

through an existing network switch even when the switch cannot independently support those services. Doc. 77 at 31. Upaid alleges that CCI’s pre-authorized payment systems for laundromat services—LaundryCard, FasCard, and FasCard Mobile App—infringe the ’947 Patent. Doc. 32 at ¶¶ 74-109. Upaid asserts ten claims against CCI, five independent (1, 20, 38, 47, and 50) and five dependent (2, 3, 5, 6, 42). Doc. 76 at 9, 24; Doc. 83 at 8; *see Alcon Research, Ltd. v. Apotex Inc.*, 687 F.3d 1362, 1367 (Fed. Cir. 2012) (“It is axiomatic that a dependent claim cannot be broader than the [independent] claim from which it depends.”) (citing 35 U.S.C. § 112).

Those claims, with the primary disputed terms in bold and the secondary disputed terms in italics, read as follows:

Table 1. Independent Claims

Claim	Text
1	<p>At least one computer readable medium encoded with processing instructions performed by at least one computer to perform a method of providing from a platform pre-authorized communication services and transactions using a plurality of external networks of different types and which are external to the platform, the method comprising:</p> <p>accepting and processing a request from a <i>user</i> to provide at least one of a communication service, a transaction or user account information via one of the plurality of external networks;</p> <p><i>verifying that the user is authorized to receive the at least one of the communication service, the transaction, or the user account information</i>, and that an account associated with the <i>user</i> has a sufficient amount currently available for payment of the at least one of the communication service or the transaction; and</p> <p>charging, in a <i>real-time</i> transaction, an authorized account associated with the <i>user</i> as the platform controls an <i>element</i> of a corresponding one of the plurality of external networks to provide at least one of the communication service or the transaction provided by any one of a plurality of different <i>service and transaction providers</i>.</p>

20	<p>A method of obtaining pre-authorized communication services and transactions under control of an enhanced services platform outside of a plurality of external networks of different types, comprising:</p> <p> sending a request to provide at least one of a communication service, a transaction or user account information from a <i>user</i> to the enhanced services platform via one of the external networks for <i>verification that the user is authorized to receive the at least one of the communication service, the transaction or the user account information</i>, and that an account associated with the <i>user</i> has a sufficient amount currently available for payment of the at least one of the communication service or the transaction, if payment is required; and</p> <p> receiving the at least one of the communication service, the transaction or the account information by the <i>user</i> one from any one of a plurality of different <i>service and transaction providers</i> if verification is obtained by the enhanced services platform and the authorized account associated with the <i>user</i> is charged in <i>real time</i> by an accounting platform in response to verification of the request.</p>
38	<p>A method of crediting a pre-authorized account of a <i>user</i>, maintained at a platform connected to a plurality of networks, comprising:</p> <p> sending a notification to the <i>user</i> at a transceiver that the pre-authorized account needs additional funds;</p> <p> receiving a response message from the <i>user</i> via the transceiver requesting additional funds be added to the pre-authorized account in accordance with the notification;</p> <p> authenticating at the platform, using a unique identifier associated with the <i>user</i>, that the <i>user</i> is associated with the pre-authorized account and another account from which the additional funds may be drawn; and</p> <p> after authentication that the <i>user</i> is associated with the pre-authorized account, crediting the pre-authorized account as a consequence of debiting the other account, thereby making the additional funds available in the pre-authorized account to pay for at least one communication service or transaction, provided or consummated, respectively via at least one of the networks of different types which are connected to the platform.</p>
47	<p>A method of crediting a pre-authorized account of a <i>user</i>, comprising:</p> <p> receiving at a first platform an identification number from a <i>user</i>;</p> <p> authenticating the <i>user</i> at the first platform using the identification number;</p> <p> sending a message to a <i>transceiver of the user</i> indicating that the pre-authorized account has reached a predetermined limit of remaining funds; and</p>

	<p>adding additional credit to the pre-authorized account, if the <i>user</i> is authenticated and the <i>user</i> has responded to a message indicating that the pre-authorized account has reached the predetermined limit of remaining funds and the <i>user</i> has identified another account on a second platform from which the additional credit is to be obtained for the pre-authorized account, by debiting the other account and making the additional credit available in the pre-authorized account to pay for at least one communication service or transaction, provided or consummated respectively via at least one of a plurality of networks of different types which are connected to the first platform.</p>
50	<p>A platform outside of external networks of different types and connectable to a <i>transceiver of a user</i>, a billing platform and another platform, comprising:</p> <p>an interface receiving a request message from a <i>user</i>, via the transceiver disposed outside of said platform, requesting an increase in an amount in an account associated with the <i>user</i> and controlled by the billing platform;</p> <p>a <i>verification module authenticating that the user is associated with the account</i> to permit increase or decrease in the amount in the account; and</p> <p>a processor, if the <i>user</i> is authenticated as being associated with the account,</p> <p>determining another account controlled by the other platform and associated with the <i>user</i> according to the request message,</p> <p>causing a top up request to be sent outside of said platform via the external networks of different types to access the other account and obtain an additional amount to top up the account via a corresponding transaction, and</p> <p>if the additional amount is received from the other account, causing the account to be topped up by the additional amount to pay for at least one communication service or transaction, provided or consummated, respectively via at least one of the external networks of different types.</p>

Doc. 77 at 81-85.

Table 2. Dependent Claims

Claim	Text
2	<p>The computer readable medium of claim 1, wherein the method further comprises processing <i>real-time</i> settlement data for the at least one of the communication service or the commercial transaction.</p>

3	The computer readable medium of claim 1, wherein the verifying further comprises authenticating the <i>user</i> using at least one of a security code, a password, user intervention, a PIN number, automatic call back or interactive voice response.
5	The computer readable medium of claim 1, wherein the charging includes at least one of decreasing an account balance of a pre-authorized account or increasing a balance of a charge account.
6	The computer readable medium of claim 1, wherein the method further comprises recording information about the at least one communication service or the transaction, including at least one of location of the authorized <i>user</i> , the amount charged, the date, the time or the type of transaction.
42	The method of claim 38, further comprising establishing an identification of the <i>user</i> using a password and the number unique to the <i>user</i> .

Id. at 81-82, 84.

The Patent and Trademark Office (“PTO”) granted the ’947 Patent to its inventors on March 10, 2015, with Upaid as the sole assignee. *Id.* at 2. The ’947 Patent was granted based on Application No. 11/931,883 (“883 Application”), filed on October 31, 2007. *Ibid.* The ’947 Patent is a continuation of U.S. Patent No. 7,308,087 (“’087 Patent”), issued on December 11, 2007, Doc. 82 at pp. 14, 20-21, ¶¶ 34, 51, as a continuation of U.S. Patent No. 6,714,632 (“’632 Patent”), issued on March 30, 2004, Doc. 32-3 at 2, 317, as a continuation of U.S. Patent No. 6,381,316 (“’316 Patent”), issued on April 30, 2002, Doc. 82 at pp. 14, 17, ¶¶ 34, 40, as a continuation of U.S. Patent No. 6,320,947 (“’947 II Patent”), issued on November 20, 2001, *id.* at pp. 14-15, ¶¶ 34-35. *See Transco Prods. Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 555 (Fed. Cir. 1994) (“A ‘continuation’ application claims the same invention claimed in an earlier application, although there may be some variation in the scope of the subject matter claimed.”).

The ’947 Patent states that the “present invention ... relates to an advanced intelligent communication system that provides subscriber-requested services”—such as “call forwarding,

call conferencing, and voice mail”—using “existing communication switches even in those circumstances in which the hardware communication switch is not configured to provide such services.” Doc. 77 at 31 (1:24, 26-31, 39-40). Because “[s]pecialized equipment and proprietary software [we]re conventionally used to provide various advanced services on a telephone system,” customers on networks with “an analog telephone switch” or even a “basic digital switch” could not always access those services. *Id.* at 31 (1:56-67). Before the invention, upgrading those legacy switches to provide advanced communication services required replacing the switch’s hardware and software, a time-intensive and expensive process. *Id.* at 31 (2:1-14).

To save the “time, effort, and expenses” associated with switch upgrades, the ’947 Patent teaches a “platform and method” that allows networks “to provide enhanced communication services to customers without replacing or upgrading existing legacy switches and supporting software.” *Id.* at 31 (2:19-24). The ’947 Patent asserts that the platform and method solve a related problem with prepaid calling cards, which previously “[did] not [often] permit access to more advanced communication services” because “[n]o integrated system exists that links calling card accounts with a database for offering” those services. *Id.* at 32 (3:1-2, 6-8). Even on cards that did offer those services, “most communication systems permitting use of” such cards did not link each card to “an identifiable account, person or corporation” so as to create “a comprehensive customer care system, which incorporates the administrative, card management, account management, security, customer care, and distribution management of a PIN [(Personal Identification Number)] access card system into a single software package on a public switched telephone network ... or any other communication network, without a need to purchase proprietary application software.” *Id.* at 32 (3:17-31). The ’947 Patent’s “‘open standards’ telephony solution” supports this “comprehensive customer care system” by allowing networks

to “delive[r] advanced communication services to customers, with or without use of PIN access cards[,] ... regardless of the sophistication of the switch to which they are connected, at a minimal cost to a local telephone company, service provider, or the subscribing consumer.” *Id.* at 32 (3:25, 35-42).

B. Prosecution History

On September 1, 2008, the PTO rejected all 56 claims proposed in the '883 Application. *Id.* at 701-706. The PTO concluded that claims 30 and 31 were duplicative, and that all claims were unpatentable on obviousness-type double patenting grounds, because they were too “similar in scope” to '087 Patent claims 1-26 and '632 Patent claims 1-50. *Id.* at 702; *see SimpleAir, Inc. v. Google LLC*, 884 F.3d 1160, 1167 (Fed. Cir. 2018) (“[T]he doctrine of obviousness-type double patenting was developed to prevent a patent owner from extending his exclusive right to an invention through claims in a later-filed patent that are not patentably distinct from the earlier filed patent.”) (internal quotation marks omitted). The PTO explained, however, that the '883 Application was “in condition for allowance” pending a terminal disclaimer to overcome the “Double Patenting rejection” and “correction” of the duplicative claims. *Doc. 77* at 705-706; *see SimpleAir*, 884 F.3d at 1167 (“[F]iling a terminal disclaimer may obviate an obviousness-type double patenting rejection ... in exchange for limiting the patent term and alienability of the resulting continuation patent.”) (citations omitted).

The inventors' response to the PTO's rejection was delayed due to ongoing litigation concerning the '947 II Patent and '632 Patent in *Upaid Systems, Ltd. v. Satyam Computer Services, Ltd.*, 07 C 114 (E.D. Tex.). *Doc. 77* at 616-641. Upaid asserted those two patents in another infringement suit as well, *Upaid Systems, Ltd. v. Qualcomm Inc.*, 05 C 346 (E.D. Tex.), where the parties disputed the construction of certain claims. *Doc. 78* at 360-428. After the

Satyam suit ended—some time after the court issued a claim construction ruling, Doc. 91 at 251-254—the inventors canceled claim 31 in the ’883 Application and submitted terminal disclaimers for the ’087 Patent and ’632 Patent. Doc. 77 at 260-261, 414-415. The PTO then granted the ’883 Application on March 10, 2015. *Id.* at 2.

C. The Disputed Claim Terms

The parties dispute the construction of three primary disputed terms and several secondary disputed terms, and propose the following constructions:

Table 3. Primary Disputed Claim Terms

Claim Term	Upaid’s Proposal	CCI’s Proposal
“Platform” (claims 1, 20, 38, 47, 50)	“Platform” means “[o]ne or more systems comprising hardware or hardware with software.”	The term “platform” is indefinite under 35 U.S.C. § 112, ¶ 2.
“External [n]etworks” (claims 1, 20, 50) / “Networks of different types” (claims 1, 20, 38, 47, 50)	“External [n]etworks” means “[n]etworks that are connected to the platform.” “Networks of different types” does not require construction.	Both terms mean “[t]wo or more different network types composed of different switches and separate from the network in which the platform resides.”

Doc. 102 at 2-3.

Table 4. Secondary Disputed Claim Terms

Claim Term	Upaid’s Proposal	CCI’s Proposal
“Real [t]ime” (claims 1, 2, 20)	“Real [t]ime” does not require construction. Alternatively, the term means “actual time.”	“Real [t]ime” means “[a]t the actual time something happens, not batched processing.”
“User” (claims 1, 3, 6, 20, 38, 42, 47, 50)	“User” does not require construction. Alternatively, the term means “a person or group of persons.”	“User” means “[a] customer, which includes a person or group of people.”
“Service and transaction providers” (claims 1, 20)	“Service and transaction providers” means “[s]ystems that provide a service or transaction.”	“Service and transaction providers” means “[e]ntities that can individually or collectively provide a

		communication service and a transaction.”
“Element” (claim 1)	“Element” means “[h]ardware or hardware with software”	“Element” is indefinite under 35 U.S.C. § 112, ¶ 2.
“A transceiver of [the/a] user” (claims 47, 50)	“A transceiver of [the/a] user” means “[a] transceiver associated with [the/a] user.”	“A transceiver of [the/a] user” means “[the/a] user’s transceiver.”
“Verify that the user is authorized to receive the at least one of the communication service, the transaction, or the user account information” (claim 1) / “verification that the user is authorized to receive the at least one of the communication service, the transaction or the user account information” (claim 20) / “a verification module authenticating that the user is associated with the account” (claim 50)	The terms do not require construction.	All three terms mean “[v]erifying at the platform that the user is associated with the account being charged for the at least one of the communication service, the transaction, or the user account information.”

Id. at 3-4.

Discussion

A patent gives the patentee the temporary “right to exclude others from making, using, offering for sale, or selling the patented invention.” *Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 638 (Fed. Cir. 2015) (alteration omitted) (quoting 35 U.S.C. § 154). The scope of the patented invention is determined by the patent’s claims—short statements describing what the public cannot do without the patentee’s consent. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (“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.”) (internal

quotation marks omitted). A court hearing a patent infringement suit must construe the patent's claims, both to settle disputes about their scope and to translate technical terms into concise definitions that jurors can understand. See *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (“[C]laim 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.”) (quoting *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997)); *AFG Indus., Inc. v. Cardinal IG Co.*, 239 F.3d 1239, 1247 (Fed. Cir. 2001) (“[T]he claim construction becomes the basis of the jury instructions, should the case go to trial.”). Claim construction is a question of law, although it may require the court to make “subsidiary factual findings.” *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331-32 (2015); see also *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388 (1996) (“[J]udges, not juries, are the better suited to find the acquired meaning of patent terms.”); *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346 (Fed. Cir. 2015).

“Claim construction must begin with the words of the claims themselves,” with the meaning of those words “generally” depending on the “‘ordinary and customary meaning’ that they ‘would have to a person of ordinary skill in the art ... in question at the time of the invention.’” *Endo Pharm. Inc. v. Actavis LLC*, 922 F.3d 1365, 1370 (Fed. Cir. 2019) (quoting *Phillips*, 415 F.3d at 1312-13) (alteration and first set of internal quotation marks omitted); see also *E.I. du Pont de Nemours & Co. v. Unifrax I LLC*, 921 F.3d 1060, 1068 (Fed. Cir. 2019) (“The purpose of claim construction is to give meaning to the claim terms according to how a person of ordinary skill in the art would have understood them at the time of the invention in light of the entire patent, including the claims in which the terms appear and the specification.”). “In some cases, the ordinary meaning of claim language as understood by a person of skill in the

art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314; *see also Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001) (noting that claim terms that “are not technical terms of art” generally “do not require elaborate interpretation”). If a term’s meaning is not readily apparent to a generalist, the court must consult “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.” *Phillips*, 415 F.3d at 1314 (internal quotation marks omitted); *see also Cont’l Circuits LLC v. Intel Corp.*, 915 F.3d 788, 796 (Fed. Cir. 2019) (“[D]istrict courts give claims their ordinary and customary meaning, which 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.’”) (quoting *Phillips*, 415 F.3d at 1312-13); *Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1320 (Fed. Cir. 2016) (cautioning that “a word describing patented technology takes its definition from the context in which it was used by the inventor” and cannot be construed “in a vacuum”) (internal quotation marks omitted); *O2*, 521 F.3d at 1361 (“A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.”).

Publicly available sources fall into two categories: “intrinsic evidence” and “extrinsic evidence.” *Endo*, 922 F.3d at 1371 (quoting *Teva*, 574 U.S. at 331). Intrinsic evidence comprises the patent itself and the official records concerning its creation, including “the words of the claims themselves, the remainder of the specification, [and] the prosecution history.” *Cont’l Circuits*, 915 F.3d at 796 (quoting *Phillips*, 415 F.3d at 1314); *see also Monsanto Tech. LLC v. E.I. DuPont de Nemours & Co.*, 878 F.3d 1336, 1341 & n.5 (Fed. Cir. 2018) (explaining

that “[a] specification includes both the written description and the claims of the patent” and that “[a] patent’s prosecution history consists of the complete record of the proceedings before” the PTO) (internal quotation marks omitted). Intrinsic evidence is the most important evidence of a term’s meaning. See *E.I. du Pont*, 921 F.3d at 1068 (“[I]t is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record.”) (internal quotation marks omitted); *SkinMedica, Inc. v. Histogen Inc.*, 727 F.3d 1187, 1195 (Fed. Cir. 2013) (“When construing claim terms, we first look to, and primarily rely on, the intrinsic evidence, including the prosecution history and the specification—which is usually dispositive.”). In particular, “[t]he specification is *always* highly relevant to the claim construction analysis’ and is, in fact, ‘the single best guide to the meaning of a disputed term.’” *Trs. of Columbia Univ. v. Symantec Corp.*, 811 F.3d 1359, 1363 (Fed. Cir. 2016) (quoting *Phillips*, 415 F.3d at 1320); see also *Bradium Techs. LLC v. Iancu*, 923 F.3d 1032, 1043 (Fed. Cir. 2019) (“[T]he specification is the single best guide to the meaning of a disputed term and usually, it is dispositive.”) (alteration and internal quotation marks omitted); *UltimatePointer, L.L.C. v. Nintendo Co.*, 816 F.3d 816, 822 (Fed. Cir. 2016) (similar). That said, courts must take care to “avoid importing limitations from the specification into the claims.” *Imaginal Systematic, LLC v. Leggett & Platt, Inc.*, 805 F.3d 1102, 1109 (Fed. Cir. 2015) (quoting *Phillips*, 415 F.3d at 1323); see also *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014) (“While we read claims in view of the specification, of which they are a part, we do not read limitations from the embodiments in the specification into the claims.”). Constructions based solely on intrinsic evidence are legal conclusions, not findings of fact. See *Teva*, 574 U.S. at 331 (“[W]hen the district court reviews only evidence intrinsic to the patent . . . , the judge’s determination will amount solely to a determination of law”); *Williamson*, 792 F.3d at 1346.

Extrinsic evidence is evidence from outside the intrinsic record that “shed[s] useful light on the relevant art,” including “expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317 (internal quotation marks omitted); *see also Cont’l Circuits*, 915 F.3d at 796 (explaining that “extrinsic evidence” can help explain “relevant scientific principles, the meaning of technical terms, and the state of the art”) (internal quotation marks omitted). Although the court “may consider extrinsic evidence in claim construction, such evidence is generally of less significance than the intrinsic record.” *Endo*, 922 F.3d at 1371 (internal quotation marks omitted); *see also H-W Tech., LC v. Overstock.com, Inc.*, 758 F.3d 1329, 1332 (Fed. Cir. 2014) (“After considering ... intrinsic evidence, a court may also seek guidance from extrinsic evidence such as expert testimony, dictionaries, and treatises.”); *Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 711 F.3d 1348, 1360 (Fed. Cir. 2013) (“Where the intrinsic record is ambiguous, and when necessary, we have authorized district courts to rely on extrinsic evidence ...”). It follows that “[e]xtrinsic evidence may not be used ‘to contradict claim meaning that is unambiguous in light of the intrinsic evidence.’” *Wi-Lan, Inc. v. Apple Inc.*, 811 F.3d 455, 462 (Fed. Cir. 2016) (quoting *Phillips*, 415 F.3d at 1324). A court relying on extrinsic evidence may need to make “subsidiary factual findings,” such as in resolving a dispute about what a person with ordinary skill in the art would have understood a term of art to mean at the time of the invention. *Teva*, 574 U.S. at 331-32. After making a determination of fact, however, the court must make the further legal decision about what that term means “in the context of the specific patent claim under review.” *Id.* at 332 (emphasis omitted).

The court now construes the primary disputed claim terms—expressly, as the Federal Circuit requires. *See AFG Indus.*, 239 F.3d at 1247 (“It is critical for trial courts to set forth an

express construction of the material claim terms in dispute, in part because the claim construction becomes the basis of the jury instructions, should the case go to trial. It is also the necessary foundation of meaningful appellate review.”) (citation omitted). The court need not choose the better of two incorrect constructions proposed by the parties; rather, the court “has an independent obligation to determine the meaning of the claims, notwithstanding the views asserted by the adversary parties.” *Exxon Chem. Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1555 (Fed. Cir. 1995) (further noting that “[t]he pursuit of that obligation in this case would have resulted in a determination that [one party’s] preferred claim interpretation is incorrect, and that [the other party’s] is only partly correct”); *see also Bancorp Servs., LLC v. Sun Life Assurance Co.*, 687 F.3d 1266, 1274 (Fed. Cir. 2012) (“[A] district court may construe the claims in a way that neither party advocates”); *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1323-24 (Fed. Cir. 2008) (“Because the court has an independent obligation to construe the terms of a patent, we need not accept the constructions proposed by either party”).

I. Primary Disputed Claim Terms

CCI designated two sets of claim terms as primary disputed terms—(1) “platform” and (2) “external networks” and “networks of different types”—based on its submission that those terms are “outcome-determinative.” Doc. 76 at 10, 18; *see* N.D. Ill. L.P.R. 4.1(b) (“For each term to be presented to the Court, the parties must certify whether it is outcome-determinative.”). By adopting CCI’s characterization of those terms as primary disputed terms without contesting CCI’s contention that they are outcome determinative, Doc. 83 at 7; *see* Doc. 90 at 6, Upaid has forfeited (if not waived) any contrary argument. *See Ennin v. CNH Indus. Am., LLC*, 878 F.3d 590, 595 (7th Cir. 2017) (“Failure to respond to an argument generally results in waiver”); *Bonte v. U.S. Bank, N.A.*, 624 F.3d 461, 466 (7th Cir. 2010) (collecting cases).

A. “Platform” (claims 1, 20, 38, 47, 50)

CCI contends that the term “platform” is indefinite under 35 U.S.C. § 112, ¶ 2, while Upaid proposes that “platform” should be construed to mean “one or more systems comprising hardware or hardware with software.” Doc. 102 at 3. (Although the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011), reorganized 35 U.S.C. § 112 into lettered subsections, the reorganization “applies only to patent applications ‘filed on or after’ September 16, 2012.” *Zeroclick, LLC v. Apple, Inc.*, 891 F.3d 1003, 1006 n.2 (Fed. Cir. 2018) (quoting Pub. L. No. 112-29, § 4(e), 125 Stat. at 297). Because the ’883 Application was filed in October 2007, the court cites to the pre-2012 version of § 112.)

To be sufficiently definite, “[a] patent’s specification must ‘conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as the invention.’” *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1340 (Fed. Cir. 2015) (quoting 35 U.S.C. § 112, ¶ 2); *see also Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 909 (2014) (explaining that although “the definiteness requirement must take into account the inherent limitations of language,” “a patent must be precise enough to afford clear notice of what is claimed, thereby apprising the public of what is still open to them”) (alteration and internal quotation marks omitted). “[T]he dispositive question in an indefiniteness inquiry is whether the ‘claims,’ not particular claim terms, ‘read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.’” *Cox Commc’ns, Inc. v. Sprint Commc’n Co.*, 838 F.3d 1224, 1231 (Fed. Cir. 2016) (quoting *Nautilus*, 572 U.S. at 910); *see also One-E-Way, Inc. v. Int’l Trade Comm’n*, 859 F.3d 1059, 1063 (Fed. Cir. 2017) (“This test mandates clarity, while recognizing that absolute precision is unattainable.”) (internal quotation marks omitted); *Interval*

Licensing LLC v. AOL, Inc., 766 F.3d 1364, 1371 (Fed. Cir. 2014) (“[A] patent does not satisfy the definiteness requirement of § 112 merely because a court can ascribe *some* meaning to a patent’s claims.”) (internal quotation marks omitted). Like other invalidity defenses, “[i]ndefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017); *see also Biosig Instruments, Inc. v. Nautilus, Inc.*, 783 F.3d 1374, 1377 (Fed. Cir. 2015) (holding that “‘an invalidity defense’” like indefiniteness must be “‘proved by clear and convincing evidence’” because “[a] patent is presumed valid under 35 U.S.C. § 282”) (quoting *Microsoft Corp. v. i4i L.P.*, 564 U.S. 91, 111 (2011)).

“The indefiniteness inquiry ... is intertwined with claim construction” *Eidos Display, LLC v. AU Optronics Corp.*, 779 F.3d 1360, 1364 (Fed. Cir. 2015); *see also Sonix Tech.*, 844 F.3d at 1378 (“[I]ndefiniteness analysis involves general claim construction principles”); *Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1368 (Fed. Cir. 2006) (“An analysis of claim indefiniteness under § 112 ¶ 2 is inextricably intertwined with claim construction.”) (internal quotation marks omitted). Yet while “training questions of indefiniteness on individual claim terms is a helpful tool,” the indefiniteness inquiry—as noted—“ultimately turn[s] on ... whether the *claims*,” not individual claim *terms*, are sufficiently definite. *Cox Commc’ns*, 838 F.3d at 1232 (internal quotation marks omitted); *see also Media Rights Techs., Inc. v. Capital One Fin. Corp.*, 800 F.3d 1366, 1371 (Fed. Cir. 2015) (“[A] claim is indefinite if its language ‘might mean several different things and no informed and confident choice is available among the contending definitions.’”) (quoting *Nautilus*, 572 U.S. at 911 n.8); *Interval Licensing*, 766 F.3d at 1371 (“The *claims*, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art.”) (emphasis

added). In other words, determining whether a claim term renders a claim indefinite requires examining not just the term itself, but also its role in the overall context of the claim. *See BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1366 (Fed. Cir. 2017) (instructing that “[w]hat is needed” to determine indefiniteness “is a context-specific inquiry into whether particular functional language actually provides the required reasonable certainty”); *see also Cox Commc’ns*, 838 F.3d at 1229, 1233 (declining to hold a claim indefinite where “[t]he sole source of [alleged] indefiniteness ... plays no discernable role in defining the scope of the claims”).

As CCI notes, Doc. 76 at 17-18, Upaid’s proposed construction of the term “platform”—“one or more systems comprising hardware or hardware with software”—is very broad. Still, “breadth is not indefiniteness,” and the court may not infer “indefiniteness simply from” a term’s broad “scope.” *BASF*, 875 F.3d at 1367 (internal quotation marks omitted); *see also Ultimex Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1352 (Fed. Cir. 2009) (“Merely claiming broadly does not ... prevent the public from understanding the scope of the patent.”). Illustrating the point, the Federal Circuit in *Cox Communications* held that the term “processing system” did not render indefinite the method claims in which the term appeared even though the term was quite general, so much so that it could be replaced with a highly general word (“computer”) or even “omitted” entirely without affecting the claims’ scope. 838 F.3d at 1229-33. Of significance here, the Federal Circuit held that the term’s generality was not fatal to definiteness because “[a]ll of the asserted claims are method claims, and the point of novelty resides with the steps of these methods, not with the machine that performs them.” *Id.* at 1229. Put another way, the Federal Circuit explained that because “[p]rocessing system’ ... merely [described] the locus at which the [novel] steps are being performed,” its broad scope did not render the method claims indefinite. *Ibid.*

CCI contends that *Cox Communications* is inapposite because the term “platform” here, unlike the term “processing system” in *Cox Communications*, is the ’947 Patent’s central invention and thus plays a “discernible role in defining the scope of the claim[s].” Doc. 90 at 8. In so contending, CCI does not contest that four of the five claims in which the term “platform” appears (1, 20, 38, and 47) are method claims, just like the claims in *Cox Communications*. Doc. 83 at 8. And as in *Cox Communications*, while the “platform” in those four claims acts as the “locus at which the steps are being performed,” “the point of novelty resides with the steps of these methods.” 838 F.3d at 1229. Given that the steps of the method are reasonably clear, the court agrees with Upaid, Doc. 83 at 8-9, that the scope of the claims are not rendered indefinite by their use of the broad term “platform.”

CCI nonetheless maintains that if *Cox Communications* were to apply to the method claims here, those claims would still be indefinite because they engage in “pure functional claiming”—that is, they claim “all possible means of achieving a function” rather than a particular means of doing so. Doc. 90 at 9 (internal quotation marks omitted). CCI’s contention brings into play § 112, ¶ 6, which states: “An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112, ¶ 6. “In enacting [§ 112, ¶ 6], Congress struck a balance in allowing patentees to express a claim limitation by reciting a function to be performed rather than by reciting structure for performing that function, while placing specific constraints on how such a limitation is to be construed, namely, by restricting the scope of coverage to only the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.”

Williamson, 792 F.3d at 1347. Section 112, ¶ 6 therefore permits means-plus-function claiming, but not pure functional claiming. The trouble with CCI's contention that Upaid's claims are indefinite for "pure functional claiming" is that CCI does not address the predicate question of whether the asserted claims fall under § 112, ¶ 6 in the first place. *See Cox Commc'ns*, 838 F.3d at 1232 n.4 ("We note ... that in the context of 35 U.S.C. § 112, ¶ 6, we require that, if a patentee writes his claims in 'means-plus-function' form, he must disclose the particular structure that is used to perform the recited function. This is intended to avoid pure functional claiming") (citation and internal quotations marks omitted); *Blackboard, Inc. v. Desire2Learn Inc.*, 574 F.3d 1371, 1385 (Fed. Cir. 2009) ("That ordinarily skilled artisans could carry out the recited function in a variety of ways is precisely why claims written in 'means-plus-function' form must disclose the particular structure that is used to perform the recited function. ... Section 112, paragraph 6, is intended to prevent ... pure functional claiming.").

CCI's decision to challenge the definiteness of the claimed platform's structure under § 112, ¶ 2 without discussing or referencing § 112, ¶ 6 is significant—and fatal to its functional claiming challenge to the method claims in which the term "platform" appears. Where, as here, "the word 'means'" does not accompany the allegedly indefinite claim term, there is "a rebuttable presumption that § 112, ¶ 6 does not apply." *Zeroclick*, 891 F.3d at 1007 ("Neither of the limitations at issue uses the word 'means.' Presumptively, therefore, § 112, ¶ 6 does not apply to the limitations.") (internal quotation marks omitted); *see also Williamson*, 792 F.3d at 1348 ("To determine whether § 112, para. 6 applies to a claim limitation, our precedent has long recognized the importance of the presence or absence of the word 'means.' ... [T]he failure to use the word 'means' ... creates a rebuttable presumption ... that § 112, para. 6 does not apply."). The presumption may be overcome "if the challenger demonstrates that the claim term

fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Williamson*, 792 F.3d at 1349 (internal quotation marks omitted); *see also Media Rights*, 800 F.3d at 1372 (“In undertaking this analysis, we ask if the claim language, read in light of the specification, recites sufficiently definite structure to avoid § 112, ¶ 6.”) (internal quotation marks omitted). The failure by a party pressing an indefiniteness challenge to rebut the presumption that § 112, ¶ 6 does not apply results in the failure of an indefiniteness challenge based on a “pure functional claiming” argument. *See Zeroclick*, 891 F.3d at 1007-08 (“[The defendant] argued that the [terms] must be construed under § 112, ¶ 6, but provided no evidentiary support for that position. Accordingly, [the defendant] failed to carry its burden, and the presumption against the application of § 112, ¶ 6 to the disputed [terms] remained unrebutted.”); *Cox Commc’ns*, 838 F.3d at 1232 n.4 (“[B]y agreeing that ‘processing system’ is not a means-plus-function term, [the alleged infringer] has already conceded that ‘processing system’ itself recites sufficiently definite structure and there is no problem of ‘pure functional claiming’ here.”); *see also Advanced Ground Info. Sys., Inc. v. Life360 Inc.*, 830 F.3d 1341, 1347 (Fed. Cir. 2016) (“In determining whether this presumption has been rebutted, the challenger must establish by a preponderance of the evidence that the claims are to be governed by § 112, ¶ 6.”). Because CCI does not even engage in this analysis, it fails to overcome the presumption, and its cursory indefiniteness challenge to claims 1, 20, 38, and 47 on “pure functional claiming” grounds fails in turn.

All this serves as somewhat of an aside because—as the parties agree, Doc. 83 at 9-10; Doc. 90 at 8-9—the court must construe “platform” in claim 50, which is a system claim, not a method claim. And as both parties agreed at the claim construction hearing, “platform” must have the same definition in all the claims. *See CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d

1146, 1159 (Fed. Cir. 1997) (“[W]e are obliged to construe the term ... consistently throughout the claims.”). Therefore, the core question—whether “platform” is indefinite under § 112, ¶ 2—must be answered.

CCI fails to meet its burden to show indefiniteness by clear and convincing evidence. Again, although CCI is correct that “a ‘platform’ could include almost anything,” Doc. 76 at 18, it does not necessarily follow that *claims* in which the term appears are indefinite when “read in light of the specification and prosecution history.” *Cox Commc’ns*, 838 F.3d at 1233. Focusing on that question, CCI contends that the term “platform” renders the claims indefinite because the various platforms referenced in the claims may include varying hardware components. Doc. 76 at 8. In CCI’s view, a person skilled in the relevant art would not understand “what constitutes one platform as opposed to two or more distinct platforms.” *Id.* at 12. In support, CCI’s expert opines that “[w]ithout proper context, the meaning or scope of [‘platform’] is not reasonably certain.” Doc. 76-1 at 7, ¶ 23. The expert adds that “[t]he claims do not help differentiate between what would be included or excluded from a ‘platform’ or where one ‘platform’ starts and other ends,” and that “a person of ordinary skill could not be reasonably certain which components or combinations of components ... do or do not qualify as the claimed ‘platform.’” *Id.* at 8, ¶¶ 25-26.

Reasonable clarity surely is important, as patents provide notice for the public to avoid “a zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims.” *Nautilus*, 572 U.S. 909-10 (alteration and internal quotation marks omitted). As CCI acknowledges, the specification uses “platform” to refer to “everything from a complex structure of interconnected software applications, processors, memories and interfaces, to a single computer.” Doc. 76 at 7. The term’s breadth, however, does not invariably result in

indefiniteness. To avoid indefiniteness, the patent need not use “platform” when, and only when, referring to a single, defined set of components; rather, “platform” may be used to refer to different technological systems (for example, a “payment platform,” Doc. 77 at 31 (2:31), “telephony platform,” Doc. 77 at 32 (4:48), and “Unix platform,” Doc. 77 at 38 (16:26)), though the scope of the claims must be reasonably certain. *See Nitride Semiconductors Co. v. RayVio Corp.*, 2018 WL 2183270, at *3-8, *12-13 (N.D. Cal. May, 11 2018) (construing claim terms for a patent that uses “layer” to describe different components, including a “lattice mismatch layer,” a “base layer,” and a “light emitting layer,” and holding that the term “base layer” did not render the claims indefinite because, although the term is broad, the claim provides some boundaries for what “would not qualify” and the specification provides exemplary embodiments).

The court thus considers whether claim 50, read with the intrinsic evidence, has a reasonably certain scope when applying Upaid’s proposed construction. Claim 50’s preamble provides that there is “[a] platform outside of external networks of different types and connectable to a transceiver of a user, a billing platform and another platform.” Doc. 77 at 45 (29:38-40). The body of the claim describes the first platform referenced in the preamble as including, among other components, “an interface receiving a request message from a user, via the transceiver disposed outside of said platform ... controlled by the billing platform; a verification module ... ; and a processor.” Doc. 77 at 45 (29:41-55, 30:1-7). Adopting Upaid’s construction of “platform,” then, that “platform” is one or more system(s) comprising hardware or hardware with software, which includes the listed components and is separate from a billing platform (the second referenced “platform”), which is another one or more system(s) comprising hardware or hardware with software that “control[s]” the “increase in an amount in an account.” *See id.* at 45 (29:41-45) (describing in the body of claim 50 “an interface receiving a request

message from a user, via the transceiver disposed outside of said platform, requesting an increase in an amount in an account associated with the user and controlled by the billing platform”).

CCI does not explain why this construction fails to provide notice to a person skilled in the relevant art what is being claimed; nor could it, as there is sufficient detail to do so, with claim 50 clearly informing the reader about the functions distinguishing the different platforms.

Because the claim language and intrinsic evidence clarify the scope of the invention, “platform” satisfies the requirements of § 112, ¶ 2. *See One-E-Way*, 859 F.3d at 1067 (“We conclude that a person of ordinary skill in the art, viewing the claim term ‘virtually free from interference’ in light of the specification and prosecution history, would be informed of the scope of the invention with reasonable certainty.”).

Although the term “platform” does not render indefinite the claims in which it appears, the court, mindful of its independent obligation to construe the term, considers whether it ought to receive a different construction than that Upaid proposes. In one of the cases involving the ’947 II Patent and ’632 Patent, the court construed “platform” to mean “[a] single converged system comprising hardware or hardware with software.” *Upaid Sys., Ltd. v. Satyam Comput. Servs., Ltd.*, No 2:07-CV-114-CE (E.D. Tex. May 6, 2009), ECF No. 360 (reproduced at Doc. 78 at 251). In this court’s view, however, there is no basis for limiting “platform” to a single system. While the ’947 Patent describes the invention as a “platform,” the term (as noted) is used in various ways. The described “billing platform,” for example, may not be limited to a single system given that the specification states that “the Billing Module may also be integrated with a service or transaction provider’s own billing system,” Doc. 77 at 35 (9:16-17), and CCI gives no reason why the court should read in that limitation. *See 3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1332 (Fed. Cir. 2013) (noting that a disputed term’s construction

should be “unencumbered by limitations not found in the claims”); *see also GraftTech Int’l Holdings, Inc. v. Laird Techs. Inc.*, 652 F. App’x 973, 982 (Fed. Cir. 2016) (“The PTAB’s construction ... does not suffer from error because adopting [the appellant’s] proffered construction would introduce an extraneous limitation into the claims’ terms.”).

In sum, because the term “platform” does not render indefinite any of the claims in which it appears, and because Upaid’s proposed construction is cogent and properly interprets the term, the court construes “platform” to mean “one or more systems comprising hardware or hardware with software.”

CCI contends that another claim term, “enhanced services platform,” is indefinite for the same reasons grounding its argument that “platform” is indefinite. Doc. 76 at 10 n.3. Upaid declines to propose a construction of “enhanced services platform” on the ground that it was not one of the ten disputed terms the parties identified under Local Patent Rule 4.1(b), Doc. 83 at 7 n.1. *See* N.D. Ill. L.P.R. 4.1(b) (“No more than ten (10) terms or phrases may be presented to the Court for construction absent prior leave of court upon a showing of good cause.”). Because “platform” is not indefinite, and because neither party has briefed how to separately construe “enhanced services platform,” the court declines at this juncture to construe the term.

B. “External Networks” (claims 1, 20, 50) / “Networks of Different Types” (claims 1, 20, 38, 47, 50)

The parties propose the following constructions of the terms “external networks” and “networks of different types”:

Upaid: “External [n]etworks” means “[n]etworks that are connected to the platform.”

“Networks of different types” does not require construction because its plain and ordinary meaning is sufficient.

CCI: “External [n]etworks” and “Networks of different types” both mean “[t]wo or more different network types composed of

different switches and separate from the network in which the platform resides.”

Doc. 102 at 3.

In opposing CCI’s construction, Upaid contends that construing the two terms identically would violate settled canons of claim construction. Doc. 83 at 14-19. True enough, there is a general presumption “that different terms have different meanings.” *PPC Broadband, Inc. v. Corning Optical Commc’ns RF, LLC*, 815 F.3d 747, 752 (Fed. Cir. 2016) (internal quotation marks omitted). But the presumption is not “conclusive,” *Comaper Corp. v. Antec, Inc.*, 596 F.3d 1343, 1348 (Fed. Cir. 2010), and may be overcome where “the evidence indicates that the patentee used the two terms interchangeably,” *Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010). *See Hologic, Inc. v. SenoRx, Inc.*, 639 F.3d 1329, 1337 (Fed. Cir. 2011) (“[D]ifferent terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading is proper.”) (alteration and internal quotation marks omitted); *Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1380 (Fed. Cir. 2006) (“Different claims with different words can, of course, define different subject matter within the ambit of the invention. On the other hand, claim drafters can also use different terms to define the exact same subject matter.”); *Bancorp Servs., L.L.C. v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1373 (Fed. Cir. 2004) (“[T]he use of both terms in close proximity in the same claim gives rise to an inference that a different meaning should be assigned to each. That inference, however, is not conclusive; it is not unknown for different words to be used to express similar concepts, even though it may be poor drafting practice.”) (citation omitted). As shown below, the presumption has been overcome here.

Upaid also argues that construing “external networks” and “networks of different types” to mean the same thing would create redundancies in the claims (1, 20, and 50) that use both

terms. Doc. 83 at 14-16. Claims 1, 20, and 50 refer to “external networks of different types” in their respective preambles: claim 1 (“a plurality of external networks of different types”); claim 20 (“a plurality of external networks of different types”); and claim 50 (“external networks of different types”). Doc. 77 at 41-42, 45. The simplest and most persuasive explanation for the claims’ subsequent use of “external networks” and “networks of different types” is that those terms are both shorthand for “external networks of different types.” *Ibid.* Indeed, use of the definite article “the” before “external networks” and “networks of different types” in the bodies of claim 1 (“one of *the* plurality of external networks”), claim 20 (“one of *the* external networks”), and claim 50 (“*the* external networks of different types”) confirms that those terms are shorthand for the antecedent “external networks of different types” in the claims’ preambles. *Ibid.* (emphases added); see *Microprocessor Enhancement Corp. v. Tex. Instruments Inc.*, 520 F.3d 1367, 1379 n.8 (Fed. Cir. 2008) (“[T]he term ‘*the* pipeline stage’ would properly take its antecedent basis from one of the previous uses of ‘pipeline stage,’ all of which are modified and thus denote structures that operate on one or more complete clock cycles.”) (emphasis added); see also *Georgetown Rail Equip. Co. v. Holland L.P.*, 867 F.3d 1229, 1236 (Fed. Cir. 2017) (“[A] preamble may be limiting if ... claims depend on a particular disputed preamble phrase for antecedent basis”) (alteration and internal quotation marks omitted); *Pacing Techs. LLC v. Garmin Int’l, Inc.*, 778 F.3d 1021, 1024 (Fed. Cir. 2015) (“[W]hen limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.”) (internal quotation marks omitted).

Although the other claims (38 and 47) in which the term “networks of different types” appears do not refer to “external networks of different types” in their preambles, they do make clear that the “networks” they describe are external to the platform *and* of different types. By

using the definite article “the,” claim 38 connects “*the* networks of different types which are connected to the platform” in the claim body with the preamble’s “*a* plurality of networks.” Doc. 77 at 44 (27:37-56) (emphases added). And claim 47’s description of “a plurality of networks of different types which are connected to the ... platform” in the claim body likewise requires the networks to be both of different types and external to the platform. *Id.* at 44 (28:58-60).

The ’947 Patent’s prosecution history confirms that the terms “external networks” and “networks of different types” each incorporate both the “external” and “different types” limitations. As noted, the PTO initially rejected the ’883 Application on double-patenting grounds “as being unpatentable over” ’632 Patent claims 1-50 and ’087 Patent claims 1-26. Doc. 77 at 702; *see Geneva Pharm., Inc. v. GlaxoSmithKline PLC*, 349 F.3d 1373, 1377-78 (Fed. Cir. 2003) (noting that a “double patenting” rejection “prevent[s] issuance of a patent on claims that are nearly identical to claims in an earlier patent”). Although the terminal disclaimers for the ’632 and ’087 Patents that the ’947 Patent’s inventors filed to overcome the rejection do not “give rise to a presumption that” the ’947 Patent “is patentably indistinct from its parent patents,” they do provide “a strong clue” that the ’947 Patent’s claims “lacked a patentable distinction over” the overlapping claims from the ’632 and ’087 Patents. *SimpleAir*, 884 F.3d at 1168; *see also Indivior Inc. v. Dr. Reddy’s Labs., S.A.*, 752 F. App’x 1024, 1034 (Fed. Cir. 2018) (“[A] terminal disclaimer is a strong clue that a patent examiner and, by concession, the applicant, thought the claims in the continuation lacked a patentable distinction over the parent.”) (quoting *SimpleAir*, 884 F.3d at 1168).

Given this, the descriptions of “networks” in the ’632 and ’087 Patents’ claims provide a “strong clue” about the limitations the ’947 Patent places on “networks.” The body of claim 1 of

the '632 Patent—which closely resembled claim 1 of the '947 Patent—taught that “the platform is outside the plurality of external networks of different types.” Doc. 77 at 704 (showing that the '883 Patent application claim 1 uses the term “plurality of external networks” in the same way that '632 Patent claim 1 uses the term, with '632 Patent claim 1 adding that “the platform is outside of external networks of different types”); Doc. 77 at 41 (22:53-54). Likewise, the body of claim 1 of the '087 Patent—which the PTO noted closely resembled '947 Patent claim 38—refers to “at least one of the networks of different types which are external to the platform.” *Id.* at 705 (showing that '883 Patent application claim 39, which became '947 Patent claim 38, uses the phrase “at least one of the networks of different types which are *connected* to the platform” at the same point in the body of the claim that the '087 Patent claim 1 uses the phrase “at least one of the networks of different types which are *external* to the platform”) (emphasis added); Doc. 77 at 44 (27:55-56).

In sum, because all uses of the terms “external networks” and “networks of different types” in the asserted claims have the same antecedent in the preambles or otherwise incorporate the “external” and “different types” limitations, and because the prosecution history further confirms the terms’ interchangeability, it is appropriate to construe them to mean the same thing. *See Tehrani v. Hamilton Med., Inc.*, 331 F.3d 1355, 1361 (Fed. Cir. 2003) (“We agree with [the defendant] that the intrinsic evidence indicates that the patentee meant for those two terms to be interchangeable and to carry the same meaning within the claims.”); *see also Bid for Position, LLC v. AOL, LLC*, 601 F.3d 1311, 1317 (Fed. Cir. 2010) (“The claim language uses the terms ‘bid’ and ‘value of the bid’ interchangeably, such that the two cannot be read to have separate meanings.”).

Upaid contends that CCI's proposed construction of the two terms—"Two or more different network types composed of different switches and separate from the network in which the platform resides"—is inappropriate because that construction would (1) "require the networks to include 'switches'"; (2) create ambiguity given that the phrase "network types" is unclear; and (3) "add[] at least a *third* network, 'the network in which the platform resides,' to all the claims." Doc. 83 at 15-21.

As to Upaid's first concern, the parties dispute whether the phrase "composed of different switches" should be part of the construction. CCI contends that networks "of different types" means networks composed of different switches. Doc. 76 at 20. Upaid responds that external networks need not be composed of switches, as requiring external networks to include switches would "render dependent claim 7 meaningless." Doc. 83 at 20.

Like another of the '947 Patent's non-asserted dependent claims (claim 16), claim 7 states that "the plurality of external networks of different types controllable by the platform include a wireless communication network, a publicly switched telephone network, a landline communication network, a global or wide area computer network, the internet, a TCP/IP LAN, a SS-7 signaling network, an IP signaling network and a router network." Doc. 77 at 42. Yet claims 7 and 16 do not make immediately clear what differences distinguish "the networks of different types." Looking beyond the claims, the "Summary of the Invention" in the '947 Patent's specification states that a network's type depends on its "equipment": "An object of the present invention is to provide enhanced communication services to users, ... regardless of the equipment through which the communication services are directed." *Id.* at 32 (3:46-49). The Summary of the Invention proceeds to make clear that the network "equipment" that varies across networks connected to the platform is the network switch. *Id.* at 33 (5:63-66) ("The

system preferably has an architecture supporting ... functionality in the same platform, regardless of the technological level of the switch utilized in the communication network.”); *see also id.* at 32 (4:24-26) (“[T]he enhanced communication services are accessed by a user through either an analog switch or a digital switch ...”).

Using language virtually identical to these portions of the specification, the ’947 Patent examiner’s statement of reasons for allowance likewise focused on the external networks’ switches. *Compare id.* at 198 (the examiner stating that the “[p]resent invention relates to an advanced intelligent communication system that provides subscriber-requested services through existing communication switches *even in those circumstances in which the hardware communication switch is not configured to provide such services*”) (emphasis added), *with id.* at 31 (1:26-31) (the specification stating that “the invention relates to an advanced intelligent communication system that provides subscriber-requested services through existing communication switches *even in those circumstances in which the hardware communication switch is not configured to provide such services*”) (emphasis added). Although “the statement of an examiner will not necessarily limit the claim,” it may be limiting where, as here, “the examiner simply repeated the arguments that the patentee had presented.” *ACCO Brands, Inc. v. Micro Sec. Devices, Inc.*, 346 F.3d 1075, 1079 (Fed. Cir. 2003); *see also Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1346-47 (Fed. Cir. 2005) (“Although unilateral statements by the examiner do not give rise to a clear disavowal of claim scope by an applicant, it does not necessarily follow that such statements are not pertinent to construing claim terms. Statements about a claim term made by an examiner during prosecution of an application may be evidence of how one of skill in the art understood the term at the time the application was filed.”). Thus,

the examiner's statement confirms that the claim term "networks of different types" refers to networks composed of different switches.

Upaid retorts that "networks of different types" cannot mean differently switched networks because that construction would impermissibly (a) make dependent claim 7, which lists various networks of different types, broader than the independent claim 1 and (b) import limitations from the specification into the claims. Doc. 83. at 19-21. Upaid's first contention rests on its brief's unsupported premise that the nine network types listed in the dependent claims "include networks with switches, and those without." *Id.* at 20. Because an assertion in a brief is neither intrinsic nor extrinsic evidence, Upaid's assertion does not factor into the claim construction analysis. *See Zheng Cai v. Diamond Hong, Inc.*, 901 F.3d 1367, 1371 (Fed. Cir. 2018) ("[The party's] Main Brief contains numerous assertions of fact. This information is not evidence under any of the relevant rules") (citation omitted); *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284 (Fed. Cir. 2005) ("Attorney argument is no substitute for evidence."). Indeed, although Upaid implies that only one of the nine listed network types ("publicly *switched* telephone network") listed in claim 7 includes a "switch," Doc. 83 at 20, the specification suggests that the other listed networks also do, Doc. 77 at 35 (9:45-47) (noting that the invention would obviate the need for a "a public telephone company **13**, Internet provider **21**, or wireless network to upgrade to a digital switch function"). *See Cisco Sys., Inc. v. Int'l Trade Comm'n*, 873 F.3d 1354, 1358 (Fed. Cir. 2017) ("Switches generally connect different devices to networks and facilitate data routing."). Consequently, dependent claim 7 need not be broader than independent claim 1.

Upaid's second contention rests on a legal principle—the rule against importing limitations from the specification into the claims—that is inapposite because the limiting

language here (“networks of *different types*”) is already in the claims and the specification merely contextualizes what “different types” means. *See Eon Corp. IP Holdings*, 815 F.3d at 1323 (explaining that although “[the court] do[es] not import [the specification’s] requirements into the claims,” it nevertheless “read[s] the claims in the context of the specification”); *see also ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 769 (Fed. Cir. 2019) (“[T]he specification cannot be used to import details from the specification *if those details are not claimed.*”) (emphasis added); *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1342 (Fed. Cir. 2013) (“While claim terms are understood in light of the specification, a claim construction must not import limitations from the specification into the claims.”). Indeed, Upaid acknowledges that “networks of different types is described in the specification and Figures.” Doc. 83 at 25. But instead of relying on intrinsic evidence to construe the phrase “different types,” Upaid invokes its expert’s opinion that no construction is needed because the phrase’s meaning is “readily understandable by a jury,” with “‘different’ mean[ing] ‘not the same as another’; and ‘type’ mean[ing] ‘a category of things having common characteristics.’” Doc. 83 at 24-25 (quoting Doc. 83-1 at ¶ 43).

In the court’s view, the intrinsic evidence that the phrase “different types” has a contextual meaning is more persuasive than Upaid’s expert’s opinion that it can be understood using the words’ ordinary meanings, Doc. 83-1 at ¶¶ 42-44. The result reached from the intrinsic evidence finds further support in Upaid’s assertion in its Rule 12(c) brief that “networks of different types” has not only a context-specific meaning, but also one virtually identical to what CCI now proposes: “The [’947 Patent’s] claims also disclose ‘a plurality of external networks.’ These external networks are inherently composed of different switches” Doc. 42 at 18.

In sum, it is necessary to construe the term “networks of different types,” and given the intrinsic record’s strong support of CCI’s position that “networks of different types” means networks “composed of different switches,” the court adopts that portion of CCI’s construction of that term and of its synonym, the term “external networks.” Doc. 102 at 3.

Upaid’s second concern is that “different network types” in CCI’s proposed construction is ambiguous. Doc. 83 at 15-16. CCI does not object to “replacing ‘different network types’ with ‘networks of different types’ in its construction.” Doc. 90 at 13. Although the court agrees that “network types” is ambiguous, merely replacing the phrase with “networks of different types” would itself create redundancy and ambiguity. The construction would read: “Two or more networks of different types composed of different switches,” but the court has already construed the term “networks of different types” to mean “composed of different switches.” Given this, there is no reason to include the redundant phrase “networks of different types.” The clearer construction, which comports with this understanding and which the court therefore adopts, is: “Two or more networks composed of different switches”

As to Upaid’s third concern, that CCI’s assertion would impermissibly require that the platform reside in its own network, CCI concedes the point in its reply brief by noting that its proposed construction could be changed from “network[s] ... separate from *the* network in which the platform resides” to “network[s] ... separate from *any* network in which the platform resides.” *See* Doc. 90 at 15 n.7. Neither here nor in their dispute over “platform” do the parties present evidence supporting any network limitation on “platform,” so the court declines CCI’s invitation to suggest that limitation in construing “network of different types” and “external networks.” *See 3M Innovative Props. Co.*, 725 F.3d at 1332 (noting that a disputed term’s construction should be “unencumbered by limitations not found in the claims”); *see also*

GraftTech Int'l Holdings, Inc., 652 F. App'x at 982 (“The PTAB’s construction ... does not suffer from error because adopting [the appellant’s] proffered construction would introduce an extraneous limitation into the claims’ terms.”). Removing that limitation changes CCI’s proposed construction to: “Two or more networks ... composed of different switches and separate from the ... platform” Doc. 102 at 3 (including the other changes, discussed above).

The court finally turns to the relationship between the “networks” and the “platform.” Upaid’s proposed construction would require the networks to be “connected to the platform, and ... external to the platform.” Doc. 83 at 24. Taking those two limitations together, it is not clear that Upaid’s proposed construction is meaningfully different from CCI’s (“network[s] ... separate from the ... platform”). In any event, “separate from” the platform better captures the claims’ limitation that the “external networks” be “outside” the platform. Doc. 77 at 42-45. A network “connected to” to the platform may be a component part of the platform, and therefore within it, while a network “separate” from the platform is necessarily “outside” of it.

Accordingly, the court construes the terms “external networks” and “networks of different types” to both mean: “Two or more networks composed of different switches and separate from the platform.”

II. Secondary Disputed Claim Terms

Consistent with Local Patent Rule 4.1(b), the parties agree that the secondary disputed terms are not outcome determinative. Doc. 102 at 3-4; Doc. 76 at 10 (presenting only the primary disputed terms as outcome determinative); Doc. 90 at 6. Because the primary disputed terms are outcome determinative, Doc. 102 at 2; Doc. 76 at 10; Doc. 90 at 6, the court will reserve construction of the secondary disputed terms until after the parties have an opportunity to

explain whether (and how) the court’s construction of the three primary disputed terms are in fact outcome determinative.

Conclusion

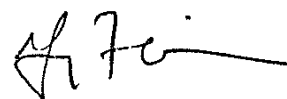
For the foregoing reasons, the court construes the three claim terms that the parties have designated as “primary disputed terms” as follows:

Table 5. Construction of Primary Disputed Claim Terms

Disputed Claim Term	Court’s Construction
“Platform” (claims 1, 20, 38, 47, 50)	One or more systems comprising hardware or hardware with software.
“External networks” (claims 1, 20, 50) / “Networks of different types” (claims 1, 20, 38, 47, 50)	Two or more networks composed of different switches and separate from the platform.

Given that the court’s construction does not turn on the declaration of CCI expert Stephen Mott, Doc. 76-1, the court denies as moot CCI’s motion to strike the portion of Upaid’s surreply that objects to the declaration, Doc. 100.

April 22, 2020



United States District Judge