IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

SMARTPHONE TECHNOLOGIES	§	
LLC,	§	
	§	
Plaintiff,	§	
	§	NO. 6:10cv74 LED-JDL
vs.	§	
	§	PATENT CASE
RESEARCH IN MOTION	§	
CORPORATION, et al.,	§	
Defendants.		
SMARTPHONE TECHNOLOGIES	§	
LLC,	§	
,	§	
Plaintiff,	§	
,	§	NO. 6:10cv580 LED-JDL
vs.	§	
	§	PATENT CASE
HTC CORPORATION, et al.,	§	
, ,	§	
	×	

MEMORANDUM OPINION AND ORDER

This claim construction opinion construes the disputed claim terms in U.S. Patent Nos. 7,076,275 ("the '275 patent"); 7,506,064 ("the '064 patent"); 7,533,342 ("the '342 patent"); 7,693,949 ("the '949 patent"); RE40,459 ("the '459 patent"); and 6,950,645 ("the '645 patent"). Plaintiff SmartPhone Technologies LLC ("SmartPhone") alleges that Defendants¹ infringe the patents-in-suit. The parties have presented their claim construction positions (Doc. Nos. 362, 369).

¹ Defendants in Civil Action No. 6:10cv74 are LG Electronics, Inc.; LG Electronics USA, Inc.; Apple, Inc.; AT&T Inc.; and AT&T Mobility LLC. HTC Corporation; HTC America, Inc.; Sony Ericsson Mobile Communications AB; and Sony Ericsson Mobile Communications (USA), Inc. make up Defendants in Civil Action No. 6:10cv580.

& 371 in Civil Action No. 6:10cv74 and Doc. Nos. 172, 184 & 193 in Civil Action No. 6:10cv580).² On March 6, 2012, the Court held a joint claim construction hearing.³ For the reasons stated herein, the Court adopts the constructions set forth below.

CLAIM CONSTRUCTION PRINCIPLES

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). The Court examines a patent's intrinsic evidence to define the patented invention's scope. *Id.* at 1313-1314; *Bell Atl. Network Servs., Inc. v. Covad Comme'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). Intrinsic evidence includes the claims, the rest of the specification and the prosecution history. *Phillips*, 415 F.3d at 1312-13; *Bell Atl. Network Servs.*, 262 F.3d at 1267. The Court gives claim terms their ordinary and customary meaning as understood by one of ordinary skill in the art at the time of the invention. *Phillips*, 415 F.3d at 1312-13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

Claim language guides the Court's construction of claim terms. *Phillips*, 415 F.3d at 1314. "[T]he context in which a term is used in the asserted claim can be highly instructive." *Id.* Other claims, asserted and unasserted, can provide additional instruction because "terms are normally used consistently throughout the patent." *Id.* Differences among claims, such as additional limitations

² Briefing is identical in both cases. Hereinafter, the Court will refer to the briefing in Civil Action No. 6:10cv74.

³ SmartPhone alleges infringement of the '275 patent, the '064 patent, the '342 patent, the '949 patent, the '459 patent, and the '645 patent in both Civil Action No. 6:10cv74 and 6:10cv580. The Court held a claim construction hearing specifically to address the common patents between the two actions.

in dependent claims, can provide further guidance. Id.

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

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct." *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v.*

Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571 (Fed. Cir. 1988); see also Phillips, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patentee may define a term during prosecution of the patent. Home Diagnostics Inc. v. LifeScan, Inc., 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent"). The well established doctrine of prosecution disclaimer "preclud[es] patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." Omega Eng'g Inc. v. Raytek Corp., 334 F.3d 1314, 1323 (Fed. Cir. 2003). The prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed the proposed interpretation during prosecution to obtain claim allowance. *Middleton* Inc. v. 3M Co., 311 F.3d 1384, 1388 (Fed. Cir. 2002); see also Springs Window, 323 F.3d at 994 ("The disclaimer . . . must be effected with 'reasonable clarity and deliberateness."") (citations omitted)). "Indeed, by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover." Spectrum Int'l v. Sterilite Corp., 164 F.3d 1372, 1378-79 (Fed. Cir. 1988) (quotation omitted). "As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution." Omega Eng'g, Inc., 334 F.3d at 1324.

Although, "less significant than the intrinsic record in determining the legally operative meaning of claim language," the Court may rely on extrinsic evidence to "shed useful light on the relevant art." *Phillips*, 415 F.3d at 1317 (quotation omitted). Technical dictionaries and treatises may help the Court understand the underlying technology and the manner in which one skilled in the

art might use claim terms, but such sources may also provide overly broad definitions or may not be indicative of how terms are used in the patent. *Id.* at 1318. Similarly, expert testimony may aid the Court in determining the particular meaning of a term in the pertinent field, but "conclusory, unsupported assertions by experts as to the definition of a claim term are not useful." *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

DISCUSSION

I. The '459 Patent

The '459 patent is a reissue of U.S. Patent No. 6,343,318 and is directed toward a "system and method for handheld device[s] to access Internet information over relative low bandwidth networks." '459 patent at 3:28-30. In order to reduce the amount of data transmitted over the network, the handheld device has pre-loaded forms that "contain all of the field names and selection values in them." *Id.* at 113:54-57. Alternatively, the handheld device uses server dependent forms that "do[] not contain the field names or selection values for each field in the form." *Id.* at 113:24-25. When transmitting a server dependent form, "the wireless client 405 transmits only the index of each field in the form and its user input value . . . to the proxy server." *Id.* at 113:35-39. The proxy server then retrieves the actual field names and values from an original HTML form and then sends the request to the web server. *Id.* at 113:39-45.

a. "the form including one or more fields"⁴

Plaintiff's Construction	Defendants' Construction
the form comprising a data structure with at least one field for user input	an electronic page displayed with at least one field name and value attribute for user input

The parties dispute whether the applicant disclaimed server dependent forms during the prosecution of the '459 patent in addition to disagreeing over the construction of the term "the form including one or more fields."

i. Prosecution Disclaimer

"The doctrine of prosecution disclaimer is well established in Supreme Court precedent, precluding patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution." *Omega Eng'g*, 334 F.3d at 1323 (internal citations omitted). However, prosecution disclaimer may not apply after looking at the prosecution history as a whole, which may indicate that the purported disclaimer was merely an isolated statement, lending ambiguity to whether the patent applicant clearly disavowed the particular subject matter. *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1342 (Fed. Cir. 2009) (citing *Elbex Video, Ltd. v. Sensormatic Elec. Corp.*, 508 F.3d 1366, 1372-73 (Fed. Cir. 2007)).

According to Defendants, particular remarks in the prosecution history clearly and unmistakably abandon server dependent forms, excluding them from the scope of Claim 1.⁵ In particular, Defendants note that the applicant stated:

Claim 24 provides for a handheld computer that stores data configured for a selected

⁴ This term is contained in claim 1 of the '459 patent.

⁵ Claim 1 is formerly Claim 24 in the prosecution history.

network site. The handheld computer includes a processor that can generate a form. The form can be combined with user-input (i.e. filled in), and signaled to a network site.

AMENDMENT AND REMARKS AT 8, U.S. PATENT APPL. SER. No. 09/087,515 (Aug. 6, 2001), Ex. 2, ATTACHED TO RESPONSE. Defendants contend that the applicant's statement necessarily excludes server dependent forms because "a communication associated with a server-dependent form does not have user input combined with the form *before* the communication is signaled to the network from the device." Response at 4, n.5 (emphasis in original). Rather, the proxy server, not the device, combines the user input with the form after the device sends the information. *Id.* In addition, Defendants assert that it was the applicant's failure to claim server dependent forms in Claim 1 that necessitated the reissue application. *Id.* at 4 (citing Response to Office Action at 3, U.S. Patent Appl. Ser. No. 09/087,515 (Dec. 30, 2004), Ex. 3, attached to Response.

First, the purported disclaiming statement does not unambiguously exclude server dependent forms from Claim 1. The applicant merely stated that the form can be combined with user input and signaled to the network site. Such a statement does not indicate *when* the user input and form are combined. Further, *when* the user input and form are combined is not at issue because Claim 1 is an apparatus claim, not a method claim. *Cf. Altiris v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed. Cir. 2003) (stating that method steps that do not actually recite an order do not usually require one). Thus, the applicant's purported disclaiming statement does not indicate that the applicant clearly and unmistakably disclaimed server dependent forms from the scope of Claim 1.

Second, Claim 1 requires that the processor be configured to "signal a wireless communication over the antenna for the selected network site, the wireless communication

comprising the form with the user-input being associated with the one or more fields." '459 patent at 151:30-33 (emphasis added). Defendants claim that what is communicated is the form and at least one field, as opposed to a form with user-input associated with one of the fields. See DFTS' '459 PATENT SLIDES AT 25-27. However, server dependent forms communicate user input associated with one or more fields. The '459 specification states, "When a server dependent form is submitted by the wireless client 405, the client sends the inputted values of each field up to the proxy server 180 along with the field index." '459 patent at 116:4-6. "When the wireless client 405 needs to submit a server dependent form, the wireless client 405 transmits only the index of each field in the form and its user input value (true/false checkboxes and radio buttons, typed in text for input items) to the proxy server 180." Id. at 113:35-39. Thus, even though the field of a form is not transmitted when the wireless client uses a server dependent form, the handheld device transmits the user input associated with field, consistent with Claim 1.

Finally, Defendants' argument that failure to claim server dependent forms necessitated the reissue application is a non-starter. Claim 1 is an apparatus claim whereas Claim 17—one of the independent claims that Defendants imply the applicant added to claim the previously unclaimed server dependent form embodiment—is a method claim, which makes no mention of "forms" at all. See '459 patent at 152:47-67; see also MARKMAN TRANSCRIPT AT 23:3-24:5 (Doc. No. 381). Thus, there seems to be little, if any, correlation between the reissue application and any purported failure to include server dependent forms in Claim 1.

Accordingly, the Court finds that the prosecution history does not indicate disclaimer of server dependent forms with regard to the scope of Claim 1.

ii. Construction

SmartPhone argues that the '459 patent discloses both normal, also known as standard or standalone, forms and server dependent forms. PLTFF'S BRIEF AT 8. Normal forms include name and/or value attributes for each field; in contrast, server dependent forms require only field input types, e.g., radio buttons, checkboxes, etc. and initial default values. *Id.* However, both types of forms require at least one field for user input. Therefore, SmartPhone concludes, its proposed construction properly accounts for the two types of forms disclosed in the '459 patent. *Id.* On the other hand, Defendants' construction not only requires that the form be a displayed page, but also excludes server dependent forms. *Id.* at 9-10. According to SmartPhone, Claim 1 already accounts for the render, or display, of the form; therefore, characterizing the form as displayed is redundant. *See id.* at 9, n.4. In addition, server dependent forms "do not have associated name or value attributes," and Defendants' construction would therefore read out a preferred embodiment. *Id.* at 9-10 (citing '459 patent at cols. 49-50).

Defendants respond that their proposal properly excludes server dependent forms, which is consistent with the disclaiming statement the applicant made during prosecution. RESPONSE AT 4. Defendants further contend the '459 patent specification dictates that name and value attributes are necessary for all forms. *Id.* at 3.

The Court adopts SmartPhone's proposed construction. As stated above, the Court finds that server dependent forms were not disclaimed during prosecution. Further, the specification accounts for both normal forms and server dependent forms: "There are essentially 2 classes of forms for the wireless communications device 100 as described in the Forms Processing section below: standalone

forms (like in standard HTML) and server dependent forms." '459 patent at cols. 47-50. Moreover, the language of Claim 1 does not distinguish between the two types of disclosed forms. Claim 1 recites, in relevant part:

1. A handheld computer comprising:

. . .

a processor configured to:

access the set of data from the memory to render a form for the selected network site, the form including one or more fields; associate user-input to the one or more fields provided by the form;

signal wireless communication over the antenna for the selected network site, the wireless communication comprising the form with the user-input being associated with the one or more fields

'459 patent at 151:18-40. The claim language does not specifically identify that the form requires "a field name and value attribute for user input," as Defendants contend. Nor does the claim language specify standard forms instead of server dependent forms. Rather, Claim 1 generically discloses that a form has one or more fields and that the processor is configured to wirelessly transmit the form along with user input associated with the fields found within the form.

Further, SmartPhone's proposal takes into account that both normal and server dependent forms are data structures that require user input. "A server dependent form contains a list of input fields for the form and corresponding field types (radio button, checkbox, etc.)." '459 patent at 113:22-24. "A standalone form . . . also has post and action attributes and that each of it's [sic] input fields have the necessary attributes (name and value) for submitting the form. . . ." *Id.* at cols. 49-50. Further, the *Microsoft Press Computer Dictionary* defines "data structure" as "[a]n organizational scheme . . . applied to data so that it can be interpreted and so that specific operations can be

performed upon the data." MICROSOFT PRESS COMPUTER DICTIONARY 97 (1991), Ex. P ATTACHED TO PLTFF'S BRIEF. Both standalone and server dependent forms organize data in order to wirelessly transmit the information. *See* '459 patent at cols. 49-50.

Therefore, the Court finds that "the form including one or more fields" means "the form comprising a data structure with at least one field for user input."

b. "access the set of data from the memory to render a form for the selected network site" 6

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary. Alternatively, if construed:	displaying a form for a specific website generated entirely from the set of data stored in memory
display a form for the selected network site using the set of data stored in the memory	-

The parties disagree as to (1) whether the form is "generated entirely from the set of data stored in memory" and (2) whether the "selected network site" is a "specific website." RESPONSE AT 1. SmartPhone argues that to interpret "selected network site" as a "specific website" would limit the network site to a particular embodiment. PLTFF's BRIEF AT 5. And although the form is generated from a set of data stored in memory, SmartPhone contends that other components, such as applications, processes, and protocols, generate the form, thereby making Defendants' proposal too limiting. *Id.* at 7.

Defendants contend that the specification states that the form is generated entirely from data stored in the memory of the device. RESPONSE AT 2 (citing '459 patent at 13:8-10; 13: 20-22; cols. 49-50). To adopt SmartPhone's construction would leave the door open to "get additional data [from

⁶ This term is contained in claim 1 of the '459 patent.

the Internet] and use that additional data in addition to the data [used] from memory to render the form." MARKMAN TRANSCRIPT AT 29:23-30:1. Finally, Defendants argue that designating the "selected network site" as a "specific website" merely reflects the patent's disclosure. RESPONSE AT 3.

It seems the parties agree that the form is generated from data stored in memory. See MARKMAN TRANSCRIPT AT 29:13-31:19. The crux of the dispute, therefore, pertains to Defendants' proposal that the form is generated entirely from a specific data set. See id. at 31:20-32:8. Neither Claim 1 nor the specification support such a limited reading. Claim 1 recites "access[ing] the set of data from the memory to render a form." '459 patent at 151:22-27. If Claim 1 refers to a particular "set of data" used to render a form, the "set of data" is a set stored in memory. Id. ("a memory configured to store a set of data configured for a selected network site"). The claim language does not specify that the form is generated entirely from a particular data set within the memory, but instead requires that a set of data be accessed from memory to create the form. The Court agrees that forms are rendered using data in memory, see, e.g., '459 patent at 13:8-10; 13:20-23, but Defendants have failed to point to any intrinsic evidence requiring that the form be rendered entirely from a specific data set, nor does the specification bar the possibility of generating forms with the aid of data from other data sets.

Moreover, "the selected network site" is not limited to a "specific website." The specification states as much; instead of limiting the network to the Internet or a website, the specification discloses that "the Internet 190 could be replaced by any communications network." '459 patent at 11:6-8. Thus, a "selected network site" need not be limited to a "specific website."

Accordingly, to "access the set of data from the memory to render a form for the selected network site" means to "use the set of data stored in the memory to display a form for the selected network site."

c. "the wireless communication comprising the form with the user-input being associated with the one or more fields"

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary. Alternatively, if construed:	the wireless communication comprising the rendered form, the user-input, and the association of the user-input with one or mroe
the wireless communication including the form with the user-input and the association of the user-input with the one or more fields	fields

The parties disagree as to what is exactly wirelessly communicated: the rendered form or the user-inputted information. Response at 5. As stated above, it is not the rendered form, but rather the data inputted by the user that is wirelessly communicated. *See supra* Section I.a.i. With regard to normal forms in particular, the specification notes:

The method for transmitting the message comprises submitting compressed representations of data corresponding to the fields to wireless client 405 processing resources, and transmitting the compressed representations in packets of data from the wireless client 405 to the proxy server 180.... The compressed representations comprise CTP representations of text and name attributes corresponding to input fields and CTP representations of values and value attributes corresponding to control fields and select fields.

'459 patent at 114:1-18. The disclosure explicitly states that in encoding normal form submissions, data packets, rather than the rendered form, are transmitted from the wireless client to the proxy server, and that what those data packets contain is compressed representations of data. Likewise,

⁷ This term is contained in claim 1 of the '459 patent.

transmission of server dependent forms do not require communicating the rendered form. *Id.* at 116:4-6 ("When a server dependent form is submitted by the wireless client 405, the client sends the inputted values of each field up to the proxy server 180 along with the field index.").

Further, the claim language does not indicate that the rendered form is transmitted. Rather the claim discloses (1) accessing data to render a form and (2) a wireless communication that includes the part of the form with user-inputted data. '459 patent at 151:25-33. Claim 1 does not state that the wireless communication comprises the rendered form. To wirelessly transmit the rendered form would defeat the purpose of relaying information over low bandwidth networks:

For example, to load the restaurant locator home page, multiple HTTP requests are needed to download all the graphics, frame content, etc. Next, the user will typically need to browse through a number of linked pages to get to the page from which a search for restaurants can be made. Even if the user is immediately presented with the desired page, a great deal of information has had to been down-loaded from the web site (e.g., graphics, advertisements, etc.). . . . For low bandwidth networks this technique does not work well. Too much bandwidth is needed to download the images.

'459 patent at 2:9-30; see also id. at 3:28-30.

Thus, the Court concludes that the wireless communication does not comprise the rendered form, but rather the part of the form with user-inputted information. Having resolved the parties dispute regarding claim scope, the Court finds that no construction is necessary. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

II. The '275 Patent

The '275 patent claims "[a] method and apparatus for automatic delivery of a phone call on a device (e.g. a portable computer system) regardless of whether other tasks are running on the operating system." '275 patent, ABSTRACT. A background task, always active, responds to

an incoming call even "if the user is in a graphical user interface window that requires some input from the user." *Id*.

a. "a background task executed by said processor"8

Plaintiff's Construction	Defendants' Construction
a background task of said operating system of said device executed by said processor	a single thread that is not displayed on the graphical user interface and that runs independent of the operating system

The parties dispute whether the background task executed by the processor is a part of, or separate from, the operating system. SmartPhone argues that the background task is part of the operating system, which is reflected in both the prosecution history and the specification. PLTFF'S BRIEF AT 21-22. In contrast, Defendants contend the background task is independent of the operating system, citing the Abstract and the claim language as support. Response AT 13-14. Although Defendants offer a proposed construction, Defendants nonetheless contend Claim 1 of the '275 patent is indefinite. *Id.* at 13, n.15.

The basis of Defendants' indefiniteness and claim construction arguments lie in the language of Claim 1, recited below:

- 1. A system for automatically delivering a phone call to a device, said system comprising:
- a processor coupled to a bus and a display screen coupled to said bus;
 - a cellular phone mechanism;
 - a memory unit coupled to said bus and having stored therein

⁸ This term is contained in claim 1 of the '275 patent.

⁹ At the hearing, Defendants proposed an alternate construction: "a single thread run [or executed] by a processor independent of the graphical user interface and the operating system." MARKMAN TRANSCRIPT AT 48:18-49:4.

an operating system executed by said processor and a background task executed by said processor, said operating system including at least one graphical user interface; where said background task performs to the steps of

monitoring for incoming phone calls by a background task of said operating system of said device, said background task interfacing directly with the telephony functionality of said device, said background task always active, said operating system including at least one application;

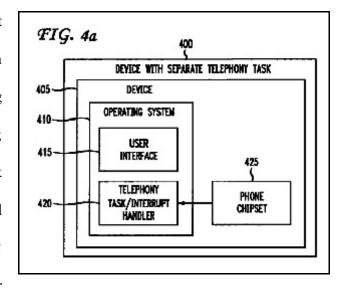
detecting said incoming phone call by **said background task**; notifying said operating system of said incoming phone call by **said background task**;

notifying a user of said device of said incoming phone call by **said background task** irrespective of the user's activity on said device without terminating said application.

'275 patent at 8:11-35 (Claim 1) (emphasis added). Defendants contend that Claim 1 discloses two separate background tasks, one of the processor and one of the operating system. DFTS' '275 PATENT SLIDES AT 2-3. Defendants assert that the first background task, the "background task executed by said processor," executes separately from the operating system because Claim 1 requires that it notify the operating system of incoming phone calls; if the background task were a part of the operating system, no notification would be needed. *Id.*; *see also* MARKMAN TRANSCRIPT AT 41:17-25. The second background task, Defendants argue, is part of the operating system. DFTS' '275 PATENT SLIDES AT 2.

As an initial matter, despite the language in the claim, the disclosure does not describe two separate background tasks. When directly questioned whether the specification described more than one background task, Defendants could not point to any portion of the disclosure supporting their assertion, aside from Figures 4a and 4b. *See* MARKMAN TRANSCRIPT AT 66:6-67:8. Figures 4a and 4b are software block diagrams that show different embodiments of "a device with a separate task

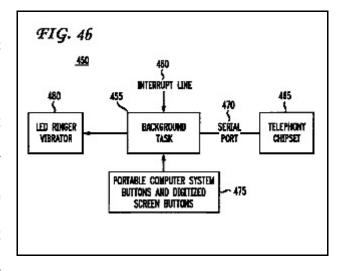
to handle telephony functions." '275 patent at 3:14-18. Operating system 410, illustrated in Fig. 4a, encompasses telephony task 420 along with graphical user interface 415. *Id.* at Fig. 4a; 5:67-6:3. Telephony task 420—the task Defendants seem to equate to the background task executed by the processor, MARKMAN TRANSCRIPT AT 66:25-67:2—monitors for



incoming calls, *id.* at 6:5-6, detects incoming phone calls, *see id.* at 6:10, notifies the user of any incoming phone calls, *id.* at 6:7-9, and notifies the operating system of the incoming call. *Id.* at 6:11-14. Essentially, telephony task 420 performs all the functions Defendants contend the background task of Claim 1 is said to perform. Response AT 14 ("The background task of claim 1 must perform four steps: 1) monitor for incoming phone calls, 2) detect incoming phone calls, 3) notify the operating system of incoming phone calls and 4) notify the user of incoming phone calls."). Thus, telephony task 420, the "background task executed by the processor," is a part of the operating system.

Even though Figure 4b seems to depict background task 455 as something "separate and apart from 475, the portable computer system [buttons and digitized screen buttons]," *see* MARKMAN TRANSCRIPT AT 67:3-5; Fig. 4b, the disclosure does not require that the background task is separate from the operating system. Instead, the specification discloses that background task 455 performs the same functions as telephony task 420. The background task in Figure 4b "responds to the

interrupt line 460, wherein the interrupt line 460 monitors for incoming phone calls." *Id.* at 6:23-30. Background task 455 further notifies the operating system and user of incoming calls by "control[ling] any LED, ringer or vibrator 480." *Id.* at 6:41-43 ("The notification may be in the form of activating any ringer, vibrator, or LED hardware or



software located within the device."). In addition, the specification merely states that the background task is dedicated to the telephony functions. *See* '275 patent at 6:20-23 ("Fig. 4b is a software block diagram 450 showing a portable computer system with a separate task to handle telephony functions."). Such a description does not prohibit the background task from being a part of the operating system; the distinction simply points out that a background task dedicated to telephony functions is separate from the computer functions of the portable computer system.

The prosecution history further supports that the background task is part of the operating system. In responding to a rejection under 35 U.S.C. § 103(a), the applicant distinguishes the embodiments of the '275 patent from a combination of U.S. Patent Nos. 5,930,700 ("Pepper") and 5,907,545 ("Arai"):

In contrast, embodiments of the claimed invention are directed towards a method and device for delivering a phone call to a device wherein a *background task of the operating system monitors for incoming phone calls*. In particular, *embodiments of the present invention are directed towards a background task of an operating system* remaining active irrespective of other activities of the operating system. The present invention provides telephony functionality to operate and present a notification

irrespective of a user's activity on the device. . . . In particular, Arai does not teach, disclose or suggest a background task of an operating system of a device monitoring for incoming phone calls and presenting an notification of a phone call upon receipt.

AMENDMENT AND RESPONSE TO OFFICE ACTION AT 8-9, U.S. PATENT APPL. SER. No. 09/687,518 (JAN. 21, 2003), Ex.H, ATTACHED TO PLTFF'S BRIEF (emphasis added). Not only does the applicant distinguish the prior art by stating that the background task is part of the operating system, but the applicant also notes that the background task both monitors for incoming phone calls and notifies the user of such a call. Thus, the prosecution history refutes the idea that the "background task executed by said processor" is independent of the operating system.

Accordingly, the construction for "a background task executed by said processor" is "a background task of said operating system of said device executed by said processor."

b. "always active" 10

Plaintiff's Construction	Defendants' Construction
active when said telephony functionality is enabled	always monitoring for incoming phone calls and always capable of detecting incoming phone calls, notifying the operating system of incoming phone calls and notifying the user of incoming phone calls

The parties dispute what it means for the background task to be "always active," particularly in terms of the relationship between the background task and the telephony functionality when the telephony functionality is enabled or disabled. SmartPhone argues that "always active" does not mean that the background task is active when the telephony functionality is disabled, i.e., when the device is off or in airplane mode. PLTFF's BRIEF AT 22. Defendants, on the other hand, contend

This term is contained in claim 1 of the '275 patent.

Plaintiff's proposed construction defies the plain and ordinary meaning of "always," thereby relegating "always active" to "sometimes active." *See* RESPONSE AT 15. Instead, Defendants reason that because the background task serves to monitor and detect incoming phone calls, as well as notify both the user and operating system of incoming phone calls, Claim 1 requires that the background task "be always capable of detecting and notifying" incoming phone calls. *Id.* at 14. Defendants seem to argue that the background task is constantly active, even when the telephony functionality is disabled.

Defendants' proposed construction seems to require that the background task and telephony functionality be constantly enabled despite the stated purpose of the embodiments described within the '275 patent. The specification divulges that the purpose of the invention is to notify the user and operating system of an incoming call regardless of the user's activity when using the graphical user interface:

A method and apparatus for automatic delivery of a phone call on a device (e.g. a portable computer system) regardless of whether other tasks are running on the operating system. A separate background task ("thread"), independent of the operating system, enables telephony functionality without regard to the mode of a graphical user interface. The background task is always active and functions to respond to an incoming call even if the user is in a graphical user interface window that requires some input from the user (e.g. the graphical user interface is blocked).

'275 patent, ABSTRACT (emphasis added); *see also id.* at 2:10-17; 2:25-32. The Abstract notes that the background task functions to respond to an incoming call. However, if the device is off, i.e., the telephony functionality is disabled, the device cannot receive incoming calls, and therefore the background task cannot respond to incoming calls and "enable telephony functionality without regard to the mode of a graphical interface." *See id.*, ABSTRACT. Thus, the background task is

"always active" only when the telephony functionality is enabled. To adopt Defendants' construction, which apparently ignores the practical implications of the '275 patent's disclosure, would elevate form over substance. Therefore, the background task cannot be active unless the telephony functionality is enabled.

In addition, Defendants' proposal reads additional capabilities into the term "active." Claim 1 recites "always active" in the context of monitoring for incoming calls and interfacing with the telephony functionality of the device. '275 patent at 8:23-27. The claim does not require that the background task be capable of detecting incoming calls or notifying the user and operating system of said calls when the telephony functionality is disabled. Moreover, Defendants' proposal merely restates the language of Claim 1, which does not further the jury's understanding of the term.

Because Plaintiff's proposal (1) contemplates that the telephony functionality may be disabled and (2) does not reiterate the claim language, the Court concludes that "always active" means "active when said telephony functionality is enabled."

c. "irrespective of the user's activity on said device without terminating said application" 11

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary	without regard to the user's operation on the device and without interrupting or affecting
	the application the user is interfacing with

Defendants contend their proposed construction incorporates arguments the applicant made during prosecution to distinguish the invention from prior art. RESPONSE AT 15-16. SmartPhone,

This term is contained in claim 1 of the '275 patent.

on the other hand, argues that Defendants' construction is overly limiting and that the term requires no construction. PLTFF's BRIEF AT 23.

In distinguishing U.S. Patent No. 6,529,742 ("Yang"), the applicant stated that the embodiments within the '275 patent "are directed towards notifying the user without disrupting the application running on the operating system." Amendment and Response to Office Action at 11, U.S. Patent Appl. Ser. No. 09/687,518 (Aug. 4, 2003), Ex.10, Attached to Response. In a subsequent response to an office action, the applicant stated:

In particular, embodiments of the present invention are directed towards notifying a user without disrupting the application that the user is interacting with and that is running on the operating system. An aspect of the claimed embodiment, therefore, is to inform, without interruption. . . .

RESPONSE TO OFFICE ACTION AT 4, U.S. PATENT APPL. SER. No. 09/687,518 (JULY 4, 2004), Ex.11, ATTACHED TO RESPONSE. Defendants contend that these statements support their proposed construction and show that the applicant disclaimed any embodiments that allowed the GUI to display incoming call notifications; to display call information on the GUI would effectively interrupt the application. *See* MARKMAN TRANSCRIPT AT 82:18-83:16; DFTS '275 PATENT SLIDES AT 45. According to Defendants, the only reference to what "terminating" means is that the GUI or application is not affected. DFTS '275 PATENT SLIDES AT 40; MARKMAN TRANSCRIPT AT 80:19-24.

The Court finds that the prosecution history does not indicate a clear and unambiguous disclaimer. It is true that in distinguishing the Yang reference, the applicant discussed "notifying a user without disrupting the application," but in the same response, the applicant also stated that "the telephony task does not terminate the application." AMENDMENT AND RESPONSE TO OFFICE ACTION AT 11-12, U.S. PATENT APPL. SER. No. 09/687,518 (Aug. 4, 2003) ("As described in the present

application, an incoming phone call may be delivered to a user without terminating other applications running on the same operating system."); *see also* RESPONSE TO OFFICE ACTION AT 4-5, U.S. PATENT APPL. SER. No. 09/687,518 (JULY 4, 2004).¹² Thus, the record is unclear; even though the applicant stated that notifications could be made without disrupting the application, the applicant did not foreclose the possibility of notifying the user of an incoming call without terminating the application in use.

In addition, the '275 patent specification describes an embodiment where the GUI may display incoming call information, thereby interrupting the application in use with caller identification information or digitized buttons. *See* '275 patent at 6:66-7:1. As SmartPhone points out, the disclosure describes an embodiment where the GUI is notified and updated even when the GUI is not busy or busy but not blocked. *See* '275 patent at 6:44-61; Figs. 5 & 6. Thus, there is a possibility of interrupting the application without terminating it. Moreover, it is unclear exactly what Defendants mean by "interrupting or affecting" without further defining those terms. Consequently, the term "without terminating" accounts for the embodiments where the GUI is notified and updated, displaying incoming call information, but "without interrupting or affecting" does not. Thus, to adopt Defendants' construction would be to read out an embodiment described in the specification. *See Vitronics Corp.*, 90 F.3d at 1538.

Having resolved the issue of prosecution disclaimer, the Court sees no dispute with regard to claim scope. Therefore, no construction is necessary for the term "irrespective of the user's activity on said device without terminating said application." *See O2 Micro*, 521 F.3d at 1362.

 $^{^{12}}$ The applicant essentially made the same comments in both the August 4, 2003 Response to Office Action and July 2004 Response to Office Action.

d. "said background task interfacing directly with the telephony functionality of said device" 13

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary	the referenced background task communicating directly with the telephony chipset through a port

The issue is whether the background task directly interfaces with the telephony chipset through a port. Response AT 16-17. Defendants contend that the telephony functionality is the phone chipset and all disclosures indicate that the background task communicates with the phone chipset through a port. *Id.* at 17 (citing '275 patent at 5:38-40; 6:25-27; Figs. 3 & 4b). SmartPhone disagrees, arguing that no construction is necessary and that Defendants' proposal merely serves to confuse the jury.¹⁴ PLTFF's BRIEF AT 23-24.

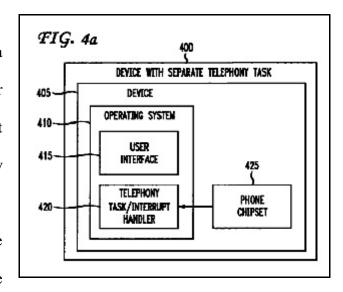
Defendants' construction imposes too many limitations. In particular, Defendants

¹³ This term is contained in claim 1 of the '275 patent.

¹⁴ On March 16, 2012, Defendants filed a Supplemental Claim Construction Brief (Doc. No. 380) addressing the claim term "said background task interfacing directly with the telephony functionality of said device," as well as the order of the method steps in claim 17 of the '064 patent. SmartPhone objects to the late submission. RESPONSE TO SUPP. BRIEF AT 1, n.1 (Doc. No. 382). At the March 6, 2012 Markman hearing, the Court stated it would be open to receiving a filing requesting leave to supplement with extrinsic evidence addressing "telephone functionality" if the submission was made within a week of the hearing. See MARKMAN TRANSCRIPT AT 98:3-17. However, Defendants filed their supplemental brief ten days after the claim construction hearing. Due to SmartPhone's objection, as well as the tardiness of Defendants' submission, the Court will not consider the parties' supplemental claim construction briefing.

 $exclude \ the \ embodiment \ illustrated \ in \ Figure \ 4a.$

Figure 4a "is a block diagram . . . illustrating a device (e.g. a palmtop or portable computer system) having a separate background task that interfaces directly with the telephony functionality (e.g. cellular phone) of the device." '275 patent at 5:60-64. As illustrated to the right, there is no indication of a port; "The



telephony task 420 [background task] monitors the phone chipset 425 for incoming calls" without the use of a port. Further, the specification notes that the telephony functionality could be a cellular phone, i.e. the device, and not the phone/telephony chipset itself, despite Defendants' argument that the telephony functionality is the phone chipset. *See id.*; Fig. 7. Because Claim 1 only requires that the "background task interfac[e] directly with the telephony functionality of said device," there is no need to import the limitation of interfacing through a port.

Moreover, Defendants' proposal does not aid in the jury's understanding of the term, and would instead serve to confuse the jury. Defendants replace "interfacing" with "communicating," the reason for which is unclear. Further, the Court has already addressed the issue of whether Claim 1 recites two different background tasks. *See supra* Section II.a. Therefore, "the referenced background task" is also unneeded.

Having resolved the parties' claim scope dispute, the Court finds that the jury will readily understand the plain and ordinary meaning of the term "said background task interfacing directly

with the telephony functionality of said device." Therefore, no construction is necessary. *See O2 Micro*, 521 F.3d at 1362.

III. The '645 Patent

The '645 Patent relates to "networks of devices that can be connected using wireless links." '645 patent at 1:6-7. Specifically, the patent is directed to a "method and system for managing when a responder device (a device having a transceiver for wireless communication) is operating in a discoverable mode in a wireless network of devices." *Id.* at 4:31-34. The objective is to reduce the amount of time the responder is in discoverable mode in order to conserve the responder's battery power. *See id.*, ABSTRACT; 4:62-5:6. By reducing the amount of time that the responder device is in discoverable mode, the responder device will respond to fewer inquiry messages, reducing the number of messages generated from initiator devices, thereby conserving power for both initiator and responder devices. *See id.* at 4:6-14.

a. Bluetooth Limitation

Many of Defendants' proposals attempt to insert a Bluetooth limitation. *See e.g.*, RESPONSE AT 7 & 9. However, imposing such a limitation is unwarranted. The Bluetooth limitation is explicitly recited in Claim 22, which indirectly depends from Claim 18¹⁵:

22. The responder device of claim 20 wherein said initiator device and said responder device are *Bluetooth-enabled devices*.

'645 patent at 16:51-53 (emphasis added). The doctrine of claim differentiation dictates a presumption that the Bluetooth limitation does not apply to independent claim 18 because dependent

¹⁵ Claim 22 depends from Claim 20, which depends from Claim 19. '645 patent at 16:43-53. Claim 19 depends from Claim 18. *Id.* at 16:32.

claim 22 adds such a limitation. See Phillips, 415 F.3d at 1315 ("[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim."). "This presumption is 'especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim." Retractable Technologies, Inc. v. Becton, Dickinson and Co., 653 F.3d 1296, 1312 (Fed. Cir. 2011) (Rader, J., dissenting) (citing SunRace roots Enter. Co., Ltd. v. SRAM Corp., 336 F.3d 1298, 1303 (Fed. Cir. 2003)). The only structural difference between apparatus Claims 18 and 22 is the Bluetooth limitation (the intervening claims 19 and 20 each adding only "method capability" limitations); to read the Bluetooth limitation into the terms that are contained in Claim 18 would render Claim 22 superfluous. See Digital-Vending Services International, LLC v. Univ. of Phoenix, Inc., --- F.3d ----, 2012 WL 718316, at *4 (Fed. Cir. Mar. 7, 2012) ("[C]laims are interpreted with an eye toward giving effect to all terms in the claim.") (internal citations omitted); Retractable, 653 F.3d at 1312 (Rader, J., dissenting); Innova/Pure Water, Inc., 381 F.3d at 1119 ("[A]ll claim terms are presumed to having meaning in a claim.").

In addition, the specification clearly states that the invention contemplates alternatives to Bluetooth:

[I]t is appreciated that the present invention may be utilized with devices and systems coupled using technologies and/or protocols different from Bluetooth, including but not limited to infrared communications links as defined by the Infrared Data Associations (IrDA).

'645 patent at 6:56-61; *see also id.* at 5:63-6:2. Further, the disclosure states that the Bluetooth-enabled device is a preferred embodiment. *Id.* at 4:45-47. Because the specification contemplates

non-Bluetooth embodiments, it would be inappropriate to narrow the scope of Claim 18 to apply to only Bluetooth modes. Accordingly, the Court declines to read the Bluetooth limitation into Claim 18.

Although the Specification of the Bluetooth System, Core, '645 patent at 11:40-42, is incorporated by reference in its entirety, there is no evidence in the record that one of ordinary skill in the art as of September 2000—when the '645 patent was filed—would necessarily recognize the embodiments described in the patent to be limited to Bluetooth embodiments. See LG Elec., Inc. v. Bizcom Elec., Inc., 453 F.3d 1364, 1375 (Fed. Cir. 2006) (taking into account the incorporated industry standard as intrinsic evidence of what one of ordinary skill in the art would regard as the invention), overruled on other grounds, Quanta Computer, Inc. v. LG Elec., Inc., 553 U.S. 617 (2008). However, Defendants provide no evidence of what one of skill in the art would consider the '645 patent to disclose. Thus, after considering the Bluetooth standard, the claims, and the specification, the Court concludes that the '645 patent is not limited to Bluetooth embodiments. See Arlington Industries, Inc. v. Bridge Fittings, Inc., 632 F.3d 1246, 1254 (Fed. Cir. 2011) ("[E]ven where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.") (internal citations omitted); Libel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004).

b. "discoverable mode" 16

Plaintiff's Construction	Defendants' Construction
a mode in which a device is responsive to broadcast wireless signals from initiator	a Bluetooth mode in which a responder device scans for and responds to all inquiry
devices	messages

The parties disagree as to (1) whether "discoverable mode" requires the device to scan for and respond to broadcast wireless signals as opposed to merely responding to those signals; and (2) whether "discoverable mode" is a Bluetooth mode related to inquiry messages. Response AT 16.

As discussed above, the Bluetooth limitation does not apply to "discoverable mode." *See supra* Section III.a. Moreover, Claim 18 describes what it means to be in discoverable mode:

18. A responder device comprising:

a bus;

a wireless transceiver unit coupled to said bus and for communicating with initiator devices; and

a processor coupled to said bus, said processor for performing a method for managing responses to signals received from said initiator devices, said method comprising:

automatically setting said responder device to discoverable mode when said responder device enters awake mode, wherein said responder device in said discoverable mode scans for and responds to broadcast wireless signals that are broadcast by initiator devices;

automatically setting said responder device to nondiscoverable mode when said responder device enters standby mode, wherein said responder device in said non-discoverable mode does not scan for and does not respond to broadcast wireless signals that are broadcast by initiator devices, and wherein said standby mode is a power-conserving mode relative to said awake mode; and

automatically setting said responder device to connectable mode with said responder device in either said awake mode or said standby mode, wherein said responder device in said connectable mode receives and responds to directed wireless signals

¹⁶ This term is contained in claims 18 and 19 of the '645 patent.

from initiator devices, wherein directed wireless signals specifically identify said responder device.

'645 patent at 16:3-31 (Claim 18) (emphasis added). Claim 18 explains that to be in discoverable mode is to scan for and respond to broadcast wireless signals from initiator devices. Therefore, SmartPhone's proposed construction fails in part; while in discoverable mode, the responder device is not only "responsive to broadcast signals from initiator devices," but the responder device also scans for such broadcast signals.

Finally, contrary to Defendants' proposal, when in discoverable mode, the responder device is not limited to scanning for and responding to inquiry messages. Dependent Claim 23 explicitly claims inquiry messages as a type of wireless signal to which the responder device responds:

23. The responder device of claim 22¹⁷ wherein said first wireless signal is an inquiry message requesting an address for said responder device.

'675 patent at 54-57 (Claim 23). Again, the doctrine of claim differentiation presents a presumption that Claim 18 does not contain the inquiry message limitation. *See Phillips*, 415 F.3d at 1315. Therefore, "discoverable mode" does not require scanning for and responding to inquiry messages.

Thus, in accordance with the claim language, the Court finds that "discoverable mode" is "a mode in which the responder device scans for, and responds to, broadcast wireless signals from initiator devices."

¹⁷ Ultimately, Claim 23 is dependent on Claim 18. Claim 22 depends from Claim 20, which depends from Claim 19. Claim 19 depends from Claim 18.

c. "standby mode" 18

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary. Alternatively, if construed:	a mode in which the responder device is powered off and its transceiver remains connectable and not discoverable
a power-conserving mode	

SmartPhone contends that because Claim 18 defines "standby mode," the term needs no construction. PLTFF's BRIEF AT 17-18. Defendants, however, assert that the specification shows that standby mode is a mode in which the responder device is powered off. RESPONSE AT 10 (citing '645 patent at 8:63-9:6; 9:53-65; 11:64-66; 4:63-65).

"The claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc.*, 381 F.3d at 1115). While the claims must be read in light of the specification, the disclosures within the specification do not overcome the "bedrock principle" that the claims, not the written description, define the invention. *Id.* at 1312, 1315, 1327 (holding that a baffle may be at a right angle despite no such disclosure in the specification). To do otherwise would be to improperly import a limitation from the specification into the claims.

Defendants' construction fails because it overlooks the plain language of Claim 18, which states, "standby mode is a power-conserving mode relative to said awake mode." '645 patent at 16:23-24. In addition, the specification states that in a Bluetooth embodiment, "[t]he standby mode is a low power mode." *Id.* at 8:31-32. Therefore, to define "standby mode" in terms of "powered

¹⁸ This term is contained in claim 18 of the 645 patent.

off," as Defendants suggest, would confuse the jury; "powered off," as it is plainly understood, contradicts the disclosure of "low power mode," which connotes a state of being "powered on."

Defendants' proposal further fails because it states that the transceiver, rather than the responder device, is connectable but not discoverable. However, the claim states that the responder device, not the transceiver, is set to standby mode and when in standby mode, the responder device remains connectable but not discoverable:

automatically setting said responder device to non-discoverable mode when said responder device enters standby mode.

. .

automatically setting said responder device to connectable mode with said responder device in either said awake mode or said standby mode.

Id. at 16:17-27; *see also id.* at 4:38-40 ("The responder device automatically enters a non-discoverable mode when [it] enters into its standby (or sleep) mode."). Defendants' construction improperly discusses a transceiver even though the discoverability and connectability of the transceiver is not recited in Claim 18. Therefore, adopting Defendants's proposal would erroneously import limitations into the claim.

Accordingly, the jury will be able to look at the claim language and understand what it means for the responder device to be in standby mode. Therefore, no construction is necessary for the term "standby mode."

d. "automatically setting" 19

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary	selecting a mode in response to the occurrence of a condition without user discretion or intervention

SmartPhone asserts that the plain and ordinary meaning of "automatically setting" is readily understood and therefore the term needs construction. *See* PLTFF's BRIEF AT 19. However, the crux of the dispute concerns the need to define the term in relation to a lack of user action. *See* RESPONSE AT 11.

Defendants' proposal imposes an unnecessary limitation. As SmartPhone points out, Defendants' proposed construction eliminates any user action whatsoever. Such a construction is contrary to the specification, which indicates that the "user can manage the device discovery process":

[R]esponder device 730 is automatically made discoverable or non-discoverable depending on whether the device is powered on or powered off. . . . Accordingly, the device discovery process can be managed by the user in a way that is both user-friendly and intuitively understood by the user. For example, when the user turns responder device 730 on, it automatically is placed into discoverable mode, and turning the device off automatically places responder device 730 into non-discoverable mode. In essence, the on/off switch of responder device 730 also functions as the mechanism by which the user selects either discoverable or non-discoverable mode. Thus, a user can manage the device discovery process according to a usage model already understood by the user.

'645 patent at 12:60-13:6. The portion cited above indicates that the user, at least indirectly, may affect the "automatic setting" of the responder device to discoverable or non-discoverable mode

This term is contained in claim 18 of the '645 patent.

simply by turning on/off responder device 730. Such user action qualifies as "user discretion or intervention." Consequently, Defendants' proposal is overly limiting.

Having resolved the parties' dispute regarding claim scope, the Court finds that "automatically setting," is easily understood in accordance with its plain and ordinary meaning.

Therefore, the Court finds that no construction is necessary.

e. "non-discoverable mode"²⁰

Plaintiff's Construction	Defendants' Construction
a mode in which a device is not responsive to broadcast wireless signals from initiator devices	a Bluetooth mode in which a responder device does not scan for and does not respond to inquiry messages

As stated above, the Bluetooth limitation does not apply to "non-discoverable mode." However, the parties seem to agree that in "non-discoverable" mode, the responder device "does not scan for and does not respond to broadcast wireless signals." *See* RESPONSE AT 9; REPLY AT 4, n.9. Because the parties essentially agree to the language recited in Claim 18, *see* '645 patent at 16:20-22, "non-discoverable mode" is "a mode in which the responder device does not scan for, and does not respond to, broadcast wireless signals from initiator devices."

f. "connectable mode"²¹

Plaintiff's Construction	Defendants' Construction
a mode in which a device is responsive to directed wireless signals from initiator devices	a Bluetooth mode in which a responder device scans for and responds to page messages

This term is contained in claim 18 of the 645 patent.

This term is contained in claim 18 of the 645 patent.

The parties cite to the same portion of Claim 18 to support their constructions: "responder device in said connectable mode receives and responds to directed wireless signals from initiator devices." *See* PLTFFS' BRIEF AT 17; RESPONSE AT 9. Yet, Defendants propose to limit "connectable mode" to a Bluetooth mode where the responder device scans for and responds to page messages. RESPONSE AT 9.

The Court has already resolved the Bluetooth dispute. *See supra* Section III.a. Further, the '645 patent recites the "page messages" limitation in dependent Claim 25. Therefore, the presumption raised by the doctrine of claim differentiation applies; Defendants have failed to provide sufficient evidence to rebut the presumption that "page messages" should not be read into independent Claim 18. Accordingly, "connectable mode" means "a mode in which the responder device scans for, and responds to, directed wireless signals from initiator devices." *See* '645 patent at 16:28-30.

g. "initiator device"²²

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary. Alternatively, if construed:	a device that discovers responder devices and connects with previously-discovered responder devices
a device capable of sending broadcast wireless signals and directed wireless signals	

Defendants contend that initiator devices must discover and connect with responder devices.

RESPONSE AT 12. As support, Defendants cite the claim language, the specification, and the Bluetooth Specification. *Id.* SmartPhone objects to Defendants' proposed construction, asserting

²² This term is contained in claims 18, 19 and 20 of the '645 patent.

that it attempts to define initiator devices in terms of Bluetooth-specific functions. PLTFF'S BRIEF AT 20.

The parties agree that Claim 18 describes initiator devices as sending broadcast and directed wireless signals. PLTFFS' BRIEF AT 20; RESPONSE AT 12; see also '675 patent at 16:21-22; 16:29-30. However, neither the claim language nor the specification require that an initiator device discover and connect to responder devices:

With reference again to FIG. 8 and with reference also to FIGS. 7A and 7B, in step 870, responder device 730 is connectable when it is in either discoverable mode or in non-discoverable mode. That is, in accordance with the present invention, responder device 730 can receive a directed message (e.g. page 744) from initiator device 720 whether responder device is in the discoverable mode or the non-discoverable mode.

For example, at some earlier point in time when responder device 730 was in discoverable mode, it may have provided its address (device access code) to initiator device 720. Initiator device can then use that address to send a directed message to responder device 730 (a page 744 instead of a broadcast message such as inquiry 740). Thus, messages from devices that have previously been made known to responder device 730 can be received by responder device 730 whether it is discoverable or non-discoverable.

'675 patent at 13:36-52. This portion of the specification notes that the responder device may be connectable and receive messages from the initiator device even when the responder device is not discoverable, i.e., in non-discoverable mode. Yet, in requiring that the initiator device "discover[] responder devices," Defendants' construction essentially reads out the possibility of an initiator device sending a directed message to a responder device in non-discoverable mode. Further, Defendants' proposal results in a definition of "initiator device" that depends on the mode of the responder device, which would vary as a function of the responder operation. In other words, under Defendants' construction, an initiator device would only be an initiator device if the responder

device is in discoverable mode. Such a reading is contrary to the specification.

Accordingly, an "initiator device" is "a device capable of sending broadcast wireless signals and directed wireless signals."

IV. The '949 Patent

The '949 patent is directed to "[a] method and electronic system for exchanging data between a handheld device and another computer system." '949 patent, ABSTRACT. "The system allows a data file of any data format" to be transferred from one computer system to a handheld device. *Id.* at 4:1-5. The system uses an exchange program manager to identify the application program that corresponds to the data file. *See id.* at 3:62-65; 4:14-18. The appropriate application program then processes the data file so that the file becomes a record stored in the database associated with the application program. *See id.* at 4:20-23. "Using this mechanism, a user can import records to an application program without requiring a custom conduit program to perform the data exchange." *Id.* at 4:23-27. The data flow may also be reversed, transferring data from the handheld device to the other computer. *Id.* at 27-29.

a. "the application program shielded from details of the transport mechanism"²³

Term	Plaintiff's Construction	Defendants' Construction
the application program is shielded from details of the transport mechanism	No construction necessary see below	the application does not know anything about the actual method that is used to transmit the message
is shielded from	need not specify	construed in the context above

This term is contained in claim 1 of the '949 patent.

To address the claim scope dispute among the parties, the Court need only address the term "is shielded from." Defendants contend that the prosecution history and the specification indicate that Claim 1 discloses an embodiment where the application program "does not know anything about the transmission method." *See* RESPONSE AT 28. SmartPhone disagrees, arguing Defendants' proposal is overly restrictive, particularly because the intrinsic record contradicts Defendants' proposed construction. PLTFF's BRIEF AT 30 (citing '949 patent at 15:36-38; 21:1-5).

Defendants take issue with SmartPhone's proposal because it allows the application program to be capable of specifying the terms of transmission, which Defendants claim contradicts the "shielded from" limitation recited in Claim 1. Response AT 29. However, the specification contradicts Defendants' position, implying that the application may be capable of knowing the details of the transport mechanism:

Applications that use the exchange manager 350 may not need to know anything about the actual method that is used to transmit the data. This allows an application to be written once to use the exchange manager 350 and be used for any number of transport mechanisms.

'949 patent at 15:36-40 (emphasis added). This portion of the specification accounts for the *possibility* that the application programs know nothing about the transmission method, but also leaves open the possibility that the application programs have knowledge of details of the transport mechanism. Moreover, even though the exchange manager program selects the transport mechanism so that there is no need for a custom conduit program, '949 patent at 22:55-56; 4:23-26, Defendants fail to point to claim language or portions of the specification requiring that the application program know nothing about the details of the data transmission. Therefore, "shielded from details of the transport mechanism" does not wholly exclude applications from knowing anything about the

transmission of data.

Nor did the patentee state otherwise during prosecution of the '949 patent. To illustrate that the application program has no knowledge of the transmission details, Defendants cite a portion of the history where the applicant stated that "the exchange [manager] program selects a transport mechanism and exports the message using the selected transport mechanism." AMENDMENT AND REMARKS AT 6, U.S. PATENT APPL. SER. No. 09/598,668 (OCT. 21, 2009), EX. 28, ATTACHED TO RESPONSE. Defendants contend that because the exchange manager program is the only structure to select the transport mechanism, the application programs know nothing about the method used to transmit data. *See* RESPONSE AT 28. However, the prosecution history does not support Defendants' assertion. In an Office Action, the Examiner made comments, reproduced below, specifically addressing what it means for the application program to be shielded from details of the transport mechanism:

The limitation of "the application program is shield [sic] from details of the transport mechanism" is not well defined, i.e., it indicates the application program does not involve in the selecting step or it indicates the application program does [sic] not aware of what transport mechanism will be selected. Office Action, page 3.

AMENDMENT AND REMARKS AT 6, U.S. PATENT APPL. SER. No. 09/598,668 (OCT. 21, 2009), Ex. 28, ATTACHED TO RESPONSE. The applicant went on to distinguish the Examiner's remarks, not only citing the portion of the specification above, *see supra* p.37, but also stating, "The Examiner appears to suggest what is claimed is a choice between two options. The claims as written do not make or suggest such a distinction and it would be improper to import such a limitation into the claims." AMENDMENT AND REMARKS AT 6, U.S. PATENT APPL. SER. No. 09/598,668 (OCT. 21, 2009), Ex. 28, ATTACHED TO RESPONSE. The applicant's statements do not concede that the applications know

nothing about the details of the transport mechanism. Instead, the applicant comments that to pigeonhole the claim as the Examiner did would improperly import limitations into the claim. Such a statement is not a clear disavowal of claim scope; the record does not indicate that the applicant forfeited the possibility that the applications using the exchange manager could know details regarding the transmission of the data. *See Ecolab, Inc.*, 569 F.3d at 1342. By negating the Examiner's conclusion that "shielded from" necessitates either that the application program is not involved in selecting the transmission means or that the application is not aware of which transport mechanism will be selected, the applicant left open the possibility that (1) the application program knows the details of the transport mechanism, but does not select said transport mechanism, and (2) the application may not know anything about the transport mechanism at all. Thus, the prosecution history shows that the application program could know details related to the transport mechanism, but is not required to.²⁴

The Court therefore defines "is shielded from" as "need not know anything about."

b. "exchange manager program"²⁵

Plaintiff's Construction	Defendants' Construction
a program that allows other applications to transmit or receive messages in different formats	a program for transparently selecting one of multiple communication methods for exporting a message from the portable device

²⁴ Even though the applicant stated that "The present claims are directed towards an exchange manager on a portable device to export application program information such that the transport mechanism is abstracted from the application program," the same reasoning applies. See RESPONSE TO FINAL OFFICE ACTION AT 6, U.S. PATENT APPL. SER. NO. 09/598,668 (JUNE 27, 2009), Ex. 29, ATTACHED TO RESPONSE. Even if the exchange manager chooses the transport mechanism, this portion of the prosecution history is silent as to whether the application programs know or do not know details of the transport mechanism. Further, the applicant made this statement to distinguish prior art, stating said prior art "has no analog for the exchange manager." Id.

²⁵ This term is contained in claim 1 of the '949 patent.

According to Defendants, the primary claim scope dispute concerns Defendants' use of "transparent," which is typically synonymous with "invisible." RESPONSE AT 29 (citing *Hybrid Patents, Inc. v. Charter Commc'ns, Inc.*, No. 2:05cv436, 2007 U.S. Dist. LEXIS 33062, at *33-34 (E.D. Tex. May 4, 2007)). Defendants assert that the use of "transparent" is consistent with its proposal for the term "is shielded from." *See id.* at 30. As for the remainder of its proposal, Defendants maintain their construction is consistent with the claim language. See id.

In addition, Defendants take issue with SmartPhone's proposal, asserting that it describes the exchange program manager as receiving messages in different formats when the claim language discusses neither receiving messages nor the format of said messages. *Id.* SmartPhone simply contends that Defendants' proposal redundantly introduces functionality into the term, functionality that is already iterated in Claim 1. PLTFF's BRIEF AT 29.

As an initial matter, the Court has addressed the "transparent" issue in its discussion of the term "is shielded from." *See supra* Section IV.a. Because the Court has determined that the application "need not know anything about" the transport mechanism, the exchange program manager is not necessarily required to "transparently select."

Further, the term needs no construction because the claim language adequately describes what an "exchange program manager" does:

1. A method for sending data for a portable device to a destination, comprising:

at an application program executing on a processor on a

At the *Markman* hearing, Defendants proffered an alternative proposal: "a program for selecting one of multiple communication methods for exporting a message from the portable device in a manner that is transparent to the application program." DFTS' '949 PATENT SLIDES AT 6.

portable device, the application generating a message,

the application program passing the message from the application program to an exchange manager program executing on the processor on the portable device,

at the exchange manager program, the exchange manager program selecting a transport mechanism from a library of transport mechanisms, and

exporting the message by the exchange manager program from the portable device to the destination using the selected transport mechanism,

whereby the application program is shielded from details of the transport mechanism.

'949 patent at 22:48-63 (Claim 1). Claim 1 makes clear that the exchange program manager (1) receives messages from the application program; (2) executes on the processor of the portable device; (3) selects a transport mechanism; and (4) exports the message from the portable device to the destination. Although Defendants contend the claim language does not discuss receiving data, the claim discloses that the application program passes the message from the application program to the exchange program manager, thereby implicating receipt of data. *See also id.* at 10:47-52 ("exchange manager API... provide[s] importing and exporting functionality between the handheld device and a host computer system."); 15:57-63 ("Exchange manager includes... functions to send and receive data."). Thus, to construe "exchange program manager" would simply add more layers of complexity to the term, thereby confusing the trier of fact. Accordingly, the term requires no construction.

c. "library of transport mechanisms"²⁷

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary	a collection of communication methods for exporting a message that are accessible to the exchange manager through a library API (application programming interface)

Defendants attempt to inject a limitation into the term "library of transport mechanisms," maintaining that the library must be "a library API (application programming interface)." RESPONSE AT 26 (citing '949 patent at 15:19-25; 15:52-57; 15:64-67). Thus, the issue is not the meaning of transport mechanisms," but rather, "library."

Although the specification may describe a library API as the preferred embodiment, the Court declines to limit the library to an application programming interface. *See Arlington Indus.*, 632 F.3d at 1254; *Phillips*, 415 F.3d at 1323 (cautioning against confining claims to preferred embodiments); *Libel-Flarsheim*, 358 F.3d at 906 (refusing to limit the claims to the single embodiment described in the specification). Not only does Claim 1 disclose a "library," as opposed to a "library API," *see* '949 patent at 22:56, but the specification includes a disclaimer explicitly stating that the invention is not limited to the preferred embodiments; rather, the invention is defined by the claims. *See id.* at 22:33-45. Therefore, the "library" need not be limited to a "library API," as Defendants propose.

"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. The Court finds that the jury will comprehend the plain and ordinary

This term is contained in claim 1 of the '949 patent.

meaning of the term "library." Therefore, no construction is needed.

V. The '342 Patent

The '342 patent discloses "[a]n invention for a system and method of managing phone calls initiated from a phone device of a personal digital assistant." '342 patent at 3:51-53; *see also id.* at 2:27-30. In other words, the patent is directed to "providing phone applications in a portable computer system." *Id.* at 1:18-20.

a. "call initiation button"²⁸

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction needed	the same button that always initiates a call to the last number called or the received digits

Defendants argue that the prosecution history and specification require that the call initiation button either operates as a redial button or initiates a phone call to the number inputted by the user.

RESPONSE AT 23. SmartPhone objects to Defendants' proposed construction, asserting that it is overly limiting, especially because it requires that the *same button always* initiates the call. PLTFF'S BRIEF AT 27. SmartPhone further argues that Defendants' proposal introduces functionality that is already recited in the claims. *Id*.

As SmartPhone points out, the functionality described in Defendants' proposed construction is disclosed in Claims 1 and 6:

1. A method of managing phone calls initiated from a portable computing device incorporating, telephone capability and a call initiation button, the method comprising the steps of:

receiving a dial signal initiated by a user touching the *call*

²⁸ This term is contained in claims 1 and 6 of the '342 patent.

initiation button of the portable computing device to initiate a phone call, thereby suspending non-phone functions of the portable computing device;

determining the presence of digits received prior to receiving the dial signal

selectively initiating the phone call to a last called phone number if digits were not received from the computing device before the dial signal was received and, placing a call to a phone number corresponding to received digits when digits were received from the computing device before the dial signal was received.

6. A portable computing device for integrating phone functions comprising:

telephone communication capability for wireless communication;

a display device including a selectable interface capable of being configured to display a call initiation button and substantially emulate a dial pad;

a selection mechanism including a processor configured to receive user selection data from the selectable interface, wherein:

when activated the selectable interface initiates a phone call to a last called phone number when digits were not received from the selectable interface before the call initiation button is activated initiates a phone call to a phone number corresponding to digits received from the selectable interface when the digits are received before the call initiation button is activated, said processor suspending non-phone functions in response to said user selecting said call initiation button, the selectable interface further including a mute button to deactivate the telephone communication capability for received signals during a phone call, and when the mute button is selected during a phone call, a speak button replaces the mute button.

'342 patent at 12:30-45 (Claim 1) (emphasis added); 12:61-13:17 (Claim 6) (emphasis added). The claim language already iterates that the call initiation button initiates a phone call to the last called phone number or initiates a phone call to a number inputted by the user. Therefore, adopting Defendants' proposal would make much of the claim language redundant. Further, the claim language does not require that the call initiation button *always* be the *same button*; nor do

Defendants proffer adequate argument, if any, in support.

The Court finds the term may be understood according to its plain and ordinary meaning, and further, the claim language already describes a "call initiation button." Accordingly, the Court finds that no construction is necessary.

b. "[thereby] suspending non-phone functions"²⁹

Plaintiff's Construction	Defendants' Construction
temporarily stopping a current application without ending or canceling it	upon pressing the call initiation button, suspending all non-phone functions during the call

Once again, Defendants contend that the prosecution history dictates the way the term should be construed. According to Defendants, the record reflects that all non-phone functions must be suspended for the duration of the phone call. Response AT 22. Further, Defendants' proposal targets the cause of the suspension, namely, touching the call initiation button. *Id.* SmartPhone objects to Defendants' proposal, stating it uses language redundant to the claims and introduces extraneous limitations unsupported by the intrinsic record. Reply AT 8.

The claim language and specification support SmartPhone's proposed construction. The language of the claims indicate that non-phone functions are suspended "in response to said user selecting said call initiation button." '342 patent at 13:10-12. Therefore, there is no need to describe what triggers suspension of non-phone functions. Moreover, the disclosure contrasts suspending non-phone functions, i.e., current applications, with cancelling them:

The hard button 128 used to initiate the call device 101 may also be configured to

This term is contained in claims 1 and 6 of the '342 patent.

initiate a suspension of a current application. A "current application" is an application, other than the call device 101, that may be running when the hard button 128 is activated. When a current application is suspended, the current application remains active in the background by maintaining a memory allocation in a random access memory (RAM) of the PDA 100. In an alternative embodiment, the hard button 128 is configured to initiate an ending or a cancellation, rather than a suspension, of the current application.

'342 patent at 5:54-63; *see also id.* at 8:46-52; FIG. 11. The specification distinguishes suspending the current application from cancelling it altogether. Consequently, pressing the call initiation button does not necessarily suspend non-phone functions because the disclosure provides that doing so could also cancel the current application.

In addition, the prosecution history supports the disclosure and the claims. In response to the August 2, 2006 Office Action, the applicant stated:

Among the problems the present invention is intended to solve is the problem of combining phone functionality into a PDA form factor. Part of the problem of integrating phone and PDA functionality is the potential for PDA functions to interfere with phone functions. Therefore, the present invention proposes that the computer device suspend any non-phone functions in response to a user selecting the call initiation button.

AMENDMENT AND REMARKS AT 9, U.S. PATENT APPL. SER. No. 09/675,406 (OCT. 23, 2006), Ex. 19, ATTACHED TO RESPONSE. As both the disclosure and prosecution history reflect, selecting the call initiation button causes the computer device to suspend non-phone functions. However, to require that *all* non-phone functions be suspended is a limitation unsupported by the portion of the history cited above, especially because the call initiation button may suspend or cancel non-phone functions, as explained above. Accordingly, the Court declines to unnecessarily limit the term to require that all non-phone functions be suspended upon selection of the call initiation button.

Moreover, Defendants' arguments regarding the duration of the suspension are unfounded.

To show that "suspension lasts for the duration of the phone call," Defendants cite to a portion of the specification that discusses an active address entry application where the user may input contact information while the call device 101 runs in the background. See Response AT 22 (citing '342 patent at 6:59-61; 7:15-17). Once the user "tap[s] on a done button 504, a user may go back to the application that was active before the address entry application 502." '342 patent at 7:15-17. This portion of the specification in no way supports the idea that "suspension lasts for the duration of the phone call." Rather, the disclosure recites that the phone functionality, as opposed to non-phone functions, is suspended in the background. See '342 patent at 6:59-61. Moreover, both the specification and claim language are silent as to the duration that the non-phone functions are suspended. See id., FIG. 11 (indicating that a non-phone function is suspended, but not for how long). Therefore, the Court declines to limit the term "suspending non-phone functions" to the duration of the phone call, as Defendants propose.

Accordingly, the Court finds that "[thereby] suspending non-phone functions" means "temporarily stopping non-phone functions without ending or canceling them."

c. "a speak button replaces the mute button"³⁰

Plaintiff's Construction	Defendants' Construction
a button that activates the microphone on the device replaces a button that deactivates the microphone on the device	a button marked with speak replaces a button marked with mute

The main dispute among the parties is whether the "mute" button replaces the "speak" button when the mute button is selected during a phone call. *See* RESPONSE AT 24. According to

This term is contained in claim 6 of the '342 patent.

Defendants, the specification and prosecution history reflect that the mute button replaces the speak button, and further, that the buttons are literally labeled "MUTE" and "SPEAK." *Id.* at 24-25. SmartPhone argues that Defendants attempt to read in the preferred embodiment and "MUTE" and "SPEAK" are merely terms used to describe the associated functionality the buttons are meant to achieve. PLTFF's BRIEF AT 27; REPLY AT 9. However, SmartPhone does not seem to dispute that the mute button replaces the speak button.

Defendants' proposal inappropriately focuses on the literal button markings rather than the functionality of the buttons. What is important to the scope of the invention is not how the buttons are labeled, but rather what the buttons do. The specification describes the functions of the mute and speak buttons: "Preferably, when the mute button 306 is pressed, the microphone is deactivated, and a speak button 702 replaces the mute button 306. By pressing the speak button 702, a user may reactivate the microphone." '342 patent at 7:52-55. Thus, a "mute button" is "a button that deactivates a microphone on the device," and a "speak button" is "a button that activates the microphone on the device." ³¹

Moreover, Defendants cite to a portion of the prosecution history that does not address the literal markings of the buttons. To overcome an obviousness objection, the applicants stated, "Applicants submit that neither <u>Hawkins</u> nor <u>Nokia</u> disclose or suggest, either separately or in combination, replacing a mute button with a speak button in response to selecting the mute button during a phone call." Amendment and Remarks at 9, U.S. Patent Appl. Ser. No. 09/675,406

³¹ The Court declines to construe "a speak button replaces the mute button" in its entirety. Rather, the Court finds that it is more appropriate, in light of the claim scope dispute, to construe "mute button," "speak button," and "replaces" separately.

(DEC. 6, 2005), Ex. 23, ATTACHED TO RESPONSE. This statement does not explicitly require that the speak and mute buttons are labeled with the words "SPEAK" and "MUTE", respectively. Rather, the statements mirror the disclosure of Claim 6: "when the mute button is selected during a phone call, a speak button replaces the mute button." '342 patent at 13:15-17.

In accordance with the specification, the Court finds that a "mute button" is "a button that deactivates a microphone on the device." Further, a "speak button" is "a button that activates the microphone on the device." Finally, because the scope of the word "replaces" does not seem to be at issue, "replaces" shall be understood by its plain and ordinary meaning.

VI. The '064 Patent

The '064 patent discloses "[a] computer system that attempts to establish an alternative network link upon failing to establish a requested network link." '064 patent, ABSTRACT. Instead of providing an error message when the computer system cannot access numerous networks, particularly wireless networks, "the computer system determines whether the user has designated an alternative network link." *Id.* "If an alternative network link has been designated, the computer system attempts to establish the alternative network link." *Id.*

a. Order of Method Steps

Defendants request the Court to find that the steps disclosed in Claim 17 must be performed in the order claimed.³² RESPONSE AT 17. SmartPhone replies, stating that Claim 17 does not actually recite an order, and therefore, the method steps should not be construed to require one. REPLY AT 6. Claim 17, the claim at issue, is recited below:

³² Defendants also seek a ruling that the method steps disclosed in the '459 and '949 patents must be performed in the order claimed. RESPONSE AT 17, n.16.

17. An electronic system comprising:

- a data bus;
- a processor coupled to said data bus; and
- a memory device coupled to said data bus and having computer-executable instructions stored therein for performing a method of establishing one of a plurality of network links of a plurality of protocols and diverse types of connection on said electronic system, comprising steps of:
- a) associating one or more alternative network link designations with one or more of said network links based upon a priority order assigned by the user of said electronic system and stored on the memory device;
- b) requesting a first network link of said plurality of network links;
 - c) attempting to initiate said first network link;
- d) determining whether a particular alternative network link designation is associated with said first network link; and
- e) if said step c) fails to establish said first network link and if said particular alternative network link designation is associated with said first network link, attempting to initiate, by said computer system, a particular network link of said plurality of network links based on said particular alternative network link designation.

'064 patent at 16:24-49 (Claim 17).

Method steps that do not actually recite an order do not usually require one. *Altiris v. Symantec Corp.*, 318 F.3d 163, 1369 (Fed. Cir. 2003) (citing *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342-43 (Fed. Cir. 2001)). To decide whether method steps require an order, the court must look at the claim language to determine whether logic or grammar dictate that the steps be performed as written. *Id.* If not, the court must look to the specification to determine whether the specification "directly or implicitly requires such a narrow construction." *Id.* (citing *Interactive*, 256 F.3d at 1343). If the specification does not support an explicit order, then the order in which the steps are written is not limiting. *Id.*

It is important to note that Claim 17 is not a method claim, but rather a system claim, the

bounds of which are defined, in part, by a method the system is capable of performing. That said, the claim language clearly dictates that step e follow step c. '064 patent at 16:43 ("e) if said step c) fails . . ."). However, the claim language does not dictate that the other steps be performed in any particular order. *See e.g.*, PLTFF'S '064 PATENT SLIDES AT 27 (indicating that step b could be performed before step a). Moreover, Defendants point to nothing in the specification that "directly or implicitly requires such a narrow construction." ³³ *See Altiris*, 318 F.3d at 1369.

b. "network link"³⁴

Plaintiff's Construction	Defendants' Construction
specific network connection the electronic system is configured to support	a particular network connection, not including a point-to-point link or link interface, with a specific protocol and connection type

Defendants object to SmartPhone's proposed construction because (1) it omits the requirement of a specific protocol and a connection type; and (2) it does not exclude point-to-point links or link interfaces, as is disclaimed in the prosecution history. Response At 18-19. In reply, SmartPhone argues that Claim 17 already discloses that "network links" are "of a plurality of protocols and diverse types of connection." Reply At 7 (citing '064 patent at 16:30-31). SmartPhone further argues that the prosecution record does not forfeit point-to-point links. *Id.* Instead, the record reflects that the applicant distinguished point-to-point *network* links and *network* interfaces from non-network point-to-point links and link interfaces. *Id.* Therefore, SmartPhone

³³ Similarly, Defendants fail to point out why the claim language or specifications of the '459 and '949 patents require the method steps to be performed in the order recited. Having no indication that the logic or grammar of the claims require the method steps to be performed in the order claimed, or any direct or implicit instruction in the specification noting otherwise, the Court finds that the method steps recited in the '459 and '949 patents are not required to be executed in the order they are written.

This term is contained in claim 17 of the '064 patent.

concludes, the applicants did not forfeit scope regarding network connections that included point-to-point links and link interfaces. *Id*.

The disclosure notes that the device is specifically configured to support particular network links. "[E]ach network link supported by the personal digital assistant 100 is appropriately configured in the personal digital assistant 100 so that the personal digital assistant 100 can initiate and establish the network link when requested by an application or the user." '342 patent at 12:41-45; *see also id.* at 8:48-53. Further, because each network link supported by the personal digital assistant must be configured to support that particular network link, each network link is a specific network connection. Therefore, the Court adopts SmartPhone's proposed construction.

On the other hand, Defendants' proposal incorporates limitations already stated in the claim. Claim 17 discloses specific protocols and diverse types of connection. *See* '064 patent at 16:28-30. Thus, to incorporate the "specific protocol" and "connection type" limitations Defendants propose would simply reiterate the claim language. *See Haemonetics Corp. v. Baxter Healthcare Corp.*, 607 F.3d 776, 781 (Fed. Cir. 2010) (construing claims to give effect to all claim terms so as to avoid rendering physical structures and characteristics disclosed within the claims superfluous).

Further, the prosecution history does not reflect any kind of disclaimer regarding point-to-point links or link interfaces. Indeed, in distinguishing the application from U.S. Patent No. 6,681,252 ("Schuster"), the applicants stated that "the point-to-point link is not a network link," and that "alternative link interfaces are not alternative network links." REMARKS AT 5-6, U.S. PATENT APPL. SER. No. 09/847,720 (Aug. 28, 2006), Ex. 14, ATTACHED TO RESPONSE. Taken out of context such statements may suggest forfeiture of claim scope. However, after examining the record as a

whole, one of ordinary skill in the art would conclude that the applicants simply distinguished point-to-point links and link interfaces within a network from those void of a network. In response to the Examiner's remarks regarding Schuster and link interfaces, the applicants state, in relevant part:

Applicants submit that the above-cited portion of <u>Schuster</u> discloses alternative link interfaces. However, claim 1 requires associating one or more network link designations with one or more of the network links. Applicants submit that a link interface is not equivalent to a network link. A link interface defines how a device is connected via a link. For example, in Fig. 3 of <u>Schuster</u>, three link interfaces are shown that can be used to link the data network telephone with a PID. In <u>Schuster</u>, a PID may be linked with a data network telephone via an RS-232 link interface, an infrared link interface of a radio frequency link interface. However, the link between a data network telephone and a PID, as disclosed by <u>Schuster</u>, is not a network link. *No network exists between the PID and the data network telephone to which it is linked*.

Id. at 3-4 (emphasis added). This particular portion of the applicants' response makes a distinction between a link interface connecting a device to a PID without the use of a network, e.g., the link interface described in Schuster, and a link interface used in a system with a network. Because the applicants contrast the use of network link interfaces with non-network link interfaces, the Court finds that the applicants did not exclude link interfaces as a type of network connection claimed in the '064 patent, as Defendants assert.

Similarly, the applicants distinguished non-network point-to-point links with network point-to-point links:

Thus, <u>Schuster</u> discloses that the link between a PID and its respective network data phone is a point-to-point link and that each and that each link may be a wireless link, and infrared link, or a radio frequency link. However, the point-to-point link is not a network link. The link is simply a connection between two devices without necessarily involving a network.

Id. at 5. In stating that "the point-to-point link is not a network link," the applicants simply

distinguished the type of link disclosed in Schuster with the type of link claimed in the application, particularly a point-to-point link connected to a network. Moreover, the specification explicitly states that a point-to-point link is a type of network link that may be used to establish communication with a network: "These network links utilize a variety of network protocols and require a variety of physical connections (i.e., wired and wireless) to establish communication with the numerous networks. Examples of network protocols include: PPP (Point-to-Point Protocol)." '064 patent at 8:50-54. Thus, the Court finds that the prosecution record does not reflect a clear and unmistakable disclaimer of point-to-point links as a type of network link claimed by the '064 patent.

Accordingly, the Court finds that a "network link" is a "specific network connection the electronic system is configured to support."

c. "diverse types of connection"³⁵

Plaintiff's Construction	Defendants' Construction
wired or wireless connections	both wired and wireless connections

All the parties agree that the '064 patent supports the use of wired connections and wireless connections. PLTFF's BRIEF AT 24-25; RESPONSE AT 19 (citing '064 patent at 8:50-52). However, the parties differ as to whether different types of wireless connections, e.g., wireless phone communication versus wireless communication, satisfy the "diverse types of connection" requirement. *See* PLTFF's BRIEF AT 25; RESPONSE AT 19-20. SmartPhone argues that Defendants' construction requires that both wired and wireless connections be used. *See* PLTFF's BRIEF AT 25. Instead, SmartPhone argues the patent contemplates "diverse types of connection[s]" to include

³⁵ This term is contained in claim 17 of the '064 patent.

different types of wireless connections while omitting the use of any kind of wired connection. *See id.* Defendants, on the other hand, contend that limiting connections to just different types of wireless connections "would render the requirement of different protocols and different physical connections meaningless"; if that were the case, the connection types would not be diverse. RESPONSE AT 19.

The Court disagrees. The specification does not require both a wired and wireless connection to exist at the same time, as Defendants seem to contend. Rather, the specification notes the possibility of establishing only wireless connections:

[N]umerous wireless networks are being deployed throughout the country. The personal digital assistant 100 can be configured to support several of these wireless networks. However, the numerous wireless networks may not be available in all regions of the country. The present invention enables the personal digital assistant 100 to easily initiate an alternative network link (e.g., to a wireless network or a wired network) when the requested network link (e.g., to a wireless network) cannot be established because any of a variety of reasons, such as insufficient network capacity, technical network difficulties, and spotty network coverage.

'064 patent at 8:66-9:9; *see also id.* at 8:50-65 (describing a variety of wireless physical connections and a variety of wired physical connections); 9:48-55. This particular section of the specification notes the possibility of attempting to connect to "an alternative network link" upon the inability to connect to "the requested network link." The disclosure goes on to discuss such a particular scenario, noting the possibility that upon failure to establish a link to the original network, a wireless network, the personal digital assistant then attempts to connect to an alternative network, namely another wireless network. Because this particular example illustrates that the '064 patent does not require both a wired and wireless connection at the same time, the term "diverse types of connection" means "wired or wireless connections."

d. "associating one or more alternative network link designations with one or more said network links based upon a priority order assigned by the user" 36

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary	the user designating a sequential list of one or more alternative network links for each of one or more network links

The parties dispute whether a "priority order" requires a "sequential list." SmartPhone contends it does not, further stating the term may be construed by its plain and ordinary meaning. PLTFF's BRIEF AT 26. Defendants contend the intrinsic evidence discloses that the computer system only attempts to establish alternative network links sequentially. Response AT 20 (citing '064 patent at 2:54-56; 9:48-12:33, Figs. 9-12). Thus, "sequential list" is consistent with "priority order." *Id.*

Defendants misconstrue the specification. The disclosure only discusses sequentially attempting to establish network links in the context of a "chain implementation." *See*, *e.g.*, '064 patent at 2:54-56; 9:56-10:3. In addition to a chain implementation, the disclosure describes a "loop implementation," where no such "sequential" limitation is discussed:

In a chain implementation, the user designates one or several alternative network links for a particular network link. Upon failure to establish the particular network link, the computer system sequentially attempts to establish one of the alternative network links. . . .

In a loop implementation, the user designates one or several alternative network links for a particular network link. The computer system attempts the particular network link and then, if the particular network link cannot be established, attempt to establish the alternative network link(s). If no network link was established, the computer system again attempts to establish the particular network link and, if necessary, again attempts to establish the alternative network link(s). The computer system can continue this loop until a network link is established or until the user decides to stop the loop.

This term is contained in claim 17 of the '064 patent.

'064 patent at 2:52-3:5; *see also id.* at 10: 56-64; Fig. 11. If executing a chain implementation of the invention, the computer system sequentially moves through the user-designated network links, in accordance with the user's priorities, until a connection is established. Yet, in a loop implementation, if the computer system fails to establish a connection with any of the network links prioritized by the user, the loop starts again. Such action is not sequential.

Having resolved the claim scope dispute, the Court finds that no construction is necessary because the term may be understood by its plain and ordinary meaning.

e. "attempting to initiate [a] ... network link"³⁷

Plaintiff's Construction	Defendants' Construction
Plain and ordinary meaning, no construction necessary	sending a signal external to the system to initiate a network link

The parties differ on two issues: (1) whether initiating a connection always includes sending a signal; and (2) whether "attempting to" establish a connection actually means that a connection has already been initiated.³⁸ *See* MARKMAN TRANSCRIPT AT 203:9-206:13.

The Court cannot adopt Defendants' construction because it defies the intent of the invention.

The "Summary of the Invention" portion of the disclosure recites:

A computer system that attempts to establish an alternative network link upon failing to establish a requested network link is described. The computer system may encounter conditions where access to numerous networks, in particular wireless networks, is not available. Rather than only providing an error message to the user

³⁷ This term is contained in claim 17 of the '064 patent.

At the claim construction hearing, Defendants proposed a different construction for the term "attempting to initiate [a]...network link." See Dfts' '064 Patent Slides at 27. The new proposal is illustrated above. Defendants' original proposal is as follows: "sending a signal to establish communication with a network according to a protocol." Response at 20.

upon a failed attempt to establish the requested network link, the computer system determines whether the user has designated an alternative network link in case the requested network link cannot be established, whereas the alternative network link is selected from the plurality of network links that the computer system is configured to support. If an alternative network link has been designated, the computer system attempts to establish the alternative network link.

'064 patent at 2:36-51. The invention is directed to a system with the capability of connecting to an alternate network should the system fail to connect to the primary preferred network. If the Court were to equate initiating a connection with "attempting to" initiate a connection, as Defendants propose, there would be no need for the system to be capable of connecting to an alternative network link, for it would have already connected to the first network link. Such an interpretation would not only make step e of Claim 17 superfluous, but would also read out the chain and loop implementations described in the patent. Thus, the "attempting to" language accounts for the possibility that the system cannot establish the requested network link.

Having established that attempting to initiate a network connection is different from initiating a network connection, the Court finds that interpreting the term to include "sending a signal" would impose an unnecessary limitation. The system may attempt to establish a network connection without actually sending a signal. Sending a signal implies establishing a network connection, as opposed to attempting to initiate such a connection. Further, the specification does not require that a signal be sent in order to attempt to initiate a network link.

The plain and ordinary meaning of the term is clear. Therefore, the Court finds that no construction is necessary for "attempting to initiate [a] . . . network link."

CONCLUSION

For the foregoing reasons, the Court adopts the constructions set forth above.

So ORDERED and SIGNED this 2nd day of August, 2012.

JOHN D. LOVE

UNITED STATES MAGISTRATE JUDGE