

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

ZILKR CLOUD TECHNOLOGIES, LLC,

Plaintiff,

v.

CISCO SYSTEMS, INC.,

Defendant.

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CIVIL ACTION NO. 2:22-CV-00166-JRG-RSP

CLAIM CONSTRUCTION ORDER

Before the Court is the opening claim construction brief of Plaintiff Zilkr Cloud Technologies, LLC (“Plaintiff”) (Dkt. No. 92, filed on June 6, 2023), the response of Defendant Cisco Systems, Inc. (“Defendant”) (Dkt. No. 98, filed on June 20, 2023), and the reply of Plaintiff (Dkt. No. 100, filed on June 27, 2023). The Court held a claim construction hearing on July 14, 2023. Having considered the arguments and evidence presented by the parties at the hearing and in their claim construction briefing, the Court issues this Claim Construction Order.

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I. BACKGROUND

Plaintiff brings suit alleging infringement of U.S. Patent Nos. 9,210,254 (the '254 Patent), 9,883,047 (the '047 Patent), 9,883,048 (the '048 Patent), and 9,998,607 (the '607 Patent). The '254, '047, '048, and '607 patents are collectively referred to as the patents-in-suit. While the patents-in-suit all claim priority to a common application, the '047 patent, '048 patent, and '607 patent added additional figures and disclosure to the original specification. The '047, '048, and '607 patents all share a common specification and are continuations-in-part of the '254 patent. Because the '047, '048, and '607 patents all share a common specification, it should be understood that citations to one of these three patents also encompass the corresponding citations to the other two patents. In general, this Opinion refers to the '047 patent for specification citations.

The patents-in-suit generally disclose a system and method to integrate a telephone number for a particular user to a network of third-party applications. The '254 patent discloses the use of a telephone number of a user to become a common ID which is used between multiple third-party services and applications. The '047, '048, and '607 patents generally describe and claim a “unified services platform,” and each patent claims a different workflow on receiving and sending data from the unified services platform as a common interface between a network provider system and a plurality of application service providers. Figure 2 of the '254 patent and Figure 3 of the '047, '048, and '607 patents are reproduced below:

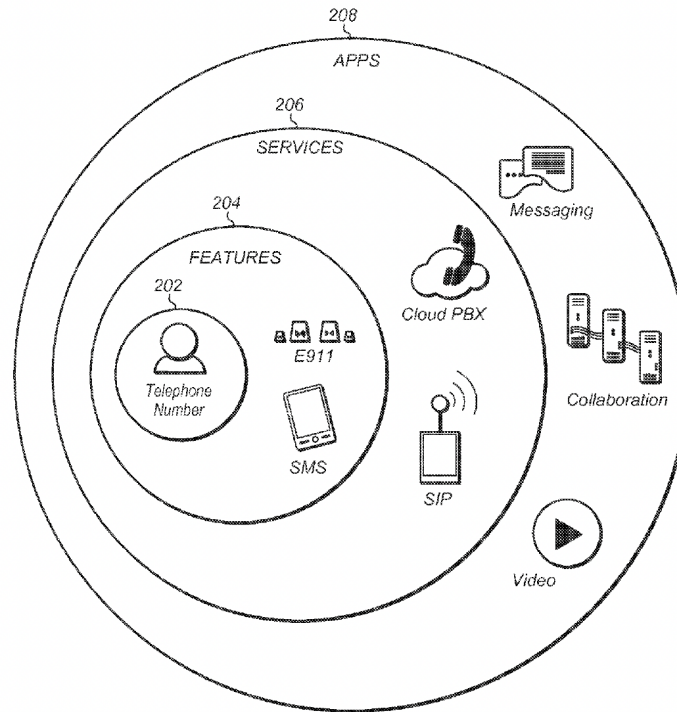


Figure 2 of the '254 patent

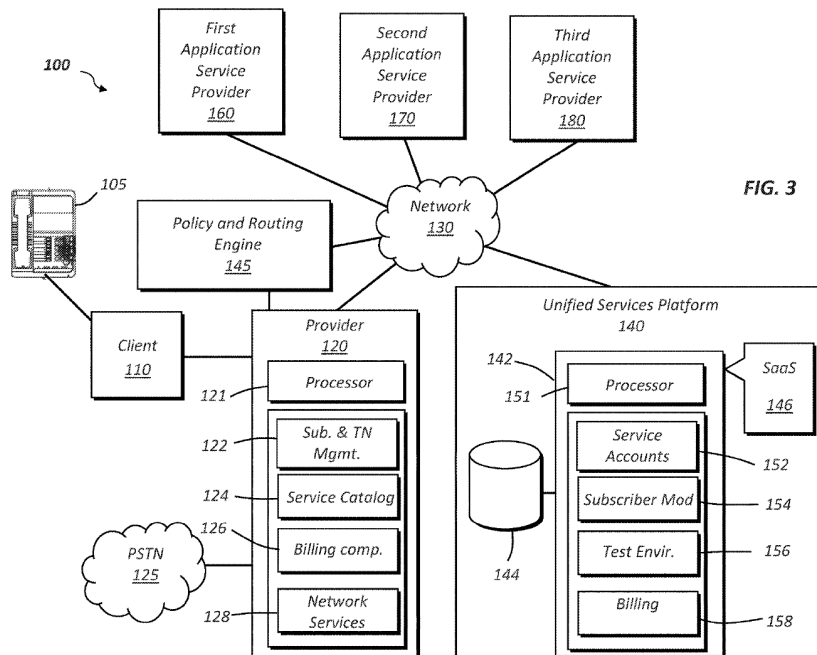


Figure 3 of the '047, '048, and '607 patents

The Abstract of the '254 patent is reproduced below:

A system and method for enabling the telephone number as a platform for the association of IP-enabled services with legacy telephone service. A unified services enabler platform may be utilized to associate a customer and their telephone number with a variety of services and applications from multiple different ecosystems. The customer can continue to use their existing telephone service and in addition can utilize new IP-enabled features that are associated with their telephone number as the common ID.

Claim 1 of the '254 patent is exemplary and is reproduced below:

A telephone system comprising:
a database; and
a server coupled to the database, wherein the server is utilized by a first provider to provide a first service to a first user, wherein the first service is telephone service, and wherein the telephone service is associated with a first telephone number;
wherein the server is configured to:
receive a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider;
responsive to receiving the request:
create a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user;
activate the second service with the second provider utilizing the second ID as a user ID for the first user; and
associate the second service with the first telephone number, wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service.

II. LEGAL PRINCIPLES

A. Claim Construction

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’ ” *Phillips*, 415 F.3d 1303 at 1312 (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court first examines a patent’s intrinsic evidence to define the patented invention’s scope. *Id.* at 1313–14; *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims themselves, the specification and the prosecution history. *Phillips*, 415 F.3d at 1312–13; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004). The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *see also Azure Networks, LLC v. CSR PLC*, 771 F.3d 1336, 1347 (Fed. Cir. 2014) (“There is a heavy presumption that claim terms carry their accustomed meaning in the relevant community at the relevant time.”).

“The claim construction inquiry. . . begins and ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). “[I]n all aspects of claim construction, ‘the name of the game is the claim.’ ” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1298 (Fed. Cir. 2014) (quoting *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998)). First, a term’s context in the asserted claim can be instructive. *Phillips*, 415 F.3d at 1314. Other asserted or unasserted claims can also aid in determining the claim’s meaning, because claim terms are typically used consistently throughout the patent. *Id.*

Differences among the claim terms can also assist in understanding a term’s meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

“[C]laims ‘must be read in view of the specification, of which they are a part.’ ” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’ ” *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficoso N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning than it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

“Although the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims

absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the U.S. Patent and Trademark Office (“PTO”) and the inventor understood the patent. *Phillips*, 415 F.3d at 1317. However, “because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes.” *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be “unhelpful as an interpretive resource”).

