sys.*, 570 F.Supp. 2d 887, 898 (E.D. Tex. 2008); *JuxtaComm-Texas Software v. Axway, Inc.*, 2011 U.S. Dist. LEXIS 1415156 (E.D. Tex. Dec. 7, 2011); *Corelogic Info. Solutions, Inc. v. Fiserv. Inc.*, 2012 U.S. Dist. LEXIS 135386, 24-25 (E.D. Tex. 2012).

term. Dkt. 329 at 36 (citing Ex. 18 at 8). Defendants assert that a term without a generally

meaning should be construed as a means plus function term. Defendants assert that "software" is

a generic term without sufficient structure necessary to avoid a means plus function construction,

similar to terms such as "mechanism," "element" and "device" which "typically do not connote

sufficiently definite structure." Dkt. 329 at 37 (quoting *MIT*, 462 F.3d at 1354).

Defendants further assert that when the means plus function element is a computer or

software running a computer, the element is limited to the algorithms disclosed in the

specification for performing the function. Dkt. 329 at 37 (citing *WMS Gaming, Inc. v. Int'l

Game Tech.,* 184 F.3d 1339, 1349 (Fed. Cir. 1999). Defendants assert that the specification

discloses "one or more servers" as performing the function for determining how data is handled:

"the content manager 114 located in the central broadcast server 34". '433 8:4-5. Defendants

then cite the passage:

> The content manager 114 determines how different types of information are
> handled. In particular, it [1] specifies priorities for different types of information,
> and [2] decides which pieces of information will be transmitted and which will be
> rejected. It also [3] applies scheduling rules 132 to determine when messages
> should be scheduled to be transmitted to the user. In addition, the content
> manager 114 is responsible for [4] determining what format the information
> should be sent in, what [5] compression method to use, and [6] who information
> should be sent to.

'433 8:26-35 (bracketed numbering added). Defendants assert that the corresponding structure

must include the algorithm steps as reflected in Defendants' construction. Defendants assert that

construing the term as a means plus function term is the only way to provide necessary structure

for "content manager."[7]

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[7] At the oral argument Defendants cited to *Functional Media L.L.C. v. Google Inc*., 708 F.3d 1310, 1321–
22 (Fed. Cir. 2013) for the proposition that software cannot be sufficient structure. However, *Functional
Media* was a case in which "means" language was utilized and a case in which (in contrast to the
disclosure at '433 8:26-35) there was no explanation of the functions the software performed.

2. Analysis

The *AWS* Court did not consider whether the "content manager" was a means plus function term as none of the parties advocated such a construction. The claim language, which does not use the term "means," creates a presumption that the limitation is not a means plus function term. *Flo Healthcare*, 697 F.3d at 1373-74. Moreover, as described in the specification, the content manager is part of the "software architecture" for communications. '433 Figure 2, 7:57-60. Further the content manager is "located in the central broadcast server 34." '433 8:4-5. The specification describes the content manager as "the content manager 114 determines how different types of information are handled" ('433 8:26-27) and then describes a number of particular ways the content manager handles the information ('433 8:27-47). Such disclosures are consistent with an interpretation that the content manager is software. Thus, in light of the specification, it is clear that the content manager is software. Here, the recitation of software with a description of the software's operation provides sufficient structural meaning such that the means plus function requirements of §112 ¶ 6 do not apply. *Aloft Media, LLC v. Adobe Sys.*, 570 F.Supp. 2d 887, 898 (E.D. Tex. 2008). The term cannot be stated to be devoid of structure and Defendants have not overcome their burden. The rationale of the *AWS* Order still applies even in view of Defendants new arguments.

The Court construes "content manager" as **"one or more software programs (or a portion of a program) that determine how different types of information received from an information source are handled or processed."**

J. "contextual graphics" and "predefined format" ('433 Claim 69; '914 Claim 69)

"contextual graphics"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
graphics relating to the context of the	Indefinite

preprocessed data that has been received.	

"predefined format"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary.	Indefinite

1. Parties' Positions

Defendants assert that the terms are indefinite. Defendants assert that "contextual graphics" is not used anywhere in the specification. Defendants assert that "contextual graphics" implies that some graphics are "contextual" and some are not, yet the specification does not provide guidance as to how to make such a distinction. Dkt. 329 at 33. Defendants assert that SimpleAir's construction of "relating to" does not cure the deficiencies in "contextual graphics."

As to "predefined format," Defendants assert that the term is also not used in the specification and there is no frame of reference for what is meant by "predefined." Defendants assert that it is unclear whether the format needs to be defined in the sense of a file format (JPEG, GIF, BMP, etc.) or merely defined prior to some known event. Thus, Defendants assert that it is unclear as to whether predefined format refers to the file type or some pre-arrangement established by the programmer or user. Defendants assert the term is indefinite because the bounds of the term cannot be discerned. Dkt. 329 at 33-34.

SimpleAir contends that Defendants submitted no evidence to support their position and merely made attorney argument. SimpleAir asserts the surrounding claim language provides meaning to the terms. SimpleAir asserts that in claim 69, contextual graphics relate to the context of the data that has been received, and "predefined format" refers to a previously defined format in which the data will be displayed. SimpleAir asserts that claim 70 provides an example

in which the "predefined format is a scoreboard" and in this case the "contextual graphics" would relate to a sports game. Dkt. 359 at 14.

2. Analysis

"Only claims 'not amenable to construction' or 'insolubly ambiguous' are indefinite." *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1250 (Fed. Cir. 2008) (quoting *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005)). That is, the "standard [for finding indefiniteness] is met where an accused infringer shows by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area." *Halliburton,* 514 F.3d at 1249-50.

SimpleAir has provided a reasonable interpretation of the claim such that the claim is amenable to a non-ambiguous construction. As to "contextual graphics," graphics which provide context to the information are shown. For example, the "football viewer" of Figure 24(b) provides a graphical football context and the "newspaper viewer" of Figure 24(c) provides a graphical newspaper context. Similarly, the various viewers of Figures 24(a)-24(d) provide the graphics in a predefined format. In light of the specification examples, the term "predefined format" requires no further construction as the formats displayed are merely displayed in a predefined manner. The specification is in conformance with claim 69 of each patent and claim 70 which depends from 69 (claim 70 of each patent describes the predefined format as "a scoreboard"). In light of the specification and claims, the terms are not insolubly ambiguous.

The Court construes "contextual graphics" to be **"graphics relating to the context of the preprocessed data that has been received."** The Court finds that "predefined format" needs no further construction.

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So Ordered and Signed on this

May 20, 2013

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RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE