UNITED STATES INTERNATIONAL TRADE COMMISSION

Washington, D.C.

In the Matter of	
CERTAIN WIRELESS DEVICES, INCLUDING MOBILE PHONES AND TABLETS II	**Inv. No. 337-TA-905**

ORDER NO. 14: CONSTRUING DISPUTED TERMS OF THE ASSERTED PATENTS

(June 2, 2014)

A *Markman* hearing was held in this Investigation on May 6-7, 2014. Counsel for Complainant Pragmatus Mobile LLC ("Pragmatus" or "Complainant") appeared and argued at the hearing, as did counsel for Respondents Samsung Electronics Co. Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC (collectively, "Samsung"); Sony Corp., Sony Mobile Communications AB and Sony Mobile Communications (USA), Inc. (collectively, "Sony"); Nokia Corp. and Nokia Inc. (collectively, "Nokia"); and ZTE Corp. and ZTE (USA) Inc. (collectively, "ZTE") (collectively, "Respondents"). The Office of Unfair Import Investigations Commission Investigative Staff ("Staff") also appeared and argued at the *Markman* hearing. In advance of the hearing, the parties filed opening claim construction briefs on April 14, 2014, and reply claim construction briefs on April 28, 2014. At the *Markman* hearing, the parties disputed seven groups of claim terms, which are each addressed in this Order. After the hearing, the private parties filed supplemental briefs on May 14, 2014. The Staff filed a supplemental brief on May 19, 2014.

The claim terms construed herein are done so for the purposes of this Investigation. Hereafter, discovery and briefing in this Investigation shall be governed by the construction of the

claim terms in this Order. Those terms not in dispute need not be construed. *See Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1323 (Fed. Cir. 2004) (noting that the administrative law judge need only construe disputed claim terms). Any claim terms not discussed herein shall be deemed undisputed and shall be interpreted by the undersigned in accordance with "their ordinary meaning as viewed by one of ordinary skill in the art." *Apex Inc. v. Raritan Computer, Inc.*, 325 F.3d 1364, 1371 (Fed. Cir. 2003), cert. denied, 540 U.S. 1073 (2003). If any party believes that changes to a mandatory disclosure are necessary due to the claim constructions in this Order, the party may file a motion pursuant to Ground Rule 1.10.2 or Ground Rule 7.6 identifying the relevant claim construction and making its case for good cause.

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Table of Abbreviations

CMIB	Complainant's Initial Markman Brief
CMRB	Complainant's Reply Markman Brief
CMSB	Complainant's Supplemental Markman Brief
RMIB	Respondents' Initial Markman Brief
RMRB	Respondents' Reply Markman Brief
RMSB	Respondents' Supplemental Markman Brief
SMIB	Staff's Initial Markman Brief
SMSB	Staff's Supplemental Markman Brief
Tr.	Transcript of the Markman Hearing

I. BACKGROUND

On January 17, 2014, the Commission instituted this Investigation to determine whether certain wireless devices infringe one or more of claims 1-5, 7-17, and 19-21 of U.S. Patent No. 8,149,124 (the "'124 Patent") and claims 1-33 of U.S. Patent No. 8,466,795 (the "'795 Patent") (collectively, the "Asserted Patents"). 79 Fed. Reg. 4173-4 (January 24, 2014). Complainant had previously asserted these patents in *Certain Consumer Electronics, Including Mobile Phones and Tablets*, Inv. No. 337-TA-889 (terminated March 11, 2014).

The parties dispute the construction of thirteen terms in the Asserted Patents, which fall into seven distinct categories: (i) "Display" in claim 1 of the '124 Patent; (ii) The "second receiver" terms, which appear in claims 13-15, 17 and 20-21 of the '124 Patent and claims 1, 8, 10, 12, 19, 26, 27 and 33 of the '795 Patent; (iii) "Security code" in claims 1, 23, 27 and 30 of the '795 Patent; (iv) "Standby mode" and "leave[s] the standby mode," which appear in claims 7, 17-19, 23, 30 and 33 of the '795 Patent; (v) "Device in proximity to the cellular device" in claims 23, 27 and 30 of the '795 Patent; (vi) "Determine a location" in claims 1 and 5 of the '124 Patent;[1] and (vii) "Data" in claims 1, 4, 5, 7 and 21 of the '124 Patent, and claims 1, 3-9, 15, 23, 27 and 30 of the '795 Patent.

II. LEGAL STANDARD

"An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*) (internal citations omitted), *aff'd*, 517 U.S. 370 (1996).

[1] The parties previously disputed the term "transmit location data representing the location" in claims 8, 23 and 30 of the '795 Patent, but at the hearing, agreed that this term had its plain and ordinary meaning. (Tutorial Tr. at 8:7-10:17).

Claim construction is a "matter of law exclusively for the court." *Id.* at 970-71. "The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims." *Embrex, Inc. v. Serv. Eng'g Corp.*, 216 F.3d 1343, 1347 (Fed. Cir. 2000).

Claim construction focuses on the intrinsic evidence, which consists of the claims themselves, the specification, and the prosecution history. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (*en banc*); *see also Markman*, 52 F.3d at 979. As the Federal Circuit in *Phillips* explained, courts must analyze each of these components to determine the "ordinary and customary meaning of a claim term" as understood by a person of ordinary skill in the art at the time of the invention. 415 F.3d at 1313. "Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Grp., Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001).

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). "Quite apart from the written description and the prosecution history, the claims themselves provide substantial guidance as to the meaning of particular claim terms." *Id.* at 1314; *see also Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) ("In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to 'particularly point [ ] out and distinctly claim [ ] the subject matter which the patentee regards as his invention."). The context in which a term is used in an asserted claim can be "highly instructive." *Phillips*, 415 F.3d at 1314. Additionally, other claims in the same patent, asserted or not, may also provide guidance

as to the meaning of a claim term. *Id.*

The 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.* at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Id.* at 1316. "In other cases, the specification may reveal an intentional disclaimer, or disavowal, of claim scope by the inventor." *Id.* As a general rule, however, the particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Id.* at 1323. In the end, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be ... the correct construction." *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

In addition to the claims and the specification, the prosecution history should be examined, if in evidence. *Id.* at 1317; *see also Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004). The prosecution history can "often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Phillips*, 415 F.3d at 1317; *see also Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) ("The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.").

When the intrinsic evidence does not establish the meaning of a claim, then extrinsic evidence (*i.e.*, all evidence external to the patent and the prosecution history, including dictionaries, inventor testimony, expert testimony, and learned treatises) may be considered. *Phillips*, 415 F.3d

at 1317. Extrinsic evidence is generally viewed as less reliable than the patent itself and its prosecution history in determining how to define claim terms. *Id.* at 1317. "The court may receive extrinsic evidence to educate itself about the invention and the relevant technology, but the court may not use extrinsic evidence to arrive at a claim construction that is clearly at odds with the construction mandated by the intrinsic evidence." *Elkay Mfg. Co. v. Ebco Mfg. Co.*, 192 F.3d 973, 977 (Fed. Cir. 1999).

If, after a review of the intrinsic and extrinsic evidence, a claim term remains ambiguous, the claim should be construed so as to maintain its validity. *Phillips*, 415 F.3d at 1327. Claims, however, cannot be judicially rewritten in order to fulfill the axiom of preserving their validity. *See Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999). Thus, "if the only claim construction that is consistent with the claim's language and the written description renders the claim invalid, then the axiom does not apply and the claim is simply invalid." *Id.*

III. LEVEL OF ORDINARY SKILL IN THE ART

The parties have each proposed standards for a person of ordinary skill in the art for the Asserted Patents. Complainant contends that a person of ordinary skill in the art would have at least a bachelor's degree and two years of work experience or a master's degree in the field of Electrical or Computer Engineering or a related field. (CMIB at 11-12). Respondents propose that a person of ordinary skill in the art would have at least a bachelor's degree in electrical engineering (or a related field such as computer science, computer engineering or telecommunications) with two or more years of work experience and/or post graduate study in the field of electronics systems, at least some of which relates to portable signaling, location, security and/or cellular technologies. (RMRB at 6). Staff submits that one of ordinary skill in the art would have been a well-educated professional – for example, such a person may have had an undergraduate degree in electrical

engineering or computer science, including coursework related to wireless communication systems and navigation systems, such as GPS tracking technology. (SMIB at 5, 20; SMRB at 2-3, 15). During the *Markman* hearing, the parties did not express significant disagreement between their competing proposals for the appropriate level of education and experience. (Tr. at 5:7-7:2). I therefore find that a person of ordinary skill in the art for the Asserted Patents would have had an undergraduate degree in electrical engineering or computer science with two years of work experience and/or post-graduate study, including coursework or work experience related to wireless communication systems (such as cellular technologies) and location systems (such as GPS technology).

IV. THE ASSERTED PATENTS

The '124 Patent and the '795 Patent are both entitled "Personal Security and Tracking System," naming inventors Mark Hoffman, Judd Hoffman, Ann Hoffman, and David Doe. The Asserted Patents have substantially identical specifications and both claim priority to a common patent application, U.S. Patent Application No. 08/786,411, which was filed on January 21, 1997.

A. Patent Specification

The Abstract of both Asserted Patents describes a "signaling system" for "rendering an alarm for an individual in distress combined with a locating and tracking system to thus alert and direct appropriate personnel ... and to monitor the location of that individual." The Background section of the Asserted Patents describes a need for "immediate notification of an emergency situation and a prompt response from police, paramedics, fire department, or another service organization." ('124 Patent at 1:38-41; '795 Patent at 1:43-46). The Summary of the Invention states:

> The present invention is a personal security and tracking system that comprises a portable signaling unit and a remote alarm switch unit, each to be worn or carried

by an individual being monitored. The system further comprises a central dispatch station to which distress signals and position coordinates are transmitted.

('124 Patent at 5:60-65; '795 Patent at 5:65-6:3). The Detailed Description of Embodiments refers to Figure 1, which depicts "a portable signaling unit 20 and a remote alarm switch unit 40 shown [] in a configuration of a wristband." ('124 Patent at 7:65-8:1; '795 Patent at 8:3-6).

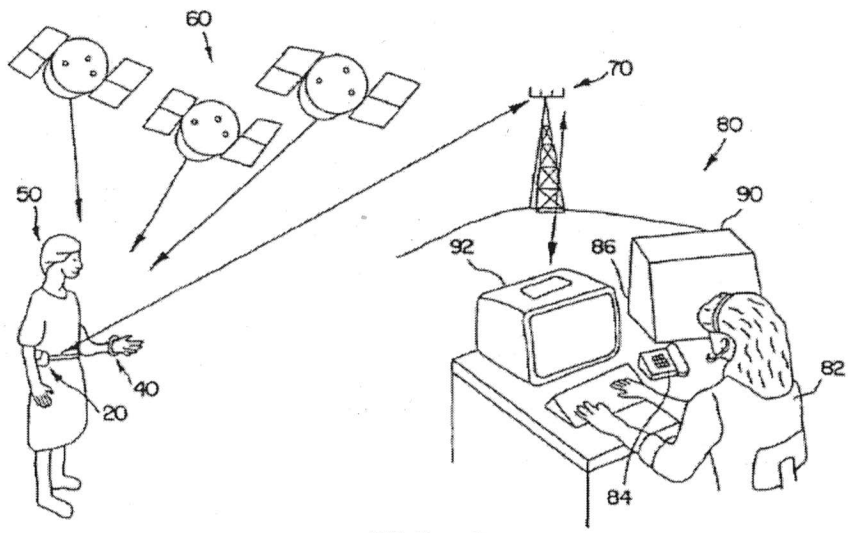

FIG. 1

The specification further elaborates: "A cellular telephone system 70 provides a means for data and voice communications between the portable signaling unit 20 and a central dispatch station 80." ('124 Patent at 8:17-19; '795 Patent at 8:21-23). And "[i]n a preferred embodiment, display console 92 [in the central dispatch station] displays the alarm signal origination location, the user identification, and an alarm code. ('124 Patent at 8:40-42; '795 Patent at 8:44-46).

The Asserted Patents both include a functional block diagram of an embodiment of the invention labeled as Figure 5.

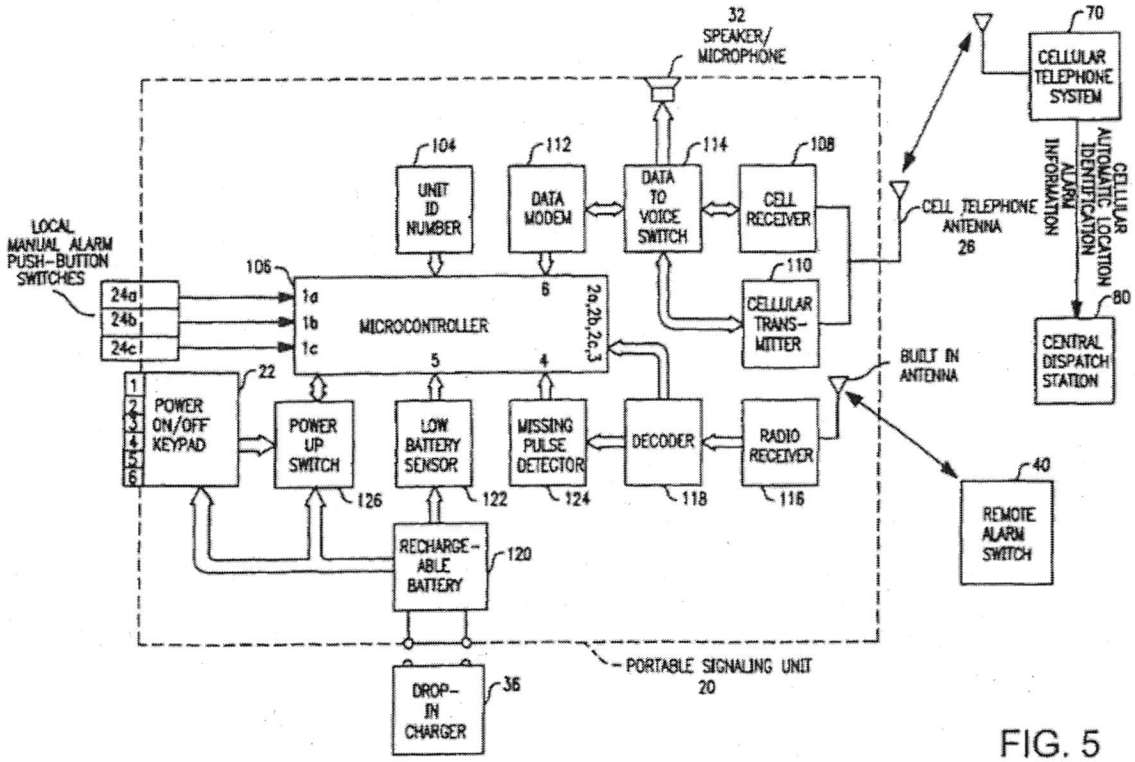

FIG. 5

Both of the Asserted Patents describe a "main power on-off keypad 22." ('124 Patent at 8:46-47; '795 Patent at 8:50-51). Also, "[l]ocal alarm push-button switches 24*a*, 24*b*, 24*c*, etc. allow the use of the portable signaling unit 20 by campers, hikers, or skiers, etc., when the additional features of the remote alarm switch unit 40 may not be required." ('124 Patent at 8:47-51; '795 Patent 8:51-55). The signaling unit also includes a "cellular telephone antenna 26," "a GPS receiving antenna 30," and a "speaker-microphone element 32." ('124 Patent at 8:51-58; '795 Patent at 8:55-62). The Asserted Patents further describe a "remote alarm switch unit 40" separate from the portable signaling unit, which can be "in the form of a wristband assembly … [or] any other object, such as a broach, pendant, or keychain." ('124 Patent at 9:1-4; '795 Patent at 9:5-8).

In an emergency situation, the user can depress the push-button switches on the portable signaling unit or similar buttons on the remote alarm switch, which correspond to different alarm

conditions, from "just checking in" to "I am in need of medical assistance" or "Help, my life is in danger!" ('124 Patent at 10:37-63; '795 Patent at 10:55-67). An alarm may also be triggered by the removal of the remote alarm switch from the person or the removal of the portable signaling unit (by detecting the separation of the two units). ('124 Patent at 11:13-41; '795 Patent at 11:17-43). There are also alarm conditions for low battery or when the central dispatch operator needs to locate the portable signaling unit remotely. ('124 Patent at 12:1-21; '795 Patent at 12:3-24). Alarm signals may be received by a central dispatch station where "[t]he location of portable signaling unit 20 is displayed on ... a digitized map on a computer monitor screen 92 at a position which corresponds to the location of the portable signaling unit 20." ('124 Patent at 13:48-56; '795 Patent at 13:50-57). The operator can then talk with the person in distress and dial the proper authorities, providing them with the person's location. ('124 Patent at 13:58-66; '795 Patent at 13:59-67).

B. Asserted Claims

Complainant has asserted claims 1-5, 7-17, and 19-21 of the '124 Patent and claims 1-33 of the '795 Patent. While the specification describes a particular alarm system, as discussed above, the claims of the Asserted Patents describe the invention in generic terms. The asserted claims of the '124 Patent are focused on the GPS tracking functionality of the invention. Claim 1 is the only independent claim of the '124 Patent, and it reads:

> **Claim 1:** A method for tracking a portable signaling unit comprising:
>
> receiving, with a GPS receiver coupled to a portable signaling unit, a GPS signal;
>
> using the GPS signal to determine a position of the portable signaling unit;
>
> transmitting, from the portable signaling unit and over a wireless communication system to a computer, **data** regarding the position of the portable signaling unit, wherein the **data** is used to **determine a location** of the portable signaling unit; and
>
> displaying, on a **display**, a map having a symbol identifying the location of the

portable signaling unit, wherein the **display** is remote from the computer and connected to the computer by a network.

('124 Patent at 14:51-65). Dependent claims 12 and 13 are also relevant to this order:

Claim 12: The method of claim 1, wherein the portable signaling unit comprises a transmitter and a first receiver.

Claim 13: The method of claim 12, wherein the portable signaling unit comprises a **second receiver** separate from the first receiver.

('124 Patent at 15:25-29). The claims of the '795 Patent describe a cellular device with multiple receivers, a security code, and a standby mode. The '795 Patent includes four independent claims:

Claim 1: A portable signaling unit comprising:

a speaker;

a microphone;

a display;

a microcontroller;

a user interface;

a transmitter adapted to transmit a first signal via a cellular network;

a first receiver adapted to receive a second signal via the cellular network; and

a **second receiver adapted to receive a third signal** other than the first signal and second signal,

wherein the third signal is other than a cellular network transmission; and

the transmitter is adapted to receive signals representing **data** and a voice of a user, and the transmitter is adapted to transmit signals representing the **data** and the user's voice;

wherein the portable signaling unit is adapted to receive a **security code** via the user interface; and

wherein the display is adapted to display a message received by the portable signaling unit via the first receiver.

('795 Patent at 14:54-15:9).

Claim 23: A cellular device for communicating voice and **data** over a cellular network, the cellular device comprising:

a user interface;

a circuit adapted to store a unit identifier;

a transmitter and a first receiver adapted to transmit cellular signals via the cellular network and adapted to establish two-way voice communications by a user via the cellular network; and

a **second receiver adapted to receive a nearby signal** from a **device in proximity to the cellular device**, the nearby signal including first **data**;

wherein the nearby signal is other than the cellular signals;

wherein the transmitter is adapted to transmit second **data** in response to the receipt of the first **data**;

wherein the cellular device has a **standby mode** to conserve power;

wherein the cellular device is adapted to **leave the standby mode** in response to a signal received by the first receiver, and the cellular device is adapted to **leave the standby mode** in response to a signal received by the second receiver;

wherein the transmitter is adapted to establish a connection with the cellular network to **transmit location data representing the location** of the cellular device, the identifier, and the second **data**; and

wherein the cellular device is adapted to receive a **security code** via the user interface.

('795 Patent at 16:31-57).

Claim 27: A cellular device for communicating voice and data over a cellular network, the cellular device comprising:

a transmitter and a first receiver adapted to transmit cellular signals via the cellular network; and

a **second receiver adapted to receive a nearby signal** from a **device in proximity to the cellular device** and the signal including first data, wherein the nearby signal is other than the cellular signals; and

a user interface adapted to receive a **security code**;

wherein the transmitter is adapted to transmit second data in response to the receipt of the first data

('795 Patent at 16:66-17:9).

Claim 30: A cellular device comprising:

a housing comprising a first surface and a second surface different from the first surface;

a battery and a sensor adapted to determine if the battery is low;

a speaker;

a microphone;

a first user interface;

a second user interface separate from the first user interface wherein the first user interface and the second user interface are positioned on the first surface;

a circuit adapted to store a unit identifier;

a transmitter and a first receiver adapted to transmit cellular signals via the cellular

network and adapted to establish two-way voice communications via the cellular network;

a **second receiver adapted to receive a nearby signal** from a **device in proximity to the cellular device**, the nearby signal including first data; and

a display adapted to display a message received by the cellular device via the first receiver;

wherein the nearby signal is other than the cellular signals;

wherein the transmitter is adapted to transmit second data after the receipt of the first data;

wherein the cellular device has a **standby mode** to conserve power;

wherein the transmitter is adapted to transmit location data representing the location of the cellular device, the unit identifier, and the second data; and

wherein the cellular device is adapted to receive a **security code** via the first user interface

('795 Patent at 17:15-18:17).

C. Disputed Claim Terms

The parties dispute the construction of thirteen terms in the Asserted Patents, which fall into seven distinct categories. For every disputed term, Complainant proposes a plain and ordinary meaning construction, emphasizing that claim construction must begin with the language of the claims. (CMIB at 7-10). In contrast, Respondents argue that the common specification of the Asserted Patents describes a specific invention with a narrow purpose, and their proposed constructions limit the claims to "the present invention" described in the specification, which is a personal security and tracking system with specific components. (RMIB at 3-10). Complainant criticizes this "definition of the invention" argument, insisting that claim terms should not be so narrowed without an express definition or clear disavowal. (CMRB at 12-18). Respondents, in reply, argue that Complainant relies too heavily on "plain meaning" when the Federal Circuit has emphasized that claim terms must be interpreted in the context of the specification. (RMRB at 1-6). The Staff generally agrees with the proposed constructions of Respondents with a few exceptions, as discussed in more detail below.

i. "Display"

The parties dispute the construction of the term "display," which appears in claim 1 of the '124 Patent.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
display	Plain meaning Or an electronic device that temporarily presents information in visual form, *e.g.*, an LCD screen or a video monitor	computer monitor screens, separate from the portable signaling unit	computer monitor screen of a computer system

a. The Parties' Positions

Complainant argues that "display" is a common term that should be given its plain and ordinary meaning. (CMIB at 13-19). The term "display" is used in the specification to refer to an LCD display screen, a display console, and means for displaying the type of alarm and the location of the individual in a convenient format. ('124 Patent at 4:35-41, 14:44-47, Figure 1, Figure 7). Complainant argues that the specification does not impart any special meaning to the word "display," and there is no express disavowal of claim scope in the prosecution history. *See Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002) ("In the absence of an express intent to impart a novel meaning to claim terms, an inventor's claim terms take on their ordinary meaning."); *Middleton, Inc. v. Minn. Mining & Mfg. Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002) (In addition, only when the applicant "clearly and unambiguously" disavows claim scope should limitations be imported into the claims of a patent."); *CCS Fitness*, 288 F.3d at 1366 (Fed. Cir. 2002) ("heavy presumption that a claim term carries its ordinary and customary meaning.").

Complainant further cites a statement from the prosecution history of the related U.S. Patent No. 6,624,754 (the "'754 Patent") where the applicant argued that "the location of the display is irrelevant and need not be specified in the claims." U.S. App. No. 09/284,598, Response to Office Action (December 12, 2002). And Complainant argues that the doctrine of claim differentiation suggests that the term "display" should not be limited to a "display console," which is claimed in dependent claim 6. *See Curtiss-Wright Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1381 (Fed. Cir. 2006) ("[P]resumption [is] that an independent claim should not be construed as requiring a limitation added by a dependent claim."); *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004) ("[T]he presence of a dependent claim that adds a particular limitation raises a presumption that the limitation in question is not found in the independent claim."). Complainant points to the claim language of the '795 Patent, which explicitly claims a "display" in the "portable signaling unit," and argues that this term should be construed to have the same meaning in these two related patents. *See Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 ("[W]e presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning"). Complainant cites a *Markman* Order in *Certain Devices for Mobile Data Communication*, where the ALJ construed "screen of the mobile device" to have its plain and ordinary meaning. Inv. No. 337-TA-809, Order No. 46 at 69-70 (Sept. 28, 2012). Complainant also cites dictionary definitions for a plain meaning of "display." (CMIB at 17-19).

Respondents propose a construction for "display" limiting the term to a "computer monitor screen separate from the portable signaling unit." (RMIB at 22-29). Respondents argue that a display located on the portable signaling unit would contravene the purpose of the claimed invention, which is to track the portable signaling unit in a personal security system. (RMIB at

23-24). Claim 1 describes "displaying, on a display, a map having a symbol identifying the location of the portable signaling unit." ('124 Patent at 14:62-63). Respondents argue that having this display on the portable signaling unit itself would not serve the purpose of the invention, which is to allow an emergency dispatch operator to locate the individual in distress and send help to that location. (RMIB at 26). Respondents cite *Decisioning.com, Inc. v. Federated Dep't Stores, Inc.*, where the Federal Circuit construed the term "remote interface" to exclude consumer-owner personal computers. 527 F.3d 1300, 1311 (Fed. Cir. 2008). The court recognized that the plain and ordinary meaning of the term was broad, but "[r]ead in light of the specification, however, ... one of ordinary skill in the art would not understand the term 'remote interface' in the '007 patent to encompass a consumer-owned personal computer." *Id.* at 1308. The court found that excluding consumer-owned personal computers was consistent with "the invention's stated purpose— *i.e.*, the closed loop processing of financial transactions without human involvement." *Id.* at 1311.

The Staff proposes a construction for "display" of a "computer monitor screen of a computer system." (SMIB at 7-13). Staff argues that the term "display" should have a construction that is consistent with the subject of the claim: "[a] method for tracking a portable signaling unit." ('124 Patent at 14:51-52). Staff cites Figure 1 of the specification and the "display consoles" or "computer monitor screen" identified as item 92. (*Id.* at 13:48-56, 8:29-33, Figure 1). Staff agrees with Respondents that the specification describes two distinct physical representations of a "display," and that the '124 Patent only refers to the "display" in the central dispatch station of the preferred embodiment. (SMIB at 10-11). The Staff also cites a portion of the prosecution history for the '124 Patent, also relied upon by Respondents, where the applicant pursued claims explicitly directed to "displaying on the portable signaling unit ... longitude and latitude coordinate data" and "wherein the displaying step further comprises displaying a symbol

superimposed on a digitized map." U.S. App. No. 11/404,206, Amendment at 3-4 (March 18, 2009). The examiner rejected these claims based on a lack of written description in the specification, and the applicant canceled the claims. *Id.*, Office Action at 3 (May 7, 2009), Amendment (October 7, 2009). The Staff thus agrees with Respondents that the construction of "display" should not encompass an LCD screen on the portable signaling unit. (SMIB at 13).

In reply, Complainant argues that the specification lists several different purposes for the invention, including: "It is still a further object and advantage of the invention to provide a portable, intelligent signaling unit." ('124 Patent at 5:1-2). Several of these objectives do not mention a personal security system, an alarm unit, or a central dispatch station. (CMRB at 32-33). Complainant distinguishes *Decisioning.com* because the disputed term there, "remote interface," was not used in the specification. (CMRB at 33-34). In contrast, "display" appears explicitly in the specification of the '124 Patent and refers to both a computer monitor at the central dispatch station and an LCD on the portable signaling unit. (*Id.*). Complainant again emphasizes that the term "display" should have the same meaning in the '124 Patent and the '795 Patent. *See NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005) ("Because NTP's patents all derive from the same patent application and share many common terms, we must interpret the claims consistently across all asserted patents.") Complainant also argues that the cancellation of claims during prosecution does not amount to a disavowal of claim scope because the pending claims were rejected on more than one ground. (CMRB at 34-36).

Respondents' reply brief acknowledges that the specification describes displays on both the portable signaling unit and the display console of the central dispatch station, but they argue that these are two distinct physical embodiments. (RMRB at 8-9). In Respondents' view, the "display" claimed in the '124 Patent is the "computer monitor screen" or "display console" in the

central dispatch station, while the '795 Patent claims the small LCD display on the portable signaling unit. (*See* '795 Patent at 14:46-49). Respondents argue that construing "display" in the '124 Patent to include an LCD screen on the portable signaling unit would result in an illogical reading of claim 1 because the terms "network" and "wireless communication system" would refer to the same structure communicating between the computer and the portable signaling device. (RMRB at 10-11). Respondents dispute Complainant's reading of the parent file history, where the applicant clearly referenced two different displays in the specification used for two different purposes, one at a console in the central dispatch station for displaying the user's location on a map, and another small LCD display on the portable signaling unit for displaying short messages. (RMRB at 12-13). Respondents also dispute Complainant's application of the doctrine of claim differentiation, arguing that Respondents proposed construction does not limit claim 1 to a display console at a central dispatch station, as claimed in claim 6; Respondents only seek to exclude a display on the portable signaling unit. (RMRB at 13-14).

In Staff's Reply, the Staff agrees with Respondents that the construction of "display" should exclude an LCD display on the portable signaling unit. (SMRB at 4-5). The Staff also disputes Complainant's interpretation of the claim construction from the 809 Investigation, where the ALJ explicitly recited language from the specification to construe "screen of the mobile device" as "the physical display screen on the mobile device." *Certain Devices for Mobile Data Communication*, Inv. No. 337-TA-809, Order No. 46 at 69-70 (September 28, 2012). The Staff further cites the context of claim 1, where the "display" is claimed separate from the elements in the portable signaling unit. (SMRB at 6-7). Moreover, the claim states that "the display is remote from the computer and connected to the computer by a network," which is not consistent with the small LCD display screen described in the specification. (*Id.* at 7-8). The specification merely

states that the portable signaling unit "can also be configured with a small LCD display screen for the hearing impaired to receive messages from the central dispatch station." ('124 Patent at 14:44-47). The Staff argues that while this display is claimed in the '795 Patent, the '124 Patent claims a different display in claim 1, which requires the display of "a map having a symbol identifying the location of the portable signaling unit." ('124 Patent at 14:62-63; SMRB at 8-9).

At the *Markman* hearing, counsel discussed the fact that in Figure 2 of the '795 Patent, a small LCD display screen 128 is explicitly depicted, but in Figure 2 of the '124 Patent, there is no LCD display screen. (Tr. at 23:24-27:3).

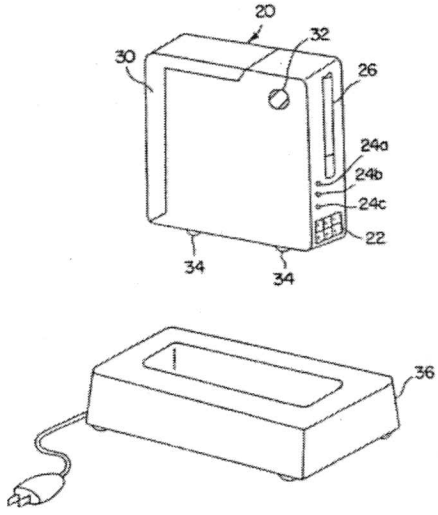

FIG. 2

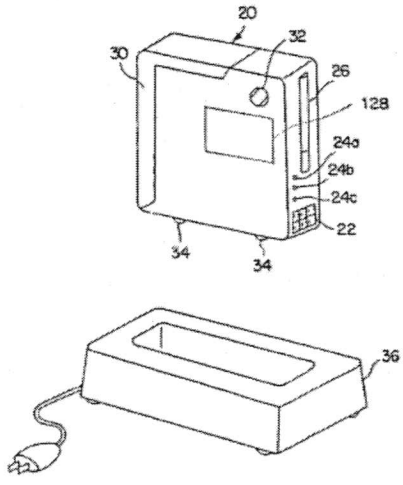

FIG. 2

'124 Patent Figure 2 (left); '795 Patent Figure 2 (right)

Counsel for Complainant pointed out that despite the difference in the figures, there is a disclosure of "a small LCD display screen for the hearing impaired to receive messages" in the '124 Patent. (*Id.* at 27:4-28:4). Complainant also argued that, contrary to Respondents' arguments, there would be some utility for a display on the portable signaling unit showing a map in an emergency situation. (*Id.* at 32:6-33:13). Counsel for Respondents re-emphasized the points from their briefs, arguing that the identification of a separate network and wireless communication system would

not make sense if the display were on the portable signaling unit, (tr. at 36:11-37:17), and that statements in the prosecution history are consistent with the disclosure of two distinct displays in the specification. (*Id.* at 38:24-41:9). The Staff pointed to the passages of the specification supporting their construction, (tr. at 42:18-44:18), and agreed that they would accept Respondents' construction. (*Id.* at 45:2-16). The Staff also highlighted the parent patent claims where the elements of the invention disclosed in the specification were more explicitly claimed, (*id.* at 47:19-49:7), and identified the canceled claims from the prosecution history of the '124 Patent, (*id.* at 49:9-50:13), arguing that the patent examiner would have understood from context that the display in claim 1 was located in the central dispatch station rather than on the portable signaling unit. (*Id.* at 50:16-51:12).

b. Analysis

After considering the parties' arguments, I agree with Respondents and Staff that the correct construction of "display" excludes a display located on the portable signaling unit. The separation between the claimed "display" and "portable signaling unit" is apparent from the context of claim 1 of the '124 Patent. The claim describes a method whereby "data regarding the position of the portable signaling unit" is transmitted "from the portable signaling unit and over a wireless communication system to a computer" where a location is determined and displayed on a display that is "remote from the computer and connected to the computer by a network." ('124 Patent at 14:51-65). The structure of the claim sends data from the portable signaling unit to a computer and then from the computer to a display, and this could not make sense if the claimed display were part of the portable signaling unit. Moreover, as Respondents' argue, the claimed "wireless communication system" connecting the portable signaling unit and the computer would be one and the same with the "network" connecting the computer and display. The separation of

the "display" from the "portable signaling unit" is also apparent from the preamble of claim 1, which describes "[a] method for tracking a portable signaling unit." It would make no sense to track the location of a portable signaling unit from a display on the portable signaling unit itself. The reference to tracking means that a third party is viewing the location of the portable signaling unit, and this would be inconsistent with a display located on the portable signaling unit.

The specification also supports a construction that excludes a display located on the portable signaling unit. There is no disclosure of a display located on the portable signaling unit that displays a map identifying the location of the portable signaling unit. The specification repeatedly describes the objects of the invention to be displaying the location of an individual at a central dispatch station for providing emergency assistance. ('124 Patent at 4:22-26, 4:35-41, 6:22-28). In the preferred embodiment, computer monitor screens at the central dispatch station display map information. (*Id.* at 8:29-32, 8:40-44, 13:34-43, 13:48-58). The only disclosure of a display on the portable signaling unit is "a small LCD display screen for the hearing impaired to receive messages from the central dispatch station." (*Id.* at 14:44-47). This small LCD screen cannot be the display claimed in claim 1 of the '124 Patent.

Complainant's briefs cite case law advocating a heavy presumption for plain and ordinary meaning, but that precedent pre-dates *Phillips*, and when reading the term "display" in the context of the claim and the specification, I find that a computer monitor screen separate from the portable signaling unit is the construction that "most naturally aligns with the patent's description of the invention." *Phillips*, 415 F.3d at 1316. I agree with Complainant that there is no explicit disclaimer regarding a "display" in the prosecution history, but the canceled claims show that the applicant knew how to explicitly claim a display on the portable signaling unit and chose not to pursue those claims in the '124 Patent. While not dispositive, this evidence supports Respondents'

and Staff's construction. When issued claim 1 is read in the context of canceled claim 2 from the prosecution history, it is even more apparent that the claimed display is separate from the portable signaling unit. While negative limitations are typically disfavored, the Federal Circuit has upheld such constructions where the language of the claim suggests the limitation and the specification fails to disclose any embodiment to the contrary. *American Calcar, Inc. v. American Honda Motor Co., Inc.*, 651 F.3d 1318, 1339-40 (Fed. Cir. 2011). The language of claim 1 here suggests a display separate from the portable signaling unit and associated with the computer.

Complainant raises a claim differentiation argument with respect to dependent claim 6, but a construction limiting the display to a "computer monitor" does not confine the claim to a display console at a central dispatch station. (*See* '124 Patent at 15:10-11). The referenced "computer" is already claimed in claim 1, and a "computer monitor" can be any display connected to that computer, as specified by the claim. (*See* '124 Patent at 14:62-65). Complainant also argues for a consistent construction for "display" in the '124 Patent and '795 Patent, but while it is preferable to construe a claim term consistently across related patents, the specification here describes two distinct displays. The "display" in the '795 Patent clearly refers to the small LCD screen on the portable signaling unit, ('795 Patent at 14:46-49, Figure 2 (item 128)), while the "display" in the '124 Patent refers to the display consoles in the central dispatch station. ('124 Patent at 8:29-32, Figure 1 (item 92)). The fact that the patent uses the term "display" to describe both of these elements does not make them interchangeable. This is even more apparent in the claims of one of the parent patents, U.S. Patent No. 6,624,754 (the "'754 Patent"), where a "display" is explicitly claimed in several dependent claims: Claim 3 refers to "a display ... to allow a person monitoring the central processing station to dispatch appropriate emergency assistance," ('754 Patent at 15:29-35), while claim 15 states: "wherein the portable signaling unit further comprises a

display to present data from the central processing station." (*Id.* at 16:20-23). While the term "display" is used in both of these claims, this cannot suggest that the "display" in claim 3 may be located on the portable signaling unit or that the "display" in claim 15 may be located at the central processing station. There is no reason to enforce one construction across all of the claims in this patent family when the specification and claims clearly refer to two distinct displays, and the relevant embodiment can be easily discerned from the context of the claim language.

Accordingly, I construe "display" in the '124 Patent to be a computer monitor screen separate from the portable signaling unit.

ii. "Second Receiver" Terms

The parties dispute the construction of the term "second receiver," which appears in claims 13-15, 17, and 20-21 of the '124 Patent, the term "second receiver adapted to receive a third signal," which appears in claim 1 of the '795 Patent and is referenced as the "second receiver" in dependent claims 8, 10, 12 and 19, and the term "second receiver adapted to receive a nearby signal," which appears in claims 23, 27 and 30 of the '795 Patent and is referenced as the "second receiver" in dependent claims 26 and 33.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
second receiver	Plain meaning or a radio frequency signal receiver	component that receives a radio frequency signal from a remote alarm switch unit	component which receives a radio frequency signal from an alarm unit
second receiver adapted to receive a third signal **the second receiver**	Plain meaning or a radio frequency signal receiver capable of receiving a radio frequency signal	component designed to receive a radio frequency signal from a remote alarm switch unit	component designed to receive a radio frequency signal from an alarm device

second receiver adapted to receive a nearby signal **the second receiver**	Plain meaning Or a radio frequency signal receiver capable of receiving a short range radio signal	component designed to receive a radio frequency signal within a preset boundary of a remote alarm switch unit	component designed to receive a radio frequency signal from a nearby alarm device

The dispute regarding each of these "second receiver" terms is similar, with the Respondents and Staff proposing constructions that limit the second receiver to a component that receives signals from an alarm device while Complainant argues that these terms should have their plain and ordinary meaning.

a. The Parties' Positions

Complainant argues that the "second receiver" terms are all easily understandable with readily apparent meanings. (CMIB at 19). The term "receiver" is used throughout the common specification to refer to different radio receivers, consistent with its plain and ordinary meaning: "GPS receiver" ('124 Patent at 8:52-55 12:29-33; '795 Patent at 8:56-59, 12:32-36); "cellular telephone receiver" ('124 Patent at 9:59-64, 12:17-21; '795 Patent at 9:64-10:1, 12:20-24); and "radio receiver" ('124 Patent at 1:61-65, 3:11-13, Fig. 6; '795 Patent at 1:66-2:3, 3:16-18, Fig. 6). Complainant thus submits that a "second receiver" is merely a radio receiver that is distinguished from the "first receiver." (CMIB at 21). Complainant argues that the specification provides no special meaning to the term "second receiver" and there is no express disavowal of claim scope in the intrinsic record. (CMIB at 21-22). Complainant cites statements from the examiner during prosecution of the '795 Patent where a prior art GPS receiver was read on the claimed second receiver, refuting Respondents' construction limiting the term to a receiver for an alarm unit. (*Id.* at 22-23; U.S. Pat. App. No. 13/404,977, Office Action at 11-12 (April 11, 2012)). Complainant further argues that the terms "adapted to receive a third signal" and "nearby signal" are also easily

understandable words that do not have a novel meaning in the Asserted Patents. (*Id.*). And Complainant argues that importing "alarm unit" limitations would create additional disputes regarding the meaning of these terms that would require further construction. (*Id.* at 23-24).

Respondents argue that the term "second receiver" should be construed consistently in the two Asserted Patents, and the specification provides an explicit definition of the invention that defines these terms as a "component that receives a radio frequency signal from a remote alarm switch unit." (RMIB at 11-13). Respondents argue that the specification references "the present invention" to include a remote alarm unit, and the "second receiver" must therefore be construed to receive a signal from an alarm unit. (*Id.* at 13-14). Respondents contend that the only disclosure of a second receiver in the specification is the receiver circuit 116 that detects signals from the remote alarm unit. (*Id.*; '124 Patent at 10:1-6, 10:23-27, 11:4-6, 11:28-30, 11:56-61; '795 Patent at 10:5-10, 10:27-32, 11:5-10, 11:28-33, 11:58-12:2). Focusing on the claim language "adapted to," Respondents cite Federal Circuit case law construing this to mean "designed to," *see In re Gianelli*, 739 F.3d 1375 (Fed. Cir. 2014), *Aspex Eyewear, Inv. C. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012), and argue that the second receiver in the specification is designed to receive a signal from a remote alarm switch. (RMIB at 14-15). Respondents cite the prosecution history and argue that the examiner mapped the "second receiver" in the claims to receivers detecting signals from remote alarm switch units. (*Id.* at 16-18). And Respondents criticize Complainant for proposing a construction that would expand the invention beyond the definition of the "present invention" in the specification. (*Id.* at 18-19). For the phrase "nearby signal," Respondents cite the specification's reference to "preset boundaries," and "predefined boundaries." (*Id.* at 19; '795 Patent at 5:25-29, 7:1-4). Respondents argue that the invention is defined as a security system with components that are designed "to be worn or carried

by an individual being monitored." ('795 Patent at 5:65-6:1). And during prosecution, the examiner cited prior art against the '795 Patent disclosing a "predetermined range" that was "just a few feet." (U.S. Pat. App. No. 13/404,977, Office Action at 5-6 (April 11, 2012).

The Staff agrees with Respondents' construction but refers to a more generic "alarm unit" in their construction: "component which receives a radio frequency signal from an alarm unit." (SMIB at 13-15). The Staff argues that one of ordinary skill in the art would read the specification and prosecution history of the '124 Patent and understand that the "second receiver" should be limited to a component that receives signals from an alarm unit, referencing the "remote alarm radio receiver" in the specification. (*Id.* at 14-15). The Staff further argues that the "third signal" referenced in the '795 Patent must be the signal from an alarm unit. (*Id.* at 22-23). And the Staff agrees with Respondents' construction of the term "adapted to" to mean "designed to." (*Id.* at 23-24). But for the term "nearby," the Staff merely proposes the plain and ordinary meaning rather than adopting Respondents' construction. (*Id.* at 24-25). The Staff argues that Complainant's construction would broaden the scope of the claims beyond the limited disclosure of the specification, citing the Federal Circuit precedent in *Decisioning.com v. Federated Department Stores, Inc.*, 527 F.3d 1300, 1308 (Fed. Cir. 2008). (SMRB at 9-10). Staff argues that the claim should not be read to cover a device that interacts with a Bluetooth earpiece or remote speaker because these features were not disclosed by the inventors. (*Id.* at 9-10). Staff maintains that the invention should be limited to a device with an alarm unit and that a broader construction would create confusion between the different types of receivers disclosed in the specification. (*Id.* at 10-11).

In Reply, the Complainant characterizes Respondents' and Staff's "definition of the invention" argument as flawed because there is no requirement that all claims of a patent cover

every aspect of an invention. (CMRB at 15-16). Complainant points out that there is no definition for the term "second receiver" in the specification, and none of the cases cited by Respondents and Staff support the reading of a "definition of the invention" into the construction of a term that is not referenced in the alleged definition. (*Id.* at 16-17). Complainant argues that, in contrast to the cases cited by Respondents and Staff, there is no clear intention to limit claim scope in the intrinsic record, and the Respondents and Staff have not identified any specific term as the subject of a limiting intention. (*Id.* at 17-18). Complainant also argues that certain embodiments do not require a remote alarm switch, citing the use of the portable signaling unit's local alarm push-button switches. (*Id.* at 18-20 *citing* '795 Patent at 8:50-55, Figure 2). Complainant further contends that the "second receiver" referenced in claim 1 of the '795 Patent may refer to either the GPS receiver or the remote alarm receiver, referencing dependent claim 8, which adds a GPS limitation. (*Id.* at 21-23). Complainant does not dispute that the term "adapted to" can mean "designed to" but argues that the claim language only specifies that the second receiver is designed to receive a generic third signal. (*Id.* at 23-24). Complainant dismisses Respondents' citation to the file history as inconsequential and contradictory to another statement by the patent examiner mapping the "second receiver" to a GPS receiver. (*Id.* at 24-25). Complainant further argues that "nearby signal" should receive its plain meaning because there is no definition of this term in the specification. (*Id.* at 25-27). While the specification discusses the distance between the portable signaling unit and the alarm unit, and the location of a person within preset boundaries, there is no discussion of a boundary for the signal itself. (*Id.*).

Respondents' Reply Brief argues that Complainant's construction is divorced from the specification and claims. (RMRB at 14-15). Respondent cites to explicit definitional statements of the invention: "the present invention is a personal security and tracking system that comprises a

portable signaling unit and a remote alarm switch unit." (*Id.* at 15-16; '795 Patent at 5:65-67). Respondents argue that the specification is consistent with this definition of the invention, and accuses Complainant of ignoring the specification. (*Id.* at 16-18). And Respondents cite several cases limiting general claim language based on definitions of the invention from the specification. (*Id.* at 18-19). Respondents further argue that their construction gives meaning to all the terms in the claim, emphasizing that the phrase "adapted to" must mean "designed to" perform some specific purpose, and finding that purpose in the specification. (*Id.* at 20-22). Respondents also argue that the term "third signal" must be construed in light of the specification to be a radio frequency signal from the remote alarm switch unit. (*Id.* at 23-24). And the only "nearby signal" described in the specification is the signal from the alarm unit. (*Id.* at 24-25). Respondents dispute Complainant's reference to the file history, arguing that the examiner's reference to a GPS second receiver in the prior art was in the context of the prior art, not the "second receiver" of the '795 Patent claims. (*Id.* at 25-27). The Staff's Reply Brief also disputes Complainant's argument that the "second receiver" could be the GPS receiver in claim 1 of the '795 Patent because the GPS receiver is explicitly claimed in other limitations of other claims. (*Id.* at 17-18). Respondents further refute Complainant's suggestion that adopting a "remote alarm switch" limitation would create ambiguities, asserting that the accused devices do not have any alarm units and that any dispute could be resolved during the infringement phase. (*Id.* at 27-28).

At the *Markman* hearing, counsel for Complainant again cited certain embodiments where the remote alarm switch was not necessary. (Tr. at 14:14-23; 15:5-11). Complainant also emphasized that different claims in a patent family can cover different subject matter from a specification, arguing that "it's often the case that there is more than one invention disclosed in a patent." (Tr. at 17:5-11). Complainant argued that the focus should be on the claims to define the

invention and conceded that its constructions would cover devices with no alarm functions. (Tr. at 54:22-57:20). Complainant also referenced the argument in its brief identifying the GPS receiver in the specification as an alternative "second receiver." (*Id.* at 58:9-66:11). Counsel for Complainant identified its "best argument" as the plain meaning of the claim language being consistent with a radio frequency receiver without any "hook" in the claim referencing an alarm unit. (*Id.* at 63:12-64:13). Counsel for Respondents disputed Complainant's argument that the specification disclosed embodiments without a remote alarm switch, emphasizing that this was an integral part of the invention. (Tr. at 66:14-69:8). Respondents further argued that the term "adapted to" is used throughout the claim language, and that this language requires a reference to the specification to find the purpose of the "second receiver" limitation. (*Id.* at 69:9-72:1). Respondents reiterated that the "present invention" is defined to include a portable signaling unit, remote alarm switch, and central dispatch station and that every embodiment includes a remote alarm switch, emphasizing that the distance-checking feature requires the two separate devices. (*Id.* at 72:2-84:4). And Respondents presented their evidence from the specification that a "nearby signal" is associated with a preset boundary. (*Id.* at 84:5-86:17). The Staff pointed out that in dependent claims 12-14 of the '124 Patent, the "second receiver" cannot refer to the GPS receiver, which is already claimed in claim 1. (Tr. at 87:23-98:5). And in claim 23 of the '795 Patent, which references a "nearby signal," the GPS receiver also could not be the "second receiver." (*Id.* at 102:1-6). Staff argued that the "second receiver" is limited to the remote alarm radio receiver in these asserted claims, and the patentee thus limited its invention to the preferred embodiment. (*Id.* at 101:13-20).

The Court requested supplemental briefs regarding this term at the *Markman* hearing, and in its brief, Complainant argues that multiple Federal Circuit cases forbid the importation of a

"remote alarm switch" limitation into the "second receiver" terms. (CMSB at 1-9). In particular, Complainant cites *Liebel-Flarsheim Co. v. Medrad, Inc.*, where the Federal Circuit refused to construe a "syringe receiving opening" term to require a pressure jacket that was included in all disclosed embodiments. 358 F.3d 898, 903-912 (Fed. Cir. 2004). The patent at issue in *Liebel-Flarsheim* included statements in the Summary of the Invention describing the objectives and principles of "the present invention" in reference to pressure jackets, but the Federal Circuit held that "[t]he fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives." *Id.* at 908-909. Complainant also cites several additional cases where the Federal Circuit construed terms broadly despite the consistent disclosure of a limitation in the specification. *See Innova/PureWater v. Safari Water Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004) (construing "operatively connected" without a "tenacious engagement" limitation that was found in the specification); *i4i Limited Partnership v. Microsoft Corp.*, 598 F.3d 831, 841-43 (Fed. Cir. 2010) (construing "storing a document's content and metacodes separately" without requiring storage in separate files, as disclosed in the specification); *Kara Technology Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1346-47 (Fed. Cir. 2009) (reversing a construction of "security indicia" that required a key described in the specification); *Ventana Medical Systems, Inc. v. Biogenex Labs., Inc.*, 473 F.3d 1173, 1181 (Fed. Cir. 2006) (declining to construe "dispensing" as "direct dispensing"); *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 689 (Fed. Cir. 2008) (refusing to import a "global controller" limitation into the claims when this was claimed in another related patent).

Respondents' supplemental brief cites Federal Circuit cases where claims were limited based on descriptions of the invention in the specification. (RMSB at 2-7). In *Alloc Inc. v.*

International Trade Commission, the Federal Circuit held that "where the specification makes clear at various points that the claimed invention is narrower than the claim language might imply, it is entirely permissible and proper to limit the claims." 342 F.3d 1361, 1370 (Fed. Cir. 2003). The Federal Circuit in *Alloc* agreed with the Commission's claim constructions requiring a limitation of "play" between floor panels where the objectives of the invention explicitly identified this limitation. *Id.* at 1368-70. In *Regents of the Univ. of Minn. v. AGA Medical Corp.*, the Federal Circuit held that "affixed" and "conjoint" disks required two separate disks based on the embodiments in the specification and statements in the prosecution history. 717 F.3d 929, 936 (Fed. Cir. 2013). In *Microsoft v. Multi-Tech Systems*, the Federal Circuit held that "the specification shared by all three patents leads to the 'inescapable conclusion' that the communications between the local and remote sites of the claimed inventions must occur directly over the telephone line," and the otherwise plain and broad meaning of the terms "sending," "transmitting," and "receiving" were thus limited to transmission over a telephone line rather than over the internet. 357 F.3d 1340, 1348 (Fed. Cir. 2004). The Staff's supplemental brief cites *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, where the Federal Circuit construed the term "body" to require a one-piece structure, consistent with the description of "the invention" in the specification. 653 F.3d 1296, 1305 (Fed. Cir. 2011). (SMSB at 1-5). The Staff also argues that in the context of the '124 Patent, the "second receiver" cannot be the GPS receiver. (SMSB at 5-6). And the Staff cites statements in the specification identifying the "alarm trigger and separate signaling unit" as advantages over the prior art. (*Id.* at 6-7).

b. Analysis

After considering the parties' arguments, I find that the "second receiver" terms should have their plain and ordinary meaning. The dispute over these claim terms raises difficult

questions, and I am sympathetic to Respondents' and Staff's arguments regarding the scope of the invention. But I find that the case law does not support the importation of an "alarm unit" limitation into these claim terms based on the intrinsic record here. The specification of the Asserted Patents indisputably describes an alarm system as "the invention," but I cannot find a compelling reason to import this definition of the invention into the "second receiver" terms. While the "second receiver" claim language clearly corresponds to the remote alarm radio receiver in the specification, there is no evidence that the patentee intended to incorporate an alarm unit into the claims by using the term "second receiver." Unlike the cases cited by Respondents and Staff, the patentees never distinguished their invention from the prior art based on any special characteristics of the "second receiver." While a separate remote alarm switch unit may be an essential part of the invention described in the specification, the "second receiver" terms are not an appropriate vehicle for importing this limitation into the claims.

Respondents and Staff focus on a definition of "the invention" in the Summary of the Invention in the specification:

> The present invention is a personal security and tracking system that comprises a portable signaling unit and a remote alarm switch unit, each to be worn or carried by an individual being monitored. The system further comprises a central dispatch station to which distress signals and position coordinates are transmitted.

('124 Patent at 5:60-65; '795 Patent at 5:65-6:3). They argue that this broad definition limits the invention to a system that includes a remote alarm switch unit. They cite Federal Circuit cases like *Retractable Techs.*, where statements in the specification that "[t]he invention is a retractable tamperproof syringe" that "features a one piece hollow body" were used to limit the scope of the term "body." 653 F.3d at 1305. *See also AGA Medical*, 717 F.3d at 936 (limiting the invention to require the joining of two separate disks based on a statement that "[t]he present invention ... includes first and second occluding disks which are attached to one another."). But while in those

cases, the disputed claim language was clearly referenced in the Summary of the Invention, it is not apparent how the definition of "the invention" in the Asserted Patents should be applied to the "second receiver" terms. Respondents and Staff argue that the "second receiver" must be construed as a receiver for signals from the "remote alarm switch unit," but there is no reference to any specific receiver in the definition of "the invention." I agree with Respondents and Staff that a remote alarm switch unit is a core component of the security and tracking system of the Asserted Patents, but this is not sufficient to dictate the construction of the "second receiver" terms.

While the definition of "the invention" includes a remote alarm switch unit, this does not necessarily imply that every claim of the Asserted Patents must reference an alarm unit. "The fact that a patent asserts that an invention achieves several objectives does not require that each of the claims be construed as limited to structures that are capable of achieving all of the objectives." *Liebel-Flarsheim*, 358 F.3d at 908. It would be plainly incorrect to require an alarm unit in every claim of the Asserted Patents without considering the language of each claim. Respondents and Staff have not taken the same rigid position on the definition of "the invention" in the context of claim 1 of the '124 Patent, which focuses on the location tracking method of the disclosed invention and does not reference a "second receiver." Respondents and Staff also have not proposed to import a "central dispatch station" limitation into any claims of the '795 Patent despite the identification of that element in the definition of "the invention." Complainant correctly identifies statements in the specification suggesting that the remote alarm switch unit is an optional component, for example: "Either or both of portable signaling unit 20 and remote alarm switch unit 40 can be worn or carried by an individual 50 being monitored." ('124 Patent at 8:1-3; '795 Patent at 8:6-8). And in a situation that corresponds to the method claimed in the '124 Patent: "the central dispatch station can activate any portable signaling unit 20 to obtain an instant

display of the current location of the individual carrying the portable signaling unit 20." ('124 Patent at 14:7-10). Neither the specification nor the claims support Respondents and Staff's contention that "the invention" is defined to always include a remote alarm switch unit. It is apparent from the varied claims of the Asserted Patents that each claim relates to different aspects of the disclosed invention, which may or may not include an alarm unit. To import this limitation into the claims, there must be some motivation in the claim language itself, and the generic term "second receiver" is not a sufficient hook to read in an alarm unit.

In the '795 Patent, Respondents identify the phrase "adapted to" in the disputed terms "second receiver adapted to receive a third/nearby signal" as a motivation for importing the remote alarm switch limitation into the claims. (RMIB at 14-15; RMRB at 22-25). In *Aspex Eyeware Inv. v. Marchon Eyeware, Inc.*, cited by Respondents, the Federal Circuit construed "adapted to" to mean "designed or made to" satisfy certain limitations in the claim language, but the Court did not use this language to import limitations from the specification that were not stated in the claim. 672 F.3d 1335, 1349 (Fed. Cir. 2014) (construing "adapted to extend across respective side portions" as "designed or configured to extend across respective side portions."); *see also In re Giannelli*, 739 F.3d 1375 (Fed. Cir. 2014) (construing the claim language "adapted to … a rowing motion" as "made to," "designed to," or "configured to" allow the user to perform a rowing exercise). Respondents point out that "adapted to" is used throughout the claim language, but their interpretation of this phrase would require every limitation to be restricted to the preferred embodiment: *e.g.* the "transmitter adapted to transmit a first signal" would be limited to transmissions to a central dispatch station and the "first receiver adapted to receive a second signal" would be limited to receiving signals from a central dispatch station. This would be impermissible rewriting of the claim language, and it is not supported by the case law construing "adapted to"

terms. Complainant does not dispute that "adapted to" means "designed to," (CMRB at 23-24), and I find that this only requires that the "second receiver" is designed to perform the functions described in the claims.

Respondents and Staff also argue that the specification's consistent disclosure of a remote alarm switch unit justifies importing this limitation into the "second receiver" terms. As discussed above, Complainant responds to this argument by identifying certain embodiments where the portable signaling unit may be used without a remote alarm unit. (*See, e.g.* '124 Patent at 8:1-3, 14:7-10). But while these embodiments undercut Respondents' and Staff's argument regarding the definition of "the invention," they are not relevant to understanding how the specification relates to the claimed "second receiver." I agree with Respondents and Staff that when a "second receiver" is described in the specification, it is a receiver that detects signals from the remote alarm switch. (*See* '795 Patent at 11:1-16, 20-33 ("a radio frequency signal, with the unique code ... is sent from the alarm switch unit 40 to the portable signaling unit 20. The signal is detected by the remote alarm radio receiver 116.")). Complainant argues that claim 1 of the '795 Patent could be read so that the GPS receiver is the "second receiver," but in the disclosed embodiments that include a GPS receiver, there is also a remote alarm radio receiver. (*See* '795 Patent at 12:32-36, Fig. 6). This is not a case where excluding a GPS receiver from the scope of a "second receiver" construction would read out a preferred embodiment. I agree with the Staff that reading the "second receiver" on the remote alarm radio receiver is the most reasonable application of the claims to every embodiment. The fact that the "second receiver" could be read on the GPS receiver or any radio receiver just demonstrates how broad the scope of claim 1 is under Complainant's construction. But while I find that Respondents and Staff are correct about the specification's consistent disclosure of a "remote alarm radio receiver," I am mindful that the

Federal Circuit "expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment." *Phillips