Although extrinsic evidence is useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862) (internal quotation marks omitted). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert’s conclusory, unsupported assertions as to a term’s definition are not useful. *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

B. Departing from the Ordinary Meaning of a Claim Term

There are “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution.” *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also* *GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal.”). “The standards for finding lexicography or disavowal are ‘exacting.’ ” *GE Lighting Solutions*, 750 F.3d at 1309.

To act as his own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also* *Renishaw*, 158 F.3d at 1249. The patentee’s lexicography must appear “with reasonable clarity, deliberateness, and precision.” *Renishaw*, 158 F.3d at 1249.

To disavow or disclaim the full scope of a claim term, the patentee’s statements in the specification or prosecution history must amount to a “clear and unmistakable” surrender. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009); *see also* *Thorner*, 669 F.3d at 1366 (“The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.”). “Where an applicant’s statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

C. Definiteness Under 35 U.S.C. § 112(b) (AIA)

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112(b). A claim, when viewed in light of the intrinsic evidence, must “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). If it does not, the claim fails § 112(b) and is therefore invalid as indefinite. *Id.* at 901. Whether a claim is indefinite is determined from the perspective of one of ordinary skill in the art as of the time the application for the patent was filed. *Id.* at 911. As it is a challenge to the validity of a patent, the failure of any claim in suit to comply with § 112 must be shown by clear and convincing evidence. *BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1365 (Fed. Cir. 2017). “[I]ndefiniteness is a question of law and in effect part of claim construction.” *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012).

“When a ‘word of degree’ is used, the court must determine whether the patent provides ‘some standard for measuring that degree.’ ” *Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1378 (Fed. Cir. 2015). “ ‘Reasonable certainty’ does not require ‘absolute or mathematical precision.’ ” *BASF*, 875 F.3d at 1365, quoting *Biosig*, 783 F.3d at 1381. Likewise, when a subjective term is used in a claim, the “court must determine whether the patent’s specification supplies some standard for measuring the scope of the [term].” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1351 (Fed. Cir. 2005). The standard “must provide objective boundaries for those of skill in the art.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014).

III. CONSTRUCTION OF AGREED TERMS

No terms have been agreed to by the parties.

IV. CONSTRUCTION OF DISPUTED TERMS

The parties' positions and the Court's analysis as to the disputed terms within the claims of the patents-in-suit are presented below.

A. "routing and interworking data necessary to utilize the second service"

<u>Plaintiff's Proposed Construction</u>	<u>Defendant's Proposed Construction</u>
No construction is necessary. To the extent a construction is needed: "information that can be used to route data or connect with a second service"	Indefinite

(1) The Parties' Positions

Plaintiff argues that the term should be given its plain and ordinary meaning. *See, e.g.*, Dkt. No. 92, Plaintiff's Opening Claim Construction Brief, at 3-9. Plaintiff argues that the meaning of the term is straightforward in the claims, and the specification confirms the plain and ordinary meaning. *Id.* at 3-4. Plaintiff cites to dictionaries that provide well known definitions for the term "interwork." *Id.* at 5-6. Plaintiff argues that nothing in the prosecution history provides any special meaning to the term, and that the prior art does not disclose the limitation. *Id.* at 5-8. Plaintiff's alternate construction uses the alternate term of "connect" instead of interworking. *Id.* at 9.

Defendant argues that the term is indefinite because there is no reasonable certainty around the boundaries of the term. *See, e.g.*, Dkt. No. 98, Defendant's Responsive Claim Construction Brief, at 3-9. Defendant argues that the specification provides no examples of "routing

information” or “interworking data.” *Id.* at 3. Defendant further argues that because Applicant distinguished the prior art during prosecution based on this claim limitation and the claims were allowed because of this claim limitation, and that the prior art allegedly discloses this limitation, then the claim is indefinite based on substantial ambiguity as to the term. *Id.* at 4-9. Defendant also argues that Plaintiff’s construction substitutes the claim term “necessary” for the permissive “can,” which is wrong. *Id.* at 9-10. Defendant’s expert states that the terms are used consistent with their plain and ordinary meaning, but because of the statements in the prosecution history regarding the prior art that they must be indefinite. *Id.*

In its Reply, Plaintiff argues that the cited prior art does not contain the claimed limitations. *See, e.g.,* Dkt. No. 100, Plaintiff’s Reply Claim Construction Brief, at 2. Plaintiff argues that there was no disclaimer during prosecution history and that there was no clear and unmistakable disclaimer of scope. *Id.* Plaintiff argues that its alternate construction does not read out any limitation. *Id.* at 4-5.

(2) Analysis

The parties dispute whether the term has its plain and ordinary meaning or whether it is indefinite. The primary issue is whether the disputed term is indefinite, and particularly whether the phrase has a different meaning than its plain and ordinary meaning based on an analysis of the prior art. There is not a dispute as to the plain and ordinary meaning itself, but rather whether the boundaries of the term can be reasonably understood. For the reasons below, the Court rejects Defendant’s indefiniteness argument and finds that the term has its plain and ordinary meaning.

The phrase “routing and interworking data necessary to utilize the second service” is found in claims 1, 7, and 13 of the ’254 patent. Claim 1 of the ’254 patent is reproduced below:

1. A telephone system comprising:

a database; and
a server coupled to the database, wherein the server is utilized by a first provider to provide a first service to a first user, wherein the first service is telephone service, and wherein the telephone service is associated with a first telephone number;
wherein the server is configured to:
receive a request to provision a second service for the first user, wherein the second service is provided by a second provider, and wherein the second provider is different than the first provider;
responsive to receiving the request:
create a mapping from the first telephone number to a second identifier (ID), wherein the second ID is utilized by the second provider to identify the first user;
activate the second service with the second provider utilizing the second ID as a user ID for the first user; and
associate the second service with the first telephone number, wherein the first telephone number is associated with **routing and interworking data necessary to utilize the second service.**

(emphasis added). The claims require a first service, a first telephone number, and a second service (among other items), wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service. Nothing in the claims indicates the phrase or embedded terms within the phrase has a meaning other than its plain and ordinary meaning.

The specification includes reference to “interworking” and “routing” information. For example, the ’254 patent specification teaches that the telephone number is associated with the relevant interworking data which allows interworking between all third-party applications:

The telephone number is associated with the relevant interworking data which links all of the IDs and third-party applications and services associated with the telephone number. The telephone number allows for the creation of the interworking between all of the third-party applications.

’254 patent, 12:53-58; *see also* 13:10-16 and 13:47-52. As another example, the ’254 patent specification teaches that the “routing” information may be used to set up and enable user sessions:

After block 820, the unified service enabler platform may generate the necessary routing information for using the service (block 825). Next, the unified service enabler platform may send this routing information to the first and second providers (block 830). The first and second providers may utilize this routing information for setting up and enabling sessions of the service for the user (block 835).

'254 patent, 11:4-10. The specification's usage of "interworking data" and "routing information" confirms the language of the claim that the "routing and interworking data" is the data necessary to connect with and use the second service. Nothing in the specification indicates the terms "interworking" or "routing" has a meaning other than its plain and ordinary meaning.

Plaintiff relies on various definitions in support of its plain meaning approach. For example, the term "interwork" is known in computing as to "be able to connect, communicate, or exchange data." *See* Plaintiff's Opening Brief at page 5 (Dkt. No. 92). The Court finds that the extrinsic evidence offered by Plaintiff – including Plaintiff's technical expert – is consistent with how the terms are used in the specification and the claims.

