

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION

SELEX COMMUNICATIONS, INC.,

Plaintiff,

v.

GOOGLE INC., et al.,

Defendants.

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CIVIL ACTION FILE  
NO. 1:09-CV-2927-TWT

OPINION AND ORDER

Polonius: What do you read, my lord?

Hamlet: Words, words, words.

William Shakespeare, Hamlet, Act II, Scene 2.

This is a patent infringement action. It is before the Court for a Claims Construction Order regarding the disputed claims in United States Patent No. 6,308,070.

I. Background

Selex Communications, Inc. (“Selex”) holds U.S. Patent No. 6,308,070 (the “‘070 Patent”). (See Joint Appendix (“J.A.”), Ex. 1, (the “‘070 Patent,” at 1). The Patent is entitled “Method and Apparatus of Minimizing Incurred Charges by the Remote Origination of Telephone Calls.” (Id.) Selex filed the complaint on October

21, 2009, against Google, Inc. (“Google”), alleging that Google was infringing the ‘070 Patent through its “Google Voice” telecommunications service. [See Doc. 1]. On February 9, 2010, this Court stayed the action pending reexamination of the ‘070 Patent. [See Doc. 29]. After the reexamination certificate was issued, the case was reopened on August 11, 2011. [See Doc. 36]. The parties disagree as to the construction of 15 claim terms in the ‘070 Patent.

## II. Claims Construction Rules

The construction of claims in a patent case is a matter of law for the Court. Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996). In construing patent claims, the Court looks first to the intrinsic evidence. The intrinsic evidence consists of the patent itself, the claim terms, the specification (or written description), and the patent prosecution history, if in evidence. Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1346 (Fed. Cir. 2004). However, not all intrinsic evidence is equal. Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1344 (Fed. Cir. 1998). First among intrinsic evidence is the claim language. Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999). A “bedrock principle” of patent law is that the claims of the patent define the patentee’s invention. Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). Thus, the Court’s focus must “begin and remain centered on the language of the claims themselves, for it is that

language that the patentee chose to use to particularly point out and distinctly claim the subject matter which the patentee regards as his invention.” Gillette Co. v. Energizer Holdings, Inc., 405 F.3d 1367, 1370 (Fed. Cir. 2005) (quoting Interactive Gift Express, Inc. v. Compuserve Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001)); see also Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995) (“The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of claims.”). When reading claim language, terms are generally given their ordinary and customary meaning, which is the meaning that the term would have to a person of ordinary skill in the art at the time of the invention. Phillips, 415 F.3d at 1313-14.

As a result, an objective baseline from which to begin claims construction is to determine how a person of ordinary skill in the relevant art would understand the terms. Phillips, 415 F.3d at 1313. Although “the claims of the patent, not its specifications, measure the invention,” Smith v. Snow, 294 U.S. 1, 11 (1935), the person of ordinary skill in the art is deemed to read the claim terms in the context of the entire patent, including the specification, rather than solely in the context of the particular claim in which the disputed term appears. Phillips, 415 F.3d at 1313. For instance, the patentee may act as his own lexicographer and set forth a special definition for a claim term. Id. at 1316.

Claims are part of a “fully integrated written instrument” and, therefore, “must be read in view of the specification, of which they are a part.” Phillips, 415 F.3d at 1315. In fact, the specification is “the single best guide to the meaning of a disputed term” and is often dispositive. Id. (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). “It is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.” Phillips, 415 F.3d at 1317. Nevertheless, the Court must be careful not to read a limitation into a claim from the specification. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 904 (Fed. Cir. 2004). In particular, the Court cannot limit the invention to the specific examples or preferred embodiments found in the specification. Phillips, 415 F.3d at 1323; see also Resonate Inc. v. Alteon Websystems, Inc., 338 F.3d 1360, 1364-65 (Fed. Cir. 2003) (“[A] particular embodiment appearing in the written description may not be read into a claim when the claim is broader than the embodiment.”). In addition to the specification, the prosecution history may be used to determine if the patentee limited the scope of the claims during the patent prosecution. Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995). The prosecution history helps to demonstrate how the patentee and the Patent and Trademark Office (“PTO”) understood the patent. Phillips, 415 F.3d at 1317. However, because the prosecution history represents the

ongoing negotiations between the PTO and the patentee, rather than a final product, it is not as useful as the specification for claim construction purposes. Id.

Extrinsic evidence – such as expert and inventor testimony, dictionaries, and learned treatises – is only considered when the claim language remains genuinely ambiguous after considering all of the patent’s intrinsic evidence. Tegal Corp. v. Tokyo Electron America, Inc., 257 F.3d 1331, 1342 (Fed. Cir. 2001). Although less reliable than the patent and prosecution history in determining construction of claim terms, extrinsic evidence may be used to help the Court understand the technology or educate itself about the invention. Phillips, 415 F.3d at 1317; Vitronics Corp., 90 F.3d at 1584. In particular, because technical dictionaries collect accepted meanings for terms in various scientific and technical fields, they can be useful in claim construction by providing a better understanding of the underlying technology and the way in which one skilled in the art might use the claim terms. Phillips, 415 F.3d at 1318. But extrinsic evidence, including dictionary definitions, cannot be used to vary or contradict the terms of the patent claims. Tegal Corp., 257 F.3d at 1342; see also Vitronics Corp., 90 F.3d at 1584 n.6 (courts are free to consult dictionaries “so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents”); Phillips, 415 F.3d at 1322-23.

### III. Discussion

## A. Remote Telephone Call Origination

The parties' first dispute concerns the construction of the term "RTCO," which is found in asserted independent claims 7,<sup>1</sup> 14,<sup>2</sup> 123,<sup>3</sup> and 148<sup>4</sup> of the '070 Patent.

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<sup>1</sup>Claim 7 reads: A mobile telephone for use with a telephony network, for use with a RTCO platform, and for use with a data messaging network configured to relay messages to the RTCO platform, said mobile telephone comprising:

circuitry for connecting said mobile telephone to the telephony network;  
an internal data messaging device for communicating with the data network;  
a user input interface for initiating telephone calls, including for dialing telephone calls; and  
control means for monitoring a telephone number dialed by the user, for determining if a telephone call should be placed using the RTCO platform, and responsive to the dialing of certain telephone numbers for transmitting a RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform.

<sup>2</sup>Claim 14 reads: In a mobile telephone of the type for use with a telephony network and having an internal data messaging device and a keypad for dialing a telephone number, the improvement therein comprising that control means are provided for monitoring the dialing of a telephone number by a user of the mobile telephone, and for determining if telephone call should be placed using an RTCO platform, and further that the internal data messaging device is operative for communicating a message to a data messaging network for relaying the message to the RTCO platform to complete the call using the RTCO platform without requiring that the user dial any additional numbers.

<sup>3</sup>Claim 123 reads: A mobile telephone for use with a telephony network, for use with an RTCO platform, and for use with a data messaging network configured to relay messages to the RTCO platform, said mobile telephone comprising:

circuitry for connecting said mobile telephone to the telephony network;  
an internal data messaging device for communicating with the data network;  
a user input interface for initialing [sic] telephone calls, including forwarding telephone calls; and  
control means for monitoring a telephone number dialed by a user, for determining if a telephone call should be placed using the RTCO platform, and

RTCO is an acronym for “Remote Telephone Call Origination.” Selex and Google agree that neither “RTCO” nor “Remote Telephone Call Origination” were known terms in the industry before the issuance of the ‘070 Patent. Selex proposes that the terms be given what it contends are their plain meaning. Thus, it defines RTCO as “facilitating the initiation of a demand for a voice communication external to the mobile phone.” (Laster Decl. ¶ 29). Google contends that Laster, the inventor, acted as a lexicographer and coined the term. Drawing from the specification of the ‘070 Patent, Google proposes that the term RTCO be construed as:

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responsive to the dialing of certain telephone numbers for transmitting an RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform;  
wherein said control means is operative for comparing the telephone number dialed by the user with a look-up table to determine if the telephone number dialed should be placed directly or should instead be placed using the RTCO platform.

<sup>4</sup>Claim 148 reads: In a mobile telephone of the type for use with a telephony network and having an internal data messaging device and a keypad for dialing a telephone number, the improvement therein comprising that control means are provided for monitoring the dialing of a telephone number, the improvement therein comprising that control means are provided for monitoring the dialing of a telephone number by a user of the mobile telephone, and for determining if a telephone call should be placed using an RTCO platform, and further that the internal data messaging device is operative for communicating a message to a data messaging network for relaying the message to the RTCO platform to complete the call using the RTCO platform without requiring that the user dial any additional numbers, wherein said control means is operative for comparing the telephone number dialed by the user with a look-up table to determine if the telephone number dialed should be placed directly or should instead be placed using the RTCO platform.

a specific callback scheme whereby: (1) in response to the dialing of a telephone number by a user of a mobile telephone, the mobile telephone sends a data message to a platform; (2) that platform places a first telephone call to the mobile telephone number and places a second telephone call to the dialed telephone number; and (3) the platform connects the two telephone calls together.

(‘070 Patent, Col. 2 ll. 45-67).

Selex contends that Google improperly relies on the specification instead of the claim language because Laster did not disavow certain meanings or act as his own lexicographer in the ‘070 Patent. Google, however, contends that the descriptions of the invention in the abstract and in the preferred embodiment, as well as the use of “RTCO” throughout the claims, necessarily limit the definition of RTCO. (See, e.g., ‘070 Patent Abstract (“The mobile telephone analyzes each number dialed to determine whether to utilize the RTCO platform or to dial normally. If RTCO is utilized, the mobile telephone transmits a data message with instructions for setting up the call. The RTCO platform then makes the call to the mobile phone and bridges this to a second call made to the dialed party.”)).

The Court concludes that Google’s construction is more appropriate. The claim language itself, which Selex purports to rely on, does not reveal a cogent claim term but rather a made-up term used throughout the claims. Selex attempts to bolster the plain language definition it proposes by referring to its expert, the inventor under the ‘070 Patent. (See Laster Decl. ¶ 29 (“From the perspective of one of ordinary skill in



the art, Remote Telephone Call Origination means ‘facilitating the initiation of a demand for voice communication external to the mobile phone.’’’)). But expert testimony is subordinate to the claim language and to the specification during the claims construction process. See Phillips, 415 F.3d at 1317. Here, the claim language and the specification reveal a consistent definition of “Remote Telephone Call Origination” which does not require consulting extrinsic evidence. In unasserted claim 1, the method calls for a relay of the data message to the data network, followed by “placing a first call from the RTCO platform to the mobile telephone; and placing a second call from the RTCO platform to the number dialed in a manner to connect the first and second calls to each other.” (‘070 Patent, Col. 9 ll. 5-25). In asserted claim 7, the apparatus includes control means “for transmitting a RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform.” (Id. Col. 9 ll. 41-58). These independent claims are utilizing a consistent definition of RTCO that is more specific than the plain meaning construction proposed by Selex because the definition involves the RTCO actually initiating voice connections. Indeed, if the RTCO merely facilitated voice connections, it would not also be capable of placing two calls and bridging them or receiving and reacting to data messages. Instead, throughout the claims and the specification, the term RTCO is referenced as a technique or scheme integral to the

invention rather than a mere facilitation of a voice connection. (See, e.g., ‘070 Patent Title, Abstract, Col. 2 ll. 45-52, Col. 3 ll. 25-39, Col. 4 ll. 1-14, Col. 9 ll. 42-58); see Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001) (“a claim term should be construed consistently with its appearance in other places in the same claim or in other claims of the same patent.”). Accordingly, the Court construes the term “Remote Telephone Call Origination” as “a method or apparatus whereby a remote location is utilized to originate a call to the mobile telephone that initiated a call and to originate a call to a desired destination and then to connect the two calls in order to achieve cost savings due to differing long distance telephone rates.”