The prosecution history is relevant to the parties' dispute. The originally presented independent claims for the application leading to the '254 patent did not include the disputed limitation. Instead, the phrase "wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service" originally was presented in dependent claims 5, 12, and 19. In the Office Action dated May 18, 2015, the independent claims were rejected on certain prior art references, but dependent claims 5, 12, and 19 were allowed (containing the relevant disputed limitation). *See* May 18, 2015 Office Action at page 7 (Exh 98-1, ZILKR_PUB_00094). In the July 7, 2015 response, the Applicant amended the independent claims to include the allowed limitation from the dependent claims, and stated simply that the prior art does not contain such limitations. *See* July 7, 2015 Response at page 10 (Exh 98-1, ZILKR_PUB_00111). In particular, Applicant presented the simple heading that "Ketchell and

Moore [the cited prior art] do not teach wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service.” *Id.* In the Notice of Allowance, the Examiner stated that the claims were allowed because of those amendments and that “Ketchell in view of Moore or any of the cited art does not teach ‘wherein the first telephone number is associated with routing and interworking data necessary to utilize the second service.’” *See* Notice of Allowance (Exh 98-1, ZILKR_PUB_00121).

But for the prosecution history, there appears to be no dispute that the terms would have their plain and ordinary meaning. The question then becomes whether the prosecution history provides enough evidence to warrant a finding other than the term’s plain and ordinary meaning, and more particularly, whether the prosecution history necessitates a finding of indefiniteness.

The Court rejects Defendant’s indefiniteness arguments. The claim language is clear, which is consistent with the specification’s treatment of the term. Nothing in the intrinsic record indicates that the phrase means anything other than its plain and ordinary meaning. Nothing in the prosecution history indicates that the phrase was intended to mean something different than its plain and ordinary meaning. While there may or may not be different interpretations of the prior art as applied to the claim term, that does not necessarily require a finding of indefiniteness or that the term must mean something other than its plain and ordinary meaning. The extrinsic evidence relied upon by Plaintiff shows that there is a commonly understood meaning for these terms. Even Defendant’s own expert agrees that the way the terms are used in the claims and specification is consistent with the term’s plain and ordinary meaning. *See* Corrected Declaration of Kevin C. Almeroth (Defendant’s Expert) at paragraph 56 (Dkt. No. 92-3). In particular, Defendant’s expert states that “[t]he claims and specification use the terms ‘routing and interworking data necessary

to utilize the second service’ consistent with their plain and ordinary meanings to a POSA.” *Id.* at paragraph 56.

Defendant’s sole indefiniteness argument is that it is unclear what the phrase means based on its analysis of the prior art, thereby creating ambiguity as to the scope of the claim and the meaning of the term. While admitting the apparent plain and ordinary meaning of the terms, Defendant and Defendant’s expert provide a lengthy discussion of how the prior art allegedly discloses the plain and ordinary meaning of the disputed claim limitations and concludes that the meaning of the terms are unclear (and indefinite) if one is to assume the terms simply have their plain and ordinary meaning. Plaintiff responds that the prior art does not teach all of the claimed limitations as a whole. In particular, Plaintiff responds that the cited prior art “does not disclose two different providers providing services, much less where the ‘routing and interworking data’ are necessary to use the second, different provider’s service, all of which are required by the claim.” *See* Plaintiff’s Reply Brief at page 2 (Dkt. No. 100).

The Court is not convinced by Defendant’s arguments on the prior art and prosecution history. Indefiniteness does not require absolute certainty, but only reasonable certainty around the boundaries of the term. When asked at the claim construction hearing, Defendant was not able to provide any case law for its proposition that the term must be indefinite (as opposed to having a plain and ordinary meaning) based on the prior art allegedly disclosing the claimed limitations. On balance, the Court finds that Defendant’s arguments are primarily invalidity arguments, and the Court does not find that any alleged differences between the prior art and the claims necessarily requires the term to be indefinite or have a special meaning other than its plain and ordinary meaning. If the Court were to conclude that every limitation is indefinite when there is a plain and

ordinary meaning dispute based on alleged differences over the prior art, then a large number of terms would be found indefinite by Courts during the claim construction process.

The Court finds that one of skill in the art would be able to reasonably determine what is meant by “routing and interworking data necessary to utilize the second service.” Overall, the Court finds that there is no doubt that one of ordinary skill in the art would understand with “reasonable certainty” the scope of the invention and the bounds of the term. Accordingly, pursuant to the Supreme Court’s holding in *Nautilus*, the Court rejects Defendant’s arguments that the claim when “read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” The Court finds that Defendant has failed to prove by clear and convincing evidence that the term is indefinite; accordingly, the Court rejects Defendant’s indefiniteness arguments.

Defendant fails to provide any construction for the term and merely argues that it is indefinite if it does not have its plain and ordinary meaning. Plaintiff argues that the term has its plain and ordinary meaning, but provides an alternative construction of “information that can be used to route data or connect with a second service.” The Court finds that Plaintiff’s alternative construction is not particularly helpful, and provides more ambiguity by introducing the phrase of “can be used.” The Court finds that one of ordinary skill in the art, based upon the specification and the claims, would understand the disputed term to have its plain and ordinary meaning. The Court finds that construction proper for this term and thereby adopts that construction. Because this resolves the dispute between the parties, the Court finds that no other terms within the disputed phrase requires further construction. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use

in the determination of infringement. It is not an obligatory exercise in redundancy.”); *see also* *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”) (*citing U.S. Surgical*, 103 F.3d at 1568).

The Court hereby construes the phrase “**routing and interworking data necessary to utilize the second service**” in the ‘254 patent to have its **plain and ordinary meaning**.

B. “unified services platform system” / “unified services platform API interface”

<u>Plaintiff’s</u> <u>Proposed Construction</u>	<u>Defendant’s</u> <u>Proposed Construction</u>
No construction is necessary. To the extent a construction is needed: “a platform to combine applications and services and provide them in an offering to end users” and “an interface to communicate with the unified services platform” For the ’048 patent, the preamble is not limiting.	Indefinite

(1) The Parties’ Positions

Plaintiff argues that the term should be given its plain and ordinary meaning. *See, e.g.*, Dkt. No. 92, Plaintiff’s Opening Claim Construction Brief, at 10-17. Plaintiff argues that the scope of the terms is clear from the claims, and that the words in the terms are well-known, plain, and ordinary. *Id.* at 10-11. Plaintiff argues that there is support in the specification as to what is meant by the terms, including references to hardware and software. *Id.* at 11-13. Plaintiff argues that the term is defined by its function, which does not require a finding of indefiniteness. *Id.* at 13-15. Plaintiff argues that its alternative construction is supported in the specification. *Id.* at 15-16.

Defendant argues that the term is indefinite because the term has no ordinary and customary meaning. *See, e.g.*, Dkt. No. 98, Defendant’s Responsive Claim Construction Brief, at 10. Defendant argues that because the intrinsic evidence provides no meaningful description to the terms, a person of skill in the art cannot reasonably determine the boundaries of the term. *Id.* at 11. Defendant argues that while the unified services platform is depicted in Figure 3 of the ’047 patent, the components are optional and do not provide any specificity as to the term. *Id.* at 12-13. Defendant argues that Plaintiff attempts to define the term by its function rather than any objective boundaries. *Id.* at 14-15.

In its Reply, Plaintiff argues that the claimed terms must have the hardware and/or software to do the steps that are ascribed to them in the claims. *See, e.g.*, Dkt. No. 100, Plaintiff’s Reply Claim Construction Brief, at 5. Plaintiff argues that Defendant has not met its burden to show the claim is indefinite and there is enough disclosure in the specification to avoid a finding of indefiniteness. *Id.* at 6.

(2) Analysis

The parties dispute whether the term is indefinite. Plaintiff argues that the term has a plain and ordinary meaning but provides a construction of the supposed plain and ordinary meaning. For the reasons below, the Court rejects Defendant’s indefiniteness argument.

The phrase “unified services platform” is found in each of the independent claims of the ’047, ’048, and ’607 patents. Some of the references are to a “unified services platform system” while some of the references are to a “unified services platform API interface.” Claim 1 of the ’047 patent is exemplary, and is reproduced below:

1. A method of provisioning a service for use with a group plan, the method comprising:

receiving, by a **unified services platform system**, a subscription request for a service for a group plan, wherein the group plan comprises a plurality of telephone numbers, wherein each telephone number of the plurality of telephone numbers is associated with a subscriber, and wherein the service is provided by a third party application service provider system;

sending, by the **unified services platform system**, an activation request for the group plan to the third party application service provider system,

receiving an activation response from the third party application service provider system;

associating the service with each telephone number of the plurality of telephone numbers;

providing access to the service for each telephone number based on the associating;

receiving, by the **unified services platform system**, a subscription request for a second service from a subscriber associated with a first telephone number of the plurality of telephone numbers, wherein the second service is provided by a second third party application service provider system;

sending, by the **unified services platform system**, a second activation request for the service to the second third party application service provider system;

receiving a second activation response from the second third party application service provider system;

associating the second service with the first telephone number; and

providing access to the second service for the first telephone number based on the associating.

(emphasis added). Claim 1 of the '047 patent requires the “unified services platform system” to receive and send certain information to and from a third-party application service provider system. Independent claim 13 of the '048 patent and independent claim 1 of the '607 patent is similar in relation to the “unified services platform” term.

The specification provides numerous references, teachings, and examples of the “unified services platform system.” For example, the specification is clear that the unified services platform system is a platform to interface with third party services and the network provider:

In order to address this difficulty, the present description provides for the use of a **unified services platform**. The **unified services platform** provides a common

interface for each third party service as well as a common interface for the telecommunication provider. This may allow the **unified services platform** to act as a translation service for the third party services. Each third party service can then maintain a single service product while having the service available for multiple telecommunication providers.

The use of the **unified services platform** may also allow the telecommunication providers to present the third party services as their own. This may increase the satisfaction of the subscribers with the telecommunication providers as well as increase revenues. The third party services may receive more customers by having their services presented to an existing subscriber base.

The ability to offer multiple services through a single telephone number and **unified services platform** may present the opportunity for the individual services to be combined in new and unanticipated ways. For example, the subscriber may activate multiple services and can define rules to control the routing of the information through the services. In some cases, the information can be routed serially through a plurality of services and in others the information can be routed in parallel. The use of serial routing of information may allow the results of one service to be used by the next, in essence creating a new customized service. Similarly, parallel routing of information for the services may allow the desired set of features to be obtained for a subscriber. In some cases, individualized features related to one or more services can be selected and used by the provider or subscriber to create a customized service. For example, selected features from a plurality of services can be grouped to provide a service desired by a subscriber.

Further, use of the **unified services platform** to mediate third party services may allow the services to be billed to the customer on a single bill. For example, the third party services can bill through the telecommunication provider directly to the subscriber rather than having to submit individual bills and deal with recovering payment from the subscriber. Thus, the systems and methods described herein may simplify the interaction of application service providers with telecommunication providers to enhance the services available for subscribers.

'047 patent, 8:46 – 9:22 (emphasis added). In particular, the specification teaches that “the unified services platform provides a common interface for each third party service as well as a common interface for the telecommunication provider.” *Id.* at 8:48-50. Referencing Figure 2 of the patent, the specification provides one example of the unified services platform:

As an example of a system described herein, a block diagram of one embodiment of a telecommunications provider cloud is shown in FIG. 2. The telecommunications provider cloud 204 may allow a telecommunications provider to add third-party applications to its various service offerings and white-brand and

sell those third-party applications as if they were their own. **In an embodiment, the telecommunications provider cloud 204 may include a unified services platform, which can be provided as software as a service (SaaS), and the unified services platform SaaS may be configured to combine large numbers of applications and provide them in a single offering to end users.** The block 202 represents third-party applications combined with native applications that may be sourced by the telecommunications provider represented by cloud 204.

'047 patent, 9:61 – 10:8 (emphasis added). In particular, the specification teaches that the unified services platform “may be configured to combine large numbers of applications and provide them in a single offering to end users.” *Id.* at 10:4-5. Referencing Figure 3 of the patent, the specification provides various teachings for the unified services platform 140:

The provider 120 may also be coupled to the **unified services platform 140** via the network 130. The **unified services platform 140** may be configured to provide a common interface between the application service providers 160, 170, 180, when each may have different APIs. **The unified services platform 140 may unify all of the available services and applications in a single platform and associate the services and applications with a single ID to identify the device 110.** Rather than using an identifier such as an email address or a completely separate identifier, the **unified services platform 140** may associate the various services and applications provided to the device 110 with the telephone number 105. In an embodiment, the provider 120 may use a single API for generating requests that are sent to **unified services platform 140**, and the **unified services platform 140** may aggregate a plurality of APIs for a plurality of providers (e.g., first application service provider 160, second application service provider 170, third application service provider 180, etc.) within different ecosystems. Each separate application service provider may have a different API, which may each be different than the API used by the provider 120. In order to allow the different services to be used by the device 110 through the provider 120, the **unified services platform 140** may activate services using the appropriate API for the provider 120 and each application service provider 160, 170, 180 to deliver the requested service.

The **unified services platform 140** may include software and/or hardware for performing the various tasks to configure and provision a variety of services and applications and associate them with the telephone number 105. In an embodiment, the **unified services platform 140** may be a Software as a Service (SaaS), and the **unified services platform 140** may reside in the cloud. In an embodiment, the **unified services platform 140** may include the server 142 and the database 144 for hosting the SaaS 146 and storing corresponding data. The server 142 and the database 144 are representative of any number of servers and databases. In some embodiments, the computing resources of the **unified services platform** may be

spread out in multiple locations in the cloud and be accessed via the network 130. Although the **unified services platform 140** is shown as being separate from the provider 120, in some embodiments, portions of the **platform 140** or the entirety of the **platform 140** may be integrated within the provider 120.

The server 142 may comprise a processor and the database 144 or another memory may comprise one or more components for performing the various tasks. In an embodiment, the **unified services platform 140** may comprise an application service provider account component 152, a subscriber component 154, a test environment component 156, and a billing component 158. While some components are illustrated in FIG. 3, any number of additional components may be included and executed by the **unified services platform 140**.

‘047 patent, 13:30 – 14:16 (emphasis added). In particular, the specification teaches that the “unified services platform 140 may unify all of the available services and applications in a single platform and associate the services and applications with a single ID to identify the device.” *Id.* at 13:34-38.

The prosecution history is not particularly relevant. Neither party relies on the prosecution history in support of their arguments.

The Court rejects Defendant’s indefiniteness arguments. There are repeated references to the “unified services platform” throughout the specification with ample teachings of what is meant by the term. The fact that the claim describes the functions the term performs does not require a finding of indefiniteness. The fact that there are multiple embodiments of the term does not require a finding of indefiniteness. The fact that the term may be broad does not require a finding of indefiniteness. Overall, based on the specification, the Court finds that the “unified services platform” is a platform that combines applications and services in a single offering to end users. This understanding of the term from the specification is consistent with how the term is used in the claims. Contrary to Defendant’s arguments, indefiniteness does not require absolute certainty, but only reasonable certainty around the boundaries of the term. The Court finds that one of skill

in the art would be able to reasonably determine what is meant by the term “unified services platform.” Overall, the Court finds that there is no dispute that one of ordinary skill in the art would understand with “reasonable certainty” the scope of the invention and the bounds of the term. Accordingly, pursuant to the Supreme Court’s holding in *Nautilus*, the Court rejects Defendant’s arguments that the claim when “read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” The Court finds that Defendant has failed to prove by clear and convincing evidence that the term is indefinite; accordingly, the Court rejects Defendant’s indefiniteness arguments.

The Court recognizes the fact that certain claims use the term “unified services platform *system*” and others use the term “unified services platform *API interface*.” Plaintiff proposes the phrase “a platform to combine applications and services and provide them in an offering to end users” for the term “unified services platform system,” and the phrase “an interface to communicate with the unified services platform” for the term “unified services platform API interface.” It is unclear what, if any, disputes there are between the parties as to the additional terms of “API interface” and “system.” The parties appear to agree that the term API interface has its plain and ordinary meaning and is not disputed. Likewise, the word “system” is not necessarily disputed. Instead, the parties dispute the core phrase “unified services platform.” The Court finds that one of ordinary skill in the art, based upon the specification and the claims, would understand the surrounding disputed terms to have their plain and ordinary meaning, and the parties’ dispute is based on the base term “unified services platform.” As to the term “unified services platform,” the Court generally agrees that Plaintiff’s construction is appropriate based on the intrinsic record, but finds that the offering to end users is a “single offering” based on the express language from

the specification. *See, e.g.*, '047 patent, 10:4-5. During the claim construction hearing, neither the Plaintiff nor the Defendant disputed the Court's proposed construction of a "single offering to end users." Further, while the Court proposed the additional phrase "via a common interface" during the claim construction hearing, the Court is not convinced that phrase is warranted and appropriate in the term's construction, and thus does not include it in Court's final construction of the term.

The Court hereby construes the term **"unified services platform"** in the '047, '048, and '607 patents to mean **"a platform to combine applications and services and provide them in a single offering to end users."**

C. "the network provider system"

<u>Plaintiff's Proposed Construction</u>	<u>Defendant's Proposed Construction</u>
"a network provider system"	Indefinite

(1) The Parties' Positions

Plaintiff argues that the term does not have an antecedent issue and should be given its plain and ordinary meaning, which is "a network provider system." *See, e.g.*, Dkt. No. 92, Plaintiff's Opening Claim Construction Brief, at 17-18. Plaintiff argues that the claims are clear that the third-party application service provider is different than the network provider system, which is consistent with the specification. *Id.*

Defendant argues that the term is indefinite because it lacks antecedent basis in the claim and it is not clear as to what is meant by the term. *See, e.g.*, Dkt. No. 98, Defendant's Responsive Claim Construction Brief, at 21-22. Defendant argues that there are multiple network provider

systems, and it is unclear what is meant by the term. *Id.* Because there is reasonable debate as to what is meant by the term, Defendant argues that its indefinite. *Id.*

In its Reply, Plaintiff argues that the lack of antecedent basis does not prevent one of skill in the art in understanding the term. *See, e.g.*, Dkt. No. 100, Plaintiff’s Reply Claim Construction Brief, at 7. Plaintiff argues that the term only recites “the network provider system” and no “second network provider,” so there is no ambiguity. *Id.*

(2) Analysis

The dispute is whether lack of antecedent basis for the term “the network provider system” necessarily renders the claim indefinite. For the reasons below, the Court rejects Defendant’s indefiniteness argument.

The phrase “the network provider system” appears in claim 4 of the ’047 patent, which is dependent on claim 1 of the ’047 patent. Claims 1, 4, and 5 of the ’047 patent are reproduced below:

1. A method of provisioning a service for use with a group plan, the method comprising:
 - receiving, by a unified services platform system, a subscription request for a service for a group plan, wherein the group plan comprises a plurality of telephone numbers, wherein each telephone number of the plurality of telephone numbers is associated with a subscriber, and wherein the service is provided by a third party application service provider system;
 - sending, by the unified services platform system, an activation request for the group plan to the third party application service provider system,
 - receiving an activation response from the third party application service provider system;
 - associating the service with each telephone number of the plurality of telephone numbers;
 - providing access to the service for each telephone number based on the associating;

receiving, by the unified services platform system, a subscription request for a second service from a subscriber associated with a first telephone number of the plurality of telephone numbers, wherein the second service is provided by a second third party application service provider system;

sending, by the unified services platform system, a second activation request for the service to the second third party application service provider system;

receiving a second activation response from the second third party application service provider system;

associating the second service with the first telephone number; and

providing access to the second service for the first telephone number based on the associating.

4. The method of claim 1, wherein an API of the third party application service provider system is incompatible with an API of **the network provider system**.

5. The method of claim 4, wherein the API of the third party application service provider system is integrated with the unified services platform system, and wherein API of **the network provider system** is integrated with the unified services platform system, and wherein the third party application communicates with **the network provider system** through the unified services platform system.

(emphasis added). The phrase “the network provider system” in claim 4 has no antecedent basis in claim 4 or in independent claim 1. Instead, claim 1 references a “unified services platform system” and a “third party application service provider system.” Claim 4 makes it clear that “the network provider system” is different than the “third party application service provider system.” Claim 5, which is dependent on claim 4, makes it clear that “the network provider system” is also not the same as the “unified services platform system.” The parties dispute whether the phrase should mean “a network provider system” or some other undescribed system or one of the other recited systems in the claims. Based on the claim language on its own, it is clear that “the network provider system” is a distinct system.

The specification resolves any ambiguity as to the term. Figure 3 of the specification describes an embodiment of the unified services platform system. Referring to Figure 3, and

generally consistent with the claims, system 100 comprises a device 110, a provider 120, a unified services platform 140, a network 130, and a plurality of application service providers 160, 170, 180. *See* '047 patent, 10:19-33. The specification discusses provider 120 in detail and states that the provider 120 may be a network provider:

The provider may comprise a telecommunications service provider. In some embodiments, **the provider 120** may be another type of provider such as a mobile carrier, a cable services provider, **a network provider**, an enterprise operating a business and providing network service to subscribers (e.g., employees, customers, contractors, etc.), or the like.

'047 patent, 10:54-60 (emphasis added); *see also* 11:20-22, 12:47-51. Based on the claims and the specification, it is clear that the provider 120 detailed in the specification is the network provider referenced in the claims.

The prosecution history is not particularly relevant. Neither party relies on the prosecution history in support of their arguments.

The Court rejects Defendant's indefiniteness arguments. Based on the claim language, it is clear that "the network provider system" is not the same as the "unified services platform system" or the "third party application service provider system." In other words, based on the claim language, there is no ambiguity that "the network provider system" is a separate system, which is consistent with the specification. And based on the specification, it is clear that the provider 120 detailed in the specification (which is also referenced as the network provider) is "the network provider" referenced in the claims. There is no other reasonable interpretation of this limitation. This finding is further confirmed by claim 1 of the '607 patent, which references "a network provider system" – a term that has not been disputed by the Defendant as to that claim.

While claim 4 lacks an express antecedent basis, it is clear from the specification and the claims that "the network provider system" is a separate system than the other systems referenced

in the claims. While the Court cannot rewrite claims to correct a material error, the issue here is not correction of an error, but understanding of what the claim covers. The fact that a claim lacks explicit antecedent basis does not necessarily render the claim indefinite, as the reasonable meaning must be decided in context. *Energizer Holdings, Inc. v. ITC*, 435 F.3d 1366, 1370-71 (Fed. Cir. 2006). The Court finds that one of skill in the art would be able to reasonably determine what is meant by “the network provider system” term. Overall, the Court finds that there is no dispute that one of ordinary skill in the art would understand with “reasonable certainty” the scope of the invention and the bounds of the term. Accordingly, pursuant to the Supreme Court’s holding in *Nautilus*, the Court rejects Defendant’s arguments that the claim when “read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” The Court finds that Defendant has failed to prove by clear and convincing evidence that the term is indefinite; accordingly, the Court rejects Defendant’s indefiniteness arguments.

The Court hereby construes the phrase “**the network provider system**” in claim 4 of the ’047 patent to mean “**a network provider system.**”

D. “wherein at least two of the API interfaces are different”

<u>Plaintiff’s Proposed Construction</u>	<u>Defendant’s Proposed Construction</u>
No construction is necessary. Plain and ordinary meaning.	Indefinite

(1) The Parties’ Positions

Plaintiff argues that the term should be given its plain and ordinary meaning, as the word “different” is readily understandable. *See, e.g.*, Dkt. No. 92, Plaintiff’s Opening Claim

Construction Brief, at 19-20. Plaintiff argues that the term is used throughout the intrinsic record consistent with its ordinary meaning, and nothing suggests that it has a special meaning. *Id.*

Defendant argues that the term is indefinite because it is not clear what would need to be “different” between two APIs. *See, e.g.*, Dkt. No. 98, Defendant’s Responsive Claim Construction Brief, at 15-16. Defendant argues that the term is one of degree, and because the specification does not provides any boundaries to the term, it must be indefinite. *Id.* at 15-16. Defendant argues that one of skill in the art would not be able to reasonably ascertain when two API interfaces of two application provider systems are different or are the same. *Id.* at 16.

In its Reply, Plaintiff argues that the “same” and “different” are simple concepts and the specification does not have to explain in further detail. *See, e.g.*, Dkt. No. 100, Plaintiff’s Reply Claim Construction Brief, at 7. Plaintiff argues that two APIs could be from different providers and still be the same. *Id.* Plaintiff argues that Defendant has not met its burden to prove that the term is indefinite. *Id.* at 8.

(2) Analysis

The parties dispute whether the term has its plain and ordinary meaning or whether it is indefinite. There is not a dispute as to the plain and ordinary meaning itself, but rather whether the boundaries of the term can be reasonably understood. The primary issue is what is meant by the term “different,” and in particular, how big of a “difference” should there be between two items to be “different.” For the reasons below, the Court rejects Defendant’s indefiniteness argument and finds that the term has its plain and ordinary meaning.

The phrase “wherein at least two of the API interfaces are different” is found in claim 13 of the ’048 patent and claim 1 of the ’607 patent. Claim 13 of the ’048 patent is exemplary and reproduced below:

13. A method of developing and testing a new application service through a unified services platform, the method comprising:

establishing a plurality of service accounts for a corresponding plurality of application service provider systems;

receiving a plurality of API interfaces from the plurality of application service provider systems, **wherein at least two of the API interfaces are different,**

integrating each of the plurality of API interfaces with a unified services platform system API interface;

receiving a definition of a service for each of the plurality of application service provider systems;

receiving one or more definitions of actions for each service for each of the plurality of application service provider systems, wherein the actions comprise responses to triggering events occurring for a telephone number;

testing each triggering event and corresponding action for each service in a test environment to generate a response;

providing access to each service within a working environment after performing the testing; and

publishing, after testing, the definition of the service, the definition of the plan, and the one or more definitions of actions for each application service provider in a provisioning catalog.

(emphasis added). The claim is directed to a method of developing and testing a new application service through a unified services platform, wherein the method includes receiving a plurality of API interfaces from the plurality of application service provider systems, “wherein at least two of the API interfaces are different.” The claim does not specify how different the API interfaces need to be, only that at least two of the API interfaces are “different.” Nothing in the claims indicates the term “different” has a meaning other than its plain and ordinary meaning.

The specification has repeated references to the term “different.” The Abstract of the patent mentions that “[a]t least two of the API interfaces are different.” The Background section of the patent mentions “different ecosystems,” “different types of IDs,” and “different rules and policies.” See ’047 patent, 1:34-36. The Summary section of the patent mentions “different” application

developer systems and that at least two of the API interfaces are “different.” *See* ’047 patent, 1:44-62. The specification mentions that the first ID may or may not be different than the second ID, and that the first API may or may not be different than the second API. *See* ’047 patent, 13:4-15. The specification states that the “unified services platform 140 may be configured to provide a common interface between the application service providers 160, 170, 180, when each may have different APIs.” ’047 patent, 13:31-34. “Each separate application service provider may have a different API, which may each be different than the API used by the provider 120.” ’047 patent, 13:48-50. Nothing in the specification indicates the term “different” has a meaning other than its plain and ordinary meaning.

The prosecution history is not particularly relevant. Neither party relies on the prosecution history in support of their arguments.

The Court rejects Defendant’s indefiniteness arguments. The claim language is clear, which is consistent with the specification’s treatment of the term. Nothing in the intrinsic record indicates that the term “different” means anything other than its plain and ordinary meaning. Nor has Defendant pointed to any evidence that the term “different” has any meaning other than its plain and ordinary meaning.

The claim does not state “substantially different” or any other term of degree related to “different.” The claims simply require that at least two of the API interfaces are “different.” The Court is not convinced that the term “different” – by itself – is a term of degree. Contrary to Defendant’s arguments, the claim does not require a certain amount of “difference” to be different. Likewise, the Court rejects Defendant’s arguments that requiring the APIs to be different without criteria to define what constitutes the “difference” requires a finding of indefiniteness. Instead, the plain meaning of the term “different” is simply “not the same.” Definiteness does not require

absolute certainty, but only reasonable certainty around the boundaries of the term. The Court finds that one of skill in the art would be able to reasonably determine what is meant by the term “different.” Overall, the Court finds that there is no dispute that one of ordinary skill in the art would understand with “reasonable certainty” the scope of the invention and the bounds of the term. Accordingly, pursuant to the Supreme Court’s holding in *Nautilus*, the Court rejects Defendant’s arguments that the claim when “read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” The Court finds that Defendant has failed to prove by clear and convincing evidence that the term is indefinite; accordingly, the Court rejects Defendant’s indefiniteness arguments.

The Court finds that one of ordinary skill in the art, based upon the specification and the claims, would understand the disputed term to have its plain and ordinary meaning. The Court finds that construction proper for this term and thereby adopts that construction. Further, the Court is not convinced that substituting other words for a well-known term (such as “not the same” for “different”) is helpful or appropriate. Because this resolves the dispute between the parties, the Court finds that no other terms within the disputed phrase requires further construction. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy.”); *see also O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“[D]istrict courts are not (and should not be) required to construe every limitation present in a patent’s asserted claims.”) (citing *U.S. Surgical*,

103 F.3d at 1568). The Court notes that the parties did not argue this term during the claim construction hearing and rested on their claim construction briefing.

The Court hereby construes the phrase “**wherein at least two of the API interfaces are different**” to have its **plain and ordinary meaning**.

E. “the definition of the plan”

<u>Plaintiff’s</u> <u>Proposed Construction</u>	<u>Defendant’s</u> <u>Proposed Construction</u>
No construction is necessary. To the extent a construction is needed: “a definition of a plan”	Indefinite

(1) The Parties’ Positions

Plaintiff argues that the term should be given its plain and ordinary meaning and that there is no antecedent issue. *See, e.g.*, Dkt. No. 92, Plaintiff’s Opening Claim Construction Brief, at 21-23. Plaintiff argues that the claim recites the term “service,” and the term “plan” is a necessary attribute of the previously recited “service,” and thus there is no antecedent issue. *Id.* at 21. In other words, the claim’s introduction of a “service” provides antecedent basis for “the plan.” *Id.* Even if there was an antecedent basis issue, Plaintiff argues that the specification is clear that “the plan” is an attribute of a “service,” and is thus not indefinite. *Id.* Plaintiff argues that nothing in the intrinsic record suggests otherwise. *Id.* at 23.

Defendant argues that the term is indefinite because it lacks antecedent basis in the claim and it is not clear what is meant by the term. *See, e.g.*, Dkt. No. 98, Defendant’s Responsive Claim Construction Brief, at 17-21. Defendant argues that lack of antecedent basis fails to inform what “the plan” relates to. *Id.* at 18-19. Defendant compares claim 1 of the ’607 patent, which correctly

provides an antecedent basis to the term, to claim 13 of the '047 patent, which does not. *Id.* at 19. Defendant argues that while a plan may be an attribute or associated with a service, a service is different from a plan and reciting a service does not inherently recite a plan, and only inherent components can provide antecedent basis to avoid indefiniteness. *Id.* at 19-20.

In its Reply, Plaintiff argues that the use of the term in both patents show that it has the same meaning, and supports a finding of definiteness. *See, e.g.*, Dkt. No. 100, Plaintiff's Reply Claim Construction Brief, at 8. Plaintiff argues that what is published is the plan of the service. *Id.* Plaintiff argues that there is no ambiguity in the claims. *Id.*

(2) Analysis

The dispute is whether lack of antecedent basis for the phrase "the definition of the plan" renders the claim indefinite. For the reasons below, the Court is persuaded by Defendant's indefiniteness argument and finds that the term is indefinite.