This definition is consistent with the state of the prior art in 1999, when the Patent was issued. The specification recognizes that callback schemes existed before the Patent was applied for on February 4, 1999. See ‘070 Patent Cols. 1-2 ll. 35-43 (“Callback services have the potential of saving up to 50% or more on international long distance calls. However, known callback services have been difficult for a customer to use. ... What is needed then is a method and apparatus that allows the customer to enjoy the cost-savings and benefits of a callback service without the difficult and time-consuming effort needed to initiate a callback session. It is to the provision of such a method and apparatus that the present invention is primarily directed.”); id. Col. 4, ll. 1-14 (“Thus, the user never has to first dial a callback

platform and then call his destination number. This is much simpler, easier to use, and faster than known callback schemes.”). Although the specification language is not the ultimate guidepost for construing claim language, the Patent must indicate how the invention is distinct from prior art. “The statutory requirement of particularity and distinctness in claims is met only when the claims clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise.” Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005) (quoting United Carbon Co. v. Binney & Smith Co., 317 U.S. 228, 236 (1942) (internal alterations omitted)). Here, the claims themselves do not indicate how the RTCO scheme is distinct from the prior art, so the Court must rely on the distinction provided in the specification. According to the specification, the RTCO is an improvement on existing callback schemes. (See, e.g., ‘070 Patent Abstract; id. Cols. 1-2 ll. 35-43; Col. 4 ll. 1-14). The above construction of RTCO thus incorporates the state of the prior art. Selex has not identified any technology existing at the time which would support the broader construction of RTCO which it proposes, i.e., without a callback component.

There are three disputed claim terms stemming from the definition of RTCO which can be clarified using the construed definition of RTCO and the plain meaning

of the terms “platform,” “message,” and “call.”<sup>5</sup> Based on its usage in the claims, the RTCO platform is “hardware and software in a remote location that is programmed to originate calls to a mobile telephone and to a desired destination.” The term “RTCO” message must be construed as “a data message sent by a mobile telephone to the RTCO platform containing information and instructions for the RTCO platform to originate calls to the mobile telephone and to the destination in order to achieve cost savings.” Likewise, the final disputed term with respect to RTCO follows the plain meaning. An “RTCO call” refers to “a voice connection involving the RTCO method or apparatus.”

B. The ‘070 Patent’s Means-Plus-Function Claims

The parties dispute the construction of three broad means-plus-function claims and five narrower means-plus-function claims. Means-plus-function claim limitations must satisfy the requirements of 35 U.S.C. § 112 ¶ 6. Noah Sys., Inc. v. Intuit Inc., 675 F.3d 1302, 1311 (Fed. Cir. 2012) (citing S3 Inc. v. nVIDIA Corp., 259 F.3d 1364, 1367 (Fed. Cir. 2001)). There are two steps in construing a means-plus-function claim. “First, the court must determine the claimed function. Second, the court must identify the corresponding structure in the written description of the patent that

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<sup>5</sup>The term “RTCO Platform” appears in claims 7, 14, 123, and 148. The terms “RTCO Message” and “RTCO Call” appear in claims 7 and 123.

performs the function.” Id. (citing Applied Med. Res. Corp. v. United States Surgical Corp., 448 F.3d 1324, 1332 (Fed. Cir. 2006) (internal quotation marks omitted). “A structure disclosed in the specification qualifies as ‘corresponding structure’ if the specification or the prosecution history ‘clearly links or associates that structure to the function recited in the claim.’” Id. (quoting B. Braun Med. Inc. v. Abbott Laboratories, 124 F.3d 1419, 1424 (Fed. Cir. 1997)). In patents such as the ‘070 Patent, where the means-plus-functions are implemented by a computer, the Federal Circuit requires “that the structure disclosed in the specification be more than simply a general purpose computer or microprocessor.” Id. at 1312 (quoting Aristocrat Techs. Austl. Pty Ltd. v. International Game Tech., 521 F.3d 1328, 1333 (Fed. Cir. 2008)). The specification must “disclose an algorithm for performing the claimed function.” Id. (quoting Net MoneyIN, Inc. v. VeriSign, Inc., 545 F.3d 1359, 1367 (Fed. Cir. 2008)). “Simply disclosing software, [] without providing some detail about the means to accomplish the function, is not enough.” Id. (quoting Finisar Corp. v. DirectTV Grp., Inc., 523 F.3d 1323, 1340 (Fed. Cir. 2008)). However, the accused infringer must show by clear and convincing evidence that a claim term is indefinite. Halliburton Energy Servs. v. M-I LLC, 514 F.3d 1244, 1249 (Fed. Cir. 2008).

1. Control Means for Monitoring a Telephone Number Dialed by a User

The parties dispute the construction of “control means for monitoring a telephone number dialed by a user.”<sup>6</sup> The parties agree this is a means-plus-function clause governed by 35 U.S.C. § 112 ¶ 6. Google contends that the specification of the ‘070 Patent does not disclose sufficient information for a person having ordinary skill in the art to determine the corresponding structure for the “monitoring” function. Selex argues that the specification does disclose the corresponding structure for the monitoring function and that monitoring the number dialed by the user of a cell phone is such a widespread function that only a minimal amount of structure needs to be disclosed.<sup>7</sup>

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<sup>6</sup>This claim language appears in claims 7, 11, 14, 18, 42, 65, 123, 132, 148, and 157.

<sup>7</sup>The parties dispute the proper definition of a person having ordinary skill in the art for the ‘070 Patent. Selex proposes that the relevant person having ordinary skill in the art is “someone with a bachelor of electrical engineering or computer science or equivalent, and three to five years of experience in mobile telecommunications, particularly in call signaling and the various methods of enabling or enacting call control.” (See Selex Response Ex. A ¶ 6). Google proposes “a person with a bachelor’s degree in electrical engineering (or electrical and computer engineering) and at least three years of experience with wireless communication systems.” (Madisetti Decl. ¶ 20). Because the term “mobile telecommunications” is narrower and encompasses the sophistication and education necessary for understanding the mobile apparatus in the ‘070 Patent, the Court will adopt Selex’s definition of a person having ordinary skill in the art. See Daiichi Sankyo Co., Ltd. v. Apotex, Inc., 501 F.3d 1254, 1256 (Fed. Cir. 2007) (discussing factors to consider when defining a person of ordinary skill in the art).

According to Selex, the algorithm is taught in Figure 2 (boxes 31 and 32), column 5, lines 39-47, and through the example of using the SIM Toolkit Application described at column 8, lines 19-23. These disclosures are insufficient to teach an algorithm for the claimed function. Boxes 31 and 32 of Figure 2 are simply boxes that state “capture # dialed” and “evaluate telephone number dialed.” These are “black boxes” that simply restate the function and are insufficient to disclose an algorithm. See ePlus, Inc. v. Lawson Software, Inc., 700 F.3d 509, 518 (Fed. Cir. 2012) (noting that, within a figure, the “black box” that represented the purchase-order-generation function by simply stating “purchase orders” did not describe corresponding structure for the purchase-order-generation function). The discussion of Figure 2 in column 5 merely walks through the figure and provides no additional detail.

Selex’s expert also asserts that programming SIM cards using the Toolkit Application was a well-known technique at the time of the invention and that a person of ordinary skill in the art would be able to use the Toolkit to complete the monitoring function. (See Laster Decl. ¶ 51; Laster Dep. at 117, ll. 6-11).<sup>8</sup> The specification

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<sup>8</sup>Laster, in his declaration and deposition, points to the Global System for Mobile Communications (GSM) manual at sections 4.5 and 9 as further structure to correspond with the monitoring function. (See Laster Dep. Ex. 1, at 12, 50). These section numbers were not listed in the specification. And, more importantly, the sections just describe another method for performing the monitoring function. When there are multiple methods for completing a computer function, the specification is required to identify a specific method. See Noah Sys., Inc. v. Intuit Inc., 675 F.3d

discusses the SIM Toolkit Application at Col. 8, lines 19-23. Selex argues that the disclosure of the SIM Toolkit Application structure is analogous to the disclosure of the “DDE Protocol” in AllVoice Computing PCL v. Nuance Communications, Inc., 504 F.3d 1236 (Fed. Cir. 2007), which the court there construed as definite. In AllVoice, the invention at issue was a speech-recognition interface that allowed users to utilize speech-recognition software with a variety of end-user applications on a personal computer. The claim at issue provided “output means for outputting the recognised words into at least any one of the plurality of different computer-related applications to allow processing of the recognised words as input text.” Id. at 1238. The corresponding structure for the means-plus-function clause in the specification referred to a flow chart and stated: “The speech recognition interface application 12 receives the recognised word at the head of the alternative list shown in FIG. 3 and outputs the word using the dynamic data exchange (“DDE”) protocol in the Windows operating system.” Id. at 1241. This language was supported by expert testimony stating that a “skilled artisan reading the specification would recognize that numerous applications support the DDE transfer protocol and that preparing the software instruction to transfer recognized words ... would be a trivial matter well within the

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1302, 1317 (Fed. Cir. 2012) (citing Blackboard, 574 F.3d at 1385) (“That various methods might exist to perform a function is ‘precisely why’ the disclosure of specific programming is required.”).



reach of a person of ordinary skill in the art.” Id. at 1242. The court concluded the reference to DDE was a corresponding structure to the “output means” claim sufficient to avoid indefiniteness. Id.

Here, the specification is much less precise in describing the structure corresponding to the monitoring function. Indeed, it describes none. In discussing the flow chart that restates the function, the specification of the ‘070 Patent does not direct the use of the SIM Toolkit Application. With respect to boxes 31 and 32 of Figure 2, which Selex cites as corresponding structure, the specification states:

The process 30 [the entirety of Figure 2] includes an initial step 31 of capturing a telephone number dialed by the user of the mobile telephone 10. Next, in step 32 the captured telephone number is evaluated to determine if it would be better to allow the number to be dialed directly or to employ an RTCO platform to dial the telephone number.

(‘070 Patent Col. 5 ll. 42-48). As noted above, boxes 31 and 32 merely restate the function they represent and do not constitute structure. Unlike in AllVoice, where the specification directed the use of the DDE protocol when discussing the associated figure, the ‘070 Patent specification does not discuss the SIM Toolkit Application in relation to Figure 2 but rather later in the specification and in a general sense. The patent states: “As those skilled in the art can appreciate, RTCO can be used by a GSM mobile phone with the SIM card (a Subscriber Identify Module) serving as the control module and a SIM Toolkit Application comprising the software in the control

module.” (‘070 Patent Col. 8 ll. 19-26). Although one with ordinary skill in the art could use the SIM Toolkit Application to execute the function, the invention does not mandate the use of the SIM Toolkit as the invention mandated the use of the “DDE protocol” in AllVoice. Instead, the ‘070 Patent offers the SIM Toolkit Application as one of several methods for implementing the RTCO scheme. (See ‘070 Patent Col. 8 ll. 27-43 (noting that IS-41 mobile phones or PC connected to landline phones could implement the RTCO scheme)). However, in a means-plus-function claim, the fact “[t]hat various methods might exist to perform a function is ‘precisely why’ the disclosure of specific programming is required.” Noah Sys., Inc. v. Intuit Inc., 675 F.3d 1302, 1317 (Fed. Cir. 2012) (citing Blackboard, 574 F.3d at 1385) (“The disclosure must identify the method for performing the function, whether or not a skilled artisan might otherwise be able to glean such a method from other sources or from his own understanding.”). Accordingly, AllVoice does not assist Selex because the specification in the patent at issue in AllVoice disclosed a precise structure for executing the claimed function whereas the ‘070 Patent broadly discloses several structures that could support the claimed function but does not disclose the required specific algorithm.

Selex further argues that the disclosure of general corresponding structure is sufficient because all cell phones necessarily have a monitoring function in order to

complete calls over a telephony network. But, as noted, in a means-plus-function claim, “the disclosure must identify the method for performing the function, whether or not a skilled artisan might otherwise be able to glean such a method from other sources or from his own understanding.” Noah, 675 F.3d at 1317 (citing Blackboard, 574 F.3d at 1385) (internal alterations omitted). Even though Selex argues that the function of monitoring the number dialed on a mobile is so widespread that a person having ordinary skill in the art could choose from a number of methods to achieve the desired function, the fact “[t]hat various methods might exist to perform a function is ‘precisely why’ the disclosure of specific programming is required.” Id. (citing Blackboard, 574 F.3d at 1385). Accordingly, Selex’s “efforts to find structure ... in the common ken of a skilled [mobile telecommunications] artisan does not allow it to avoid providing the specificity as to structure required by § 112 ¶ 6.” Id. (quoting Blackboard, 574 F.3d at 1385) (internal alterations omitted). Because the ‘070 Patent does not disclose specific corresponding structure in the specification for a person having ordinary skill in the art to determine the specific algorithm by which the dialed number is monitored, the claim language “control means for monitoring a telephone number dialed by a user” is indefinite.

2. Control Means for transmitting [or communicating] a RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform<sup>9</sup>

The parties agree that this claim term is a means-plus-function claim under § 112 ¶ 6. Google argues that the “communicating” function is indefinite because the ‘070 Patent does not disclose a sufficient algorithm for a person having ordinary skill in the art to ascertain the preferred function. Selex argues the specification does disclose specific structure via the algorithm described in box 12 of Figure 1, box 36 in Figure 2, and the specification text at column 8, lines 19-43. Further, Selex argues, the specification provides examples of several phones with data messaging capability that could be programmed to carry out the transmitting function. (See ‘070 Patent, Col. 8 ll. 23-34). According to Selex, these disclosures are sufficient for a person having ordinary skill in the art to understand the structure the ‘070 Patent teaches for the function.

Selex’s arguments fail for the same reasons they fail with respect to the “monitoring” means-plus-function claim. First, the control module in Figure 1 and

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<sup>9</sup> This claim language comes from independent claims 7, 123, 14, and 148. In claims 7 and 123 the passages state “control means... for transmitting a RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform.” (‘070 Patent, Col. 9 ll. 42-58). In claims 14 and 148 the passages state “control means... for communicating a message to the RTCO platform to complete the call using the RTCO platform.” (‘070 Patent, Col. 10 ll. 17-28).

box 36 in Figure 2 do not disclose structure. In Figure 1, box 12 simply states “control module.” And in Figure 2, box 36 simply states “pass data message to data messaging network.” As with the “monitoring” function, the disclosures of structure that simply restate the function do not establish structure. See ePlus, 700 F.3d at 518 (noting that, within a figure, the “black box” that represented the purchase-order-generation function by simply stating “purchase orders” did not describe corresponding structure for the purchase-order-generation function). Second, even when there are multiple known methods for carrying out a function, the fact “[t]hat various methods might exist to perform a function is ‘precisely why’ the disclosure of specific programming is required.” Noah, 675 F.3d at 1317 (citing Blackboard, 574 F.3d at 1385) (internal alterations omitted); ePlus, 700 F.3d at 519 (“The indefiniteness inquiry is concerned with whether the bounds of the invention are sufficiently demarcated, not with whether one of ordinary skill in the art may find a way to practice the invention.”). The specification’s failure to identify a specific algorithm to serve as corresponding structure to carry out the communicating or transmitting function renders the “communicating” claim term indefinite.

3. Control means for determining if a telephone call should be placed using the RTCO platform<sup>10</sup>

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<sup>10</sup>This claim language appears in terms 7, 14, 123, and 148.

The parties agree that this claim term is a means-plus-function. Selex argues that the corresponding structure is found in control module 12 of Figure 1, the algorithm relayed in Figure 2, box 33, and the text found in column 6, lines 39-55. Selex further states that the structure includes the “look-up table,” which illustrates how the function can analyze a set list of numbers to determine whether the call should be placed using the RTCO platform. (See ‘070 Patent, Col. 6 ll. 42-45 (“This decision making can be carried out in the context of look-up tables which are used to store logical values from which it can be deduced whether the call involves high charges.”)).

Google argues that the ‘070 Patent teaches a more limited structure. Google states that the only algorithm disclosed is the three-tiered cost-based logic found in Figure 3 and at column 6, lines 14-45. This disclosed structure directs the control module to determine if a call should be placed using the RTCO scheme by assessing (1) whether higher long distance charges apply; (2) whether higher roaming charges apply; and then (3) whether higher local charges apply. (‘070 Patent, Fig. 3). Google argues that the look-up table disclosed is the only implementation of the algorithm for the “determining” function.

Here, the three-tiered logic in Figure 3 along with the look-up table is the only algorithm disclosed in the ‘070 Patent as corresponding structure for the

“determining” function. As noted above, the control module described in box 12 of Figure 1 is only a black box that restates the described function and cannot be considered corresponding structure. See ePlus, 700 F.3d at 518 (noting that, within a figure, the “black box” that represented the purchase-order-generation function by simply stating “purchase orders” did not describe corresponding structure for the purchase-order-generation function). The only adequate structure disclosed is the three-tiered flow chart in Figure 3 which outlines the three-step process by which the control module will determine whether a call should be placed directly or indirectly based on the specified considerations. This structure, however, does not disclose a concrete algorithm unless it is viewed in conjunction with the look-up table contained in the specification. The look-up table is a reference point for the control module to assess whether the destination phone number faces higher long distance charges, higher roaming charges, or higher local charges. Without the look-up table, a person having ordinary skill in the art will not be able to discern the parameters of the invention, regardless of whether they are able to reproduce the art. ePlus, 700 F.3d at 519 (“The indefiniteness inquiry is concerned with whether the bounds of the invention are sufficiently demarcated, not with whether one of ordinary skill in the art may find a way to practice the invention.”). Even accepting Selex’s argument that the SIM Toolkit and various GSM guidelines could be used by a person having ordinary

skill in the art to establish a determining function, the disclosure of the Toolkit and GSM guidelines is insufficient. As noted with the indefinite “transmitting” and “monitoring” functions, the fact that there are multiple methods to complete a function does not allow the inventor to claim that any of the methods would suffice. Rather, the patent must teach specific structures to correspond with the claimed function. Noah, 675 F.3d at 1317 (citing Blackboard, 574 F.3d at 1385) (internal alterations omitted); Function Media, LLC v. Google Inc., No. 2012-1020, 2013 U.S. App. LEXIS 3033, at \*16 (Fed. Cir. Feb. 13, 2013) (“[I]t is well established that proving that a person of ordinary skill *could* devise some method to perform the function is not the proper inquiry as to definiteness--that inquiry goes to enablement.”). Without that, the Patent fails “to ensure that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee’s right to exclude.” Datamize, LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citing Honeywell Int’l, Inc. v. ITC, 341 F.3d 1332, 1338 (Fed. Cir. 2003)). Accordingly, the “determining” function is construed as a means-plus-function whereby the control module utilizes a look-up table to assess, as taught in Figure 3, whether high long distance charges apply, whether high roaming charges apply, and whether high local charges apply to determine whether a telephone call should be completed using the RTCO platform.



4. Control means responsive to the dialing of certain numbers for transmitting a RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform<sup>11</sup>

Google argues that this means-plus-function is indefinite since it fails to provide a corresponding algorithm for (1) responding to the dialing of telephone numbers; (2) transmitting the RTCO message to the data network; and (3) directing the RTCO platform to initiate a call. Google also argues that the phrase “certain telephone numbers” is ambiguous and therefore indefinite. Selex argues the Court should construe the language exactly as it appears in the claims and that there is a corresponding algorithm in the specification at Figure 1, box 12, Figure 2, box 36, and in the corresponding text at column 8, lines 19-43. Selex also points to several examples in the specification that could be programmed accordingly.

This claim term is indefinite at least because the “transmitting” function it references is indefinite. Selex points to box 12 in Figure 1 and box 36 in Figure 2 as providing sufficient structure for the transmitting function but, as discussed above, references to “black boxes” that simply restate the function are insufficient to demarcate corresponding structure. See ePlus, 700 F.3d at 518 (noting that, within a figure, the “black box” that represented the purchase-order-generation function by simply stating “purchase orders” did not describe corresponding structure for the

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<sup>11</sup> This claim language appears in claims 7 and 123.

purchase-order-generation function); Function Media, 2013 U.S. App. LEXIS 3033 at \*14 (“[Patentee’s] citation to the flow charts as sufficient structure is [] unavailing because the charts [] do not describe how the transmitting function is performed.”). Selex’s expert contends the claim is not indefinite because the “certain telephone numbers” are determined by the “previous step” of assessing whether the RTCO platform should be utilized. (See Laster Resp. Decl. ¶ 108). But the term is indefinite because the transmitting function itself has no corresponding structure, without regard to whether there is corresponding structure for the “certain numbers” portion of the claim term. Likewise, Selex identifies the text in the specification discussing certain mobile phones that could easily be programmed by those skilled in the art to carry out the proposed function. But, as noted above, the bare references to programmable phones are insufficient to adequately demarcate the structure for transmitting a data message. See Noah, 675 F.3d at 1317 (“the disclosure [of structure in the specification] must identify the method for performing the function, whether or not a skilled artisan might otherwise be able to glean such a method from other sources or from his own understanding.”) (citing Blackboard, 574 F.3d at 1385). Accordingly, this claim term is indefinite.<sup>12</sup>

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<sup>12</sup> The monitoring function of this claim term is also indefinite because the underlying monitoring function has been construed as indefinite.

5. Control means for determining if [sic] telephone call should be placed using the RTCO platform comprises determining that no calls should be placed using the RTCO platform<sup>13</sup>

This claim term appears to be redundant of the determining function claim discussed above with the added stipulation that the control means include a possible determination that no calls should be placed using the RTCO platform. The Court construed the “determining” function, without the added stipulation, as a means-plus-function whereby the control module utilizes a look-up table to assess, as taught in Figure 3, whether high long distance charges apply, whether high roaming charges apply, and whether high local charges apply to determine whether a telephone call should be completed using the RTCO platform.

Selex argues that this claim language concerns a user-option allowing the user to turn off the RTCO service altogether. Selex contends that the supporting structure for this function is found in the specification where it states that the user could turn the use of the RTCO service off. (See ‘070 Patent Col. 8, ll. 49-56 (“In this regard, the user could turn use of the RTCO service on or off. This could be done through a menu option, such as is currently used to select or de-select many features and functions in cellular telephones.”)). Google argues that the function of allowing the

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<sup>13</sup> This claim language is located in claims 52, 74, 142, and 166.

user to turn off the RTCO service is indefinite as the '070 Patent does not disclose sufficient corresponding structure for the user-option.

In Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106 (Fed. Cir. 2002), the patent included the function of monitoring the ECG signal and activating a charge in an implanted defibrillator. The corresponding structure made clear that both monitoring and activating were part of a dual function. The court held the claim indefinite “because only [a] physician both monitors the ECG signal and activates the charging means” and “the physician cannot be corresponding structure.” Id. at 1114. Here, too, the user cannot be the corresponding structure. Selex cannot rely on the ability of a user to turn off the RTCO options without disclosing structure within the invention for a user to turn off the RTCO.

Further, Selex’s citation to the specification stating that the structure could include a menu option that is currently used for many features in cellular telephones is insufficient because the specification fails to identify a specific method for the menu option. See Noah, 675 F.3d at 1317 (citing Blackboard, 574 F.3d at 1385) (the fact “[t]hat various methods might exist to perform a function is ‘precisely why’ the disclosure of specific programming is required.”). Because the specification language Selex identifies does not constitute sufficient structure, this claim term is indefinite.

6. Control means for determining if the telephone call should be placed using the RTCO platform comprises determining that a

subset of telephone calls should be placed using the RTCO platform<sup>14</sup>

Selex and Google agree that this is a means-plus-function under 35 U.S.C. § 112 ¶ 6. Selex argues that the claim should be construed as “determining that some, all, or no telephone calls should be placed using the RTCO platform.” Selex points to corresponding structure in Figure 1, box 12, Figure 2, box 33, Figure 3, and the patent text found at column 6, line 14 through column 7, line 21, as well as the look-up table. Google argues that Selex cannot include structure beyond the three-tiered algorithm and the look-up table as that structure alone describes the corresponding function.

Google’s argument is consistent with Federal Circuit precedent. Selex can only rely on corresponding structure for a function “if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” Medical Instr. & Diag. Corp. v. Elekta AB, 344 F.3d 1205, 1210 (Fed. Cir. 2003) (quoting B. Braun Medical v. Abbot Lab, 124 F.3d 1419, 1424 (Fed. Cir. 1997)). While 35 U.S.C. § 112 ¶ 6 does not require the patentee “to recite in the claims all possible structures that could be used as means in the claimed apparatus, ... [i]f the specification is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee ... [is] attempting to claim in functional terms

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<sup>14</sup>This claim language appears in claims 53, 75, 143, and 167.

unbounded by any reference to the structure in the specification.” Id. at 1211 (quoting O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1583 (Fed. Cir. 1997)). Here, it is not clear from the specification which structure corresponds to the claimed function of determining that a subset of calls should be made using the RTCO platform because the identified corresponding structure is the structure corresponding with the “determining” function. Accordingly, the construction must be limited to the portions of the specification that specifically relate to determining that calls are made using the RTCO platform: the three-tiered flow-chart in Figure 3 and the associated look-up table that serve as corresponding structure for the “determining” function.

7. Control means is operative for comparing the telephone number dialed by the user with the look-up table to determine if the telephone number dialed should be placed directly or should be placed using the RTCO platform<sup>15</sup>

The parties agree that this is a means-plus-function governed by 35 U.S.C. § 112 ¶ 6. Selex contends that corresponding structure can be found in Figure 1, box 12, and in the algorithms found in Figures 2 (box 33) and 3, as well as the look-up table discussed in column 6, line 14 through column 7, line 21. Selex also contends that the specification teaches that a person having ordinary skill in the art could complete such a function using the SIM Toolkit Application. Google argues that the structure must be limited to the look-up table itself.

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<sup>15</sup> This claim language appears in claims 123 and 148.

Google's construction is consistent with Federal Circuit precedent as it derives its construction from the claim language itself. See Gillette Co. v. Energizer Holdings, Inc., 405 F.3d 1367, 1370 (Fed. Cir. 2005) (quoting Interactive Gift Express, Inc. v. Compuserve Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001) (the Court's focus must "begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to particularly point out and distinctly claim the subject matter which the patentee regards as his invention.")). Because the claim language itself references the look-up table disclosed in the specification, Selex cannot rely on structure disclosed beyond the look-up table. Accordingly, this function should be limited to the structure described by the look-up table referenced in the claim language. The look-up table structure comprises (1) a network code for the country, (2) a location identity number, and (3) a sequence of possible initial digits, all of which are analyzed by the mobile telephone when the call is placed. (See '070 Patent Cols. 6-7, ll. 42-21).

8. Control means... for determining if a telephone call should be placed using the RTCO platform... wherein [such] determining ... is based on at least one criteria ... wherein at least one criteria comprises whether the telephone call placed from the mobile telephone to the telephone is an international call<sup>16</sup>

Selex again points to Figure 1, box 12, and in the algorithms found in Figures 2 (box 33) and 3, as well as the text in columns 6 and 7, lines 14-21, including the look-up table, as corresponding structure. However, as Google points out, the only structure in the specification capable of determining whether to place a call from the RTCO platform, regardless of whether the number dialed is an international call (i.e., a call from one country to another), is the look-up table disclosed in columns 6 and 7 and the multi-tiered logic in Figure 3. As discussed above, the structure Selex refers to only requires the control module to determine whether higher roaming charges apply, whether higher long distance rates apply, or whether lower local rates apply. There is no further structure in the specification concerning international calls. Accordingly, because the corresponding structure must be linked with the claimed function, the corresponding structure for this claim only includes the look-up table and

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<sup>16</sup>This claim language is derived from claims 49, 71, 139, and 163. It appears that the parties initially disputed whether they were attempting to construct this means-plus-function or simply the definition of an international call. However, the parties' response briefs indicate they view this term as a means-plus-function. (See Google Claim Construction Response, at 22; Selex Claim Construction Response, at 14).



the three-tiered logic found in Figure 3. See Medical Instr. & Diag. Corp., 344 F.3d at 1210; ('070 Patent, Cols. 6-7, ll. 42-21; Fig. 3).

C. Remaining Disputed Terms

1. [Control Means/internal data messaging device] is operative for communicating a message to a data messaging network for relaying the message to the RTCO platform to complete the call using the RTCO platform

The parties dispute whether this is a means-plus-function claim term. The language is drawn from claims 14 and 148.<sup>17</sup> Claim 14 teaches a mobile phone with a keypad, access to a telephony network and internal data messaging capabilities, “the improvement therein comprising that control means are provided for monitoring the dialing of a telephone number by a user of the mobile telephone, and for determining if telephone call should be placed using an RTCO platform, and further that the internal data messaging device is operative for communicating a message to a data messaging network for relaying the message to the RTCO platform to complete the call using the RTCO platform without requiring that the user dial any additional numbers.” ('070 Patent, Col. 10, ll. 17-28). Selex contends that the phrase beginning with “operative” modifies the internal data messaging device. Google, however,

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<sup>17</sup>The claim language is also drawn from independent claims 7 and 123, which use slightly different phrasing. Claim 7 states control means “responsive to the dialing of certain telephone numbers for transmitting a RTCO message from the internal data messaging device to the data network to initiate an RTCO call from the RTCO platform.” ('070 Patent, Col. 9, ll. 54-59).

argues that the final phrase modifies the “control means” discussed earlier in the paragraph and thus restates the “transmitting” and “communicating” functions construed above as indefinite.

The Court concludes the claim term should be construed as a means-plus-function claim. “[A] limitation lacking the term ‘means’ may overcome the presumption against means-plus-function treatment if it is shown that ‘the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.’” Massachusetts Inst. of Tech. v. Abacus Software, 462 F.3d 1344, 1353 (Fed. Cir. 2006) (quoting CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1369 (Fed. Cir. 2002)). Even reading the phrase as Selex reads it, the Court concludes that “internal data messaging device is operative for communicating a message to a data messaging network for relaying the message to the RTCO platform to complete the call using the RTCO platform” denotes a means-plus-function claim because, in general, the term “device” does “not connote sufficiently definite structure” to avoid § 112 ¶ 6. Id. at 1354 (citing Personalized Media Communs., LLC v. International Trade Comm’n, 161 F.3d 696, 704 (Fed. Cir. 1998)). There is nothing else in the claim language sufficient itself to recite definite structure. See Personalized, 161 F.3d at 704 (in determining whether § 112 ¶ 6

applies, “the focus remains on whether the claim as properly construed recites sufficiently definite structure.”). Thus, this claim term recites a means-plus-function.

This means-plus-function claim term is indefinite for the same reasons the “communicating” and “transmitting” claim terms have been construed as indefinite. The specification does not identify sufficient structure to perform the communicating functions of the claim term. Selex argues that the structure is found in the black boxes in Figures 1 and 2 that show the data messaging device and the data messaging network, and in box 36 of Figure 2 which states “pass data message to data messaging network.” The structure is further outlined in box 37 which states “relay message from data msg network to RTCO platform.” That data message would contain the dialed number, the identity of the mobile phone, and additional information as necessary. The references to the black boxes in Figures 1 and 2 that restate the functions are insufficient to establish corresponding structure. See ePlus, 700 F.3d at 518 (noting that, within a figure, the “black box” that represented the purchase-order-generation function by simply stating “purchase orders” did not describe corresponding structure for the purchase-order-generation function). Selex also argues that those skilled in the art could utilize special programming to perform the stated function with an IS-41 mobile phone, a GSM mobile phone, or by programming a SIM card. But to avoid indefiniteness Selex must identify which method a person

skilled in the art must utilize when completing a known function. See Noah, 675 F.3d at 1317 (citing Blackboard, 574 F.3d at 1385) (“[E]fforts to find structure ... in the common ken of a skilled [mobile telecommunications] artisan does not allow [the patent] to avoid providing the specificity as to structure required by § 112 ¶ 6.”). Likewise, Selex’s references to various data messaging networks, such as IP messaging capability, an SS7 signaling network, USSD network, and others, do not teach a person of ordinary skill in the art which method to utilize in performing the function. See id. Accordingly, the Court concludes that this claim term is indefinite.

2. Data messaging network configured to relay messages<sup>18</sup>

The parties agree that this term should carry its plain meaning according to one skilled in the art. The parties dispute whether a data messaging network at the time the ‘070 Patent was issued included the ability to relay data messages over Internet Protocol, which is landline-based communications, as opposed to only over mobile telephone networks. Google argues that, during the reexamination of the Patent, Selex distinguished its invention from “PCs having a landline telecommunications system” because they are different from mobile telecommunications systems. (See JA Ex. 4, Part 1, at 113-17). Although it is possible for a patentee to surrender potential constructions of claims during reexamination, such a surrender does not override the

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<sup>18</sup>This claim language is drawn from claims 7 and 123.

specification language. Phillips, 415 F.3d at 1317 (“[B]ecause 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.”). Here, the specification states: “the IP (Internet Protocol) messaging capability within the PC can serve as the data messaging device on an IP network (e.g. 33.6 Kbps dial-up to the Internet Worldwide Web, a Wide Area Network WAN, etc.) can serve as a data messaging network.” (‘070 Patent, Col. 8, ll. 38-43). Accordingly, the Court adopts Selex’s proposed construction and construes “data messaging network configured to relay messages” as a “communications network that transmits data messages including but not limited to the following network types: GSM, IS-41, SS7, USSD, GPRS, UMTS, and IP.”

### 3. High cost number<sup>19</sup>

Selex argues that the term “high cost number” should be given its ordinary meaning. The ‘070 Patent, according to Selex, describes high cost numbers as those that include roaming costs, long distance costs, or high local costs. (Selex Opening at 22, ‘070 Patent Col. 6, ll. 19-40). Google argues that the term “high cost number” is indefinite whether isolated or used in a means-plus-function because “high cost number” is inherently subjective. Google further argues that the anchors Selex points

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<sup>19</sup>This claim language is drawn from claims 51, 73, 141, and 165.

to, such as roaming and long-distance costs, do not provide sufficient guideposts for someone with ordinary skill in the art to determine what renders a cost “high.”

The Court agrees that the reference to “high cost number” renders the claim language indefinite. In Exxon Research & Eng’g Co. v. United States, 265 F.3d 1371 (Fed. Cir. 2001), the court reversed the trial court’s holdings of indefiniteness for several claim terms in a patent concerning natural gas processes after “[t]he trial court [had] found the term ‘substantial absence of slug flow’ to be indefinite because the specification did not provide any empirical standard for determining when the process could be said to be substantially lacking in slug flow.” Id. at 1380. The Federal Circuit, however, noted that “the fact that some claim language may not be precise does not automatically render a claim invalid. When a word of degree is used the district court must determine whether the patent’s specification provides some standard for measuring that degree.” Id. at 1381 (quoting Seattle Box Co. v. Industrial Crating & Packaging, Inc., 731 F.2d 818, 826 (Fed. Cir. 1984) (internal alterations omitted)). According to the court, “[o]ne of skill in the art would understand from the specification that the reason slug flow should be avoided is that it may interfere with reactor efficiency.” Id. “Whether there is a ‘substantial absence of slug flow’ therefore can be determined with reference to whether reactor efficiency is materially affected,” and “[i]f there is no slug flow or such minimal slug flow that the slug flow

has no appreciable impact on reactor efficiency,” the court concluded, “then there is a ‘substantial absence of slug flow’ within the meaning of the claims.” Id.

Here, in contrast, with respect to “high cost number,” there is no standard by which a person having ordinary skill in the art could determine with a degree of certainty that a dialed number is a “high cost number.” Unlike in Exxon, where the term of degree could be associated with a desired and understood technological result, the term of degree here, “high cost number,” can only be associated with subjective cost reduction or unanchored desired results. The subjective assessment of a person skilled in the art cannot render a claim definite. See Datamize, 417 F.3d at 1350 (construction of claim cannot depend on subjective opinion of individual). The purported anchors that Selex points to -- “roaming charges, high long distance charges, and high local charges” -- suffer from the same uncertainty as “high cost number.”<sup>20</sup> Where, as here, the only parameters of the claim term depend on judgments of whether a certain cost may be “high,” and there are no other objective parameters to rein in the claim terms, the claim language is indefinite. See Exxon, 265

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<sup>20</sup>This is in contrast to the three-tiered logic associated with the determining function whereby the control module assesses whether it faces “higher” roaming, local, or long-distance charges, presumably in comparison to roaming or long-distance charges assessed where the call originates or higher local charges where the RTCO platform may originate the destination call. See Exxon, 265 F.3d at 1381 (noting that words of degree in claim terms are permissible provided they are attached to a standard for measuring the degree).

F.3d at 1381 (requiring “a reasonable degree of particularity and definiteness” to construct a claim term involving terms of degree).

#### IV. Conclusion

For the reasons set forth above, the disputed terms in the ‘070 Patent will be construed in the manner described above.

SO ORDERED, this 8 day of April, 2013.

/s/Thomas W. Thrash  
THOMAS W. THRASH, JR.  
United States District Judge