The phrase "the definition of the plan" appears in claim 13 of the '048 patent, which is reproduced below:

13. A method of developing and testing a new application service through a unified services platform, the method comprising:

- establishing a plurality of service accounts for a corresponding plurality of application service provider systems;
- receiving a plurality of API interfaces from the plurality of application service provider systems, wherein at least two of the API interfaces are different,
- integrating each of the plurality of API interfaces with a unified services platform system API interface;
- receiving a definition of a service for each of the plurality of application service provider systems;
- receiving one or more definitions of actions for each service for each of the plurality of application service provider systems, wherein the actions comprise responses to triggering events occurring for a telephone number;

testing each triggering event and corresponding action for each service in a test environment to generate a response;

providing access to each service within a working environment after performing the testing; and

publishing, after testing, the definition of the service, **the definition of the plan**, and the one or more definitions of actions for each application service provider in a provisioning catalog.

(emphasis added). The claim recites receiving “a definition of a service for each of the plurality of application service provider systems” and receiving “one or more definitions of actions for each service for each of the plurality of application service provider systems.” The claim also recites publishing, after testing, “the definition of the service, the definition of the plan, and the one or more definitions of actions for each application service provider...” Based on the claim language alone, it is unclear what is being referred to by “the definition of the plan,” because there is no antecedent basis for “the plan” or “the definition of the plan.”

The specification has multiple references to definitions and plans. “In general, a service can be provisioned into the unified services platform 140 by defining the services, plans, and actions used with the service.” ’047 patent, 15:33-36. The specification is clear that plans may be “associated with” the service offered by the application service provider:

At step 404, the application service provider 160 may define the plans and services offered through the unified service provider. The services may define the availability and types of activities that the application service provider can provide with their products. The services can be defined through the use of catalog data such as a service name, associated website, description, category, availability, and the like. The service may also be defined using technical information including a configuration description, support information, and event notification information. The information may be provided as a link to URL, a message, or a messaging format for use with the service. **The plans comprise information regarding pricing, features, and/or service limits associated with the service offered by the application service provider 160. The definitions and information for the services and plans can be stored in the unified services platform 140.**

Id. at 15:56-16:5 (emphasis added); *see also* 46:1-4. At best, the specification suggests that the plans comprise information regarding pricing, features, and/or service limits associated with the service offered by the application service provider. *See id.* Contrary to Plaintiff's arguments, the fact that a service is recited does not mean that a plan is inherent to that service. In other words, the specification and claims clearly teach receiving and sending a "service" and a "plan" as separate steps or components, and one does not necessarily require or imply the other.

The prosecution history is not particularly relevant. Neither party relies on the prosecution history in support of their arguments. However, one of the other patents-in-suit is relevant and instructive as to the parties' dispute. Claim 1 of the '607 patent includes very similar steps and limitations as to claim 13 of the '048 patent. Claim 1 of the '607 patent is reproduced below:

1. A method of provisioning a plurality of applications from different application developer systems to a network provider system through a unified services platform, the method comprising:
 - establishing a plurality of service accounts for a corresponding plurality of application service provider systems, wherein the plurality of application service provider systems provide services for use in association with a telephone number of a subscriber of telecommunication services;
 - receiving, by a processor system, a plurality of API interfaces from the plurality of application service provider systems, wherein at least two of the API interfaces are different,
 - integrating, by the processor system, each of the plurality of API interfaces with a unified services platform API interface;
 - receiving a provider API interface for a network provider system;
 - integrating the provider API interface with the unified services platform API interface, wherein at least one of the plurality of API interfaces from the plurality of application service provider systems is not compatible with the provider API interface;
 - receiving a definition of a service and a plan for each of the plurality of application service provider systems;**
 - receiving one or more definitions of actions for the service, wherein the actions comprise responses to triggering events occurring with a telephone number;
 - and

publishing, after integrating each of the plurality of API interfaces with the unified services platform, the definition of the service, **the definition of the plan**, and the one or more definitions of actions for each application service provider in a provisioning catalog.

(emphasis added). In contrast to claim 13 of the '048 patent, claim 1 of the '607 patent expressly provides antecedent basis for a “plan.” In particular, claim 1 of the '607 patent recites receiving “a definition of a service **and a plan** for each of the plurality of application service provider systems.” (emphasis added). Claim 1 of the '607 patent does not state that the plan is part of the service or an inherent aspect of the service, nor does it state that the plan is for the service; rather, claim 1 requires receiving a definition of a service and a plan “for each of the plurality of application service provider systems.”

Plaintiff argues that “the definition of the plan” has antecedent basis because the associated term “service” is previously cited, and that a “plan” is an “attribute” of the already-introduced “service” term. Based on the prior recitation of “service,” Plaintiff argues that the disputed term simply means “a definition of the plan.” The Court disagrees. First, there are two antecedent problems with the disputed term. There is no previously recited “plan,” and there is no previously recited “definition of the plan.” In other words, even if a plan was previously recited in the claim, there is still no instruction on what is meant by the “definition of the plan.” Plaintiff’s construction does not resolve this issue. Second, as mentioned above, while the specification teaches that the plans are “associated with” the services, it is clear the “plans” and “services” are distinct limitations. Even though “services” is recited in the claim, the claim does not specify any relationship between plans and services, and it is unclear what, if any, the relationship is between the plans and services, or the related application service provider systems. Again, Plaintiff’s construction does not resolve this issue. Third, there is a reasonable dispute as to what is meant

to be covered by the undefined plans. Is there a plan for “each of the plurality of application service provider systems,” as in claim 1 of the ’607 patent? Is there a plan for each service? Is there a plan and a service for each of the plurality of application service provider systems? Plaintiff appears to argue that the plan is for a service, and not for an application service provider system. Indeed, Plaintiff argues that “what is published is the plan *of the service*.” See Plaintiff’s Reply Brief at page 8 (Dkt. No. 100). Fourth, it is unclear whether method claim 13 of the ’048 patent requires *receiving* a plan or a definition of a plan, or merely that it must *publish* an undefined “definition of the plan.”

On balance, the Court is persuaded by the Defendant’s arguments that the term is indefinite. The Court rejects Plaintiff’s arguments to the contrary. The claim language in claim 13 of the ’048 patent lacks antecedent basis for the disputed term, a problem that is not easily solved. There is no antecedent basis for “the plan” or “the definition of the plan,” a problem made more evident by comparison to claim 1 of the ’607 patent. The specification is not helpful and does not resolve the dispute between the parties. The Plaintiff’s construction does not resolve the dispute between the parties. This is not a situation where an antecedent basis can be fixed by pointing to an inherent relationship to a previously recited claim limitation. Absent a specific claim limitation providing otherwise, the mere recitation of a “service” does not require a “plan.” What is clearly missing in claim 13 of the ’048 patent is a defining limitation of what is “a plan” and what is “a definition of the plan.” The parties and the Court would merely be guessing as to what is meant by the undefined term. The Court agrees with Defendant’s expert’s opinion that the term is indefinite. See Corrected Declaration of Kevin C. Almeroth, Defendant’s Expert at paragraphs 42-44 (Dkt. No. 92-3).

While definiteness does not require absolute certainty, it does require reasonable certainty around the boundaries of the term. The Court finds that one of skill in the art would not be able to

reasonably determine what is meant by the phrase “the definition of the plan.” Overall, the Court finds that there is a dispute that one of ordinary skill in the art would understand with “reasonable certainty” the scope of the invention and the bounds of the term. Accordingly, pursuant to the Supreme Court’s holding in *Nautilus*, the Court is persuaded by Defendant’s arguments that the claim when “read in light of the specification delineating the patent, and the prosecution history, fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” The Court finds that Defendant has proven by clear and convincing evidence that the term is indefinite.

Accordingly, the Court finds the phrase “**the definition of the plan**” in claim 13 of the ’048 patent to be **indefinite**.

F. “test environment”

<u>Plaintiff’s Proposed Construction</u>	<u>Defendant’s Proposed Construction</u>
No construction is necessary. Plain and ordinary meaning.	“an environment that does not allow the interactions to be released because it is without the actual external connections or communications”

(1) The Parties’ Positions

Plaintiff argues that the term should be given its plain and ordinary meaning. *See, e.g.*, Dkt. No. 92, Plaintiff’s Opening Claim Construction Brief, at 23-25. Plaintiff argues that the term is clear from the language of the claim itself and the specification. *Id.* at 23. Plaintiff argues that the references to the specification as examples in the prosecution history do not amount to a disclaimer. *Id.* at 24. Even if there was a disclaimer, it is unclear whether “external” modifies communications, which was clearly intended in the prosecution history. *Id.*

Defendant argues that the term has a specific construction based on comments in the prosecution history. *See, e.g.*, Dkt. No. 98, Defendant’s Responsive Claim Construction Brief, at 22-25. Defendant argues that, in response to a finding of indefiniteness by the Examiner, the applicant pointed to the specification as to what is meant by the term. *Id.* A test environment is separate and distinct from a working environment. *Id.* at 23. Defendant argues that the specification and prosecution history explained what is meant by a test environment, and that language should be controlling. *Id.* at 23-24.

In its Reply, Plaintiff argues that Defendant has not shown there is a clear and unmistakable disclaimer in the prosecution history. *See, e.g.*, Dkt. No. 100, Plaintiff’s Reply Claim Construction Brief, at 9. Plaintiff argues that the prosecution history statements were exemplary and not limiting. *Id.*

(2) Analysis

The parties dispute whether there was a prosecution history disclaimer as to the term. Plaintiff argues for a plain and ordinary meaning, and Defendant proposes a construction based on prosecution history disclaimer. For the reasons below, the Court rejects Defendant’s disclaimer argument.

The term “test environment” appears in claim 13 of the ’048 patent, which is reproduced below:

13. A method of developing and **testing** a new application service through a unified services platform, the method comprising:
 - establishing a plurality of service accounts for a corresponding plurality of application service provider systems;
 - receiving a plurality of API interfaces from the plurality of application service provider systems, wherein at least two of the API interfaces are different,

integrating each of the plurality of API interfaces with a unified services platform system API interface;

receiving a definition of a service for each of the plurality of application service provider systems;

receiving one or more definitions of actions for each service for each of the plurality of application service provider systems, wherein the actions comprise responses to triggering events occurring for a telephone number;

testing each triggering event and corresponding action for each service in a **test environment** to generate a response;

providing access to each service within a **working environment** after performing the **testing**; and

publishing, after **testing**, the definition of the service, the definition of the plan, and the one or more definitions of actions for each application service provider in a provisioning catalog.

(emphasis added). The claim is directed towards a method of developing and testing a new application service. The claim is clear that the method step requires testing in a test environment. The claim contrasts a “working environment” with a “testing environment.” After being placed in a working environment, only then does the claim specify that the service is published in a provisional catalog.

The specification teaches that the unified services platform 140 may comprise a test environment component 156. *See* ’047 patent, 14:10-12. The specification provides a detailed description on the test environment component:

The **test environment component 156** may be provided by the unified services platform 140 to allow one or more application service providers 160, 170, 180 to develop the services and **test the interaction of the services with the unified services platform 140**. The **test environment component 156** may respond in a manner that is the same or similar to the live implementation of the unified services platform 140 **without allow the interactions to be released**.

’047 patent, 14:56-63 (emphasis added). In particular, the test environment allows the application service providers to test the interaction of the services without allowing the interactions to be released. *See id.* The specification also provides a detailed description on the testing process:

Once the service has been defined in the unified services platform 140, the service can be tested and built in step 412. In an embodiment, the testing component 156 within the unified services platform 140 can be used to fully test the services, functionality, and compatibility of the application service provider 160 with the unified services platform 140. Testing can include executing a number of test cases to fully establish the functionality of the service. For example, each trigger can be executed along with the use of one or more rules or policies to allow the communication with the unified services platform 140 to be verified. Billing scenarios including invoicing and returning payment can also be tested using the test system. Once the service is tested, it can be completed and published to the unified services platform 140 in step 414. The same process can be used to provision any number of services from a given application service provider 160, and/or for each service provided by different application service providers 160, 170, 180.

'047 patent, 18:4-21. The specification is consistent with the way the term “test environment” and related testing steps are utilized in the claim.

During prosecution of the application leading to the '048 patent, the Examiner issued an Office Action finding that the term “test environment” was indefinite and rejecting those claims. *See* '048 patent prosecution history, April 17, 2017 Office Action at page 2 (Exh. E to Defendant's Responsive Brief, Dkt. No 98-5). The Examiner explained that the testing limitations in the then-pending claims were indefinite because “it is not clear how the trigger event is being tested and why and what is the relationship between testing the trigger and generate a response, the specification does not further explain the ‘test environment’ or how the ‘testing’ is being performed.” *See id.* at page 2 (ZILKR_PUB_000920). In response, the Applicant pointed the Examiner to the specification as support for the term “test environment”:

The test environment is described in a number of places in the Description. Initially, paragraph [0078] of the Specification as filed describes the test environment, which allows the application service providers to test the services and their interactions with the unified services platform. **For example**, this paragraph states, “The test environment component 156 **may respond** in a manner that is the same or similar to the live implementation of the unified services platform 140 without allow[] the interactions to be released.” **In other words, the test**

environment is the same as the unified services platform without the actual external connections or communications.

Paragraph [0090] then describes the testing process. As noted in this paragraph, testing includes executing any number of test cases in the test environment to establish the functionality of the services. This can include testing the trigger events to verify communications and actions. Billing scenarios can be tested to ensure they accurately bill to the correct accounts. When the testing verifies the functionality and operability of the services, the tested versions can be published for use with the live version of the unified services platform.

In the context of the claims, the testing is used to establish what the response will be for a given triggering event. This response is then stored and used for defining the services. Thus, the testing in claim 1 refers to the proper functioning of the services with the unified services platform.

See '048 patent prosecution history, August 17, 2017 Response to Office Action at pages 12-13 (Exh. E to Defendant's Responsive Brief, Dkt. No 98-5) (emphasis added).

The Court rejects Defendant's prosecution history disclaimer arguments, and Defendant's reliance on the prosecution history is not persuasive. On balance, the Court finds that the cited statements in the prosecution history do not amount to a clear and unmistakable disclaimer. If the prosecution history statements "are ambiguous or amenable to multiple reasonable interpretations, prosecution disclaimer is not established. *Tech. Prop. Ltd. LLC v. Huawei Techs. Co., Ltd.*, 849 F.3d 1349, 1358 (Fed. Cir. 2017). The statements in the prosecution history are expressly exemplary. The Applicant referenced portions of the specification as teaching what is meant by the test environment term, and preceded those references by exemplary language such as "for example" and "in other words." The Court finds that such exemplary statements are a strong indication that there was not a disclaimer in the prosecution history. Instead, the Court finds that the Applicant was simply providing support in the specification as to the "test environment" term.

The specification teaches that the test environment "may respond in a manner that is the same or similar to the live implementation of the unified services platform 140 without allow[] the

interactions to be released.” ’047 patent, 14:61-63. This portion of the specification is referenced in the prosecution history and consistent with the teachings in the prosecution history. The Court finds that this specification disclosure provides an appropriate meaning to the term. On the other hand, the Court finds that the exemplary statement in the prosecution history regarding “without the actual external connections or communications” is not a definitional statement and was not a disclaimer. The Court thus rejects Defendant’s proposed inclusion of that phrase. On balance, based on the specification and consistent with the prosecution history, the Court finds that the term means “an environment that does not allow the interactions of the services to be released.” The Court notes that at the claim construction hearing, the parties did not contest the Court’s proposed construction as to this term.

The Court hereby construes the term “**test environment**” to mean “**an environment that does not allow the interactions of the services to be released.**”

V. CONCLUSION

The Court adopts the above constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 3rd day of August, 2023.


ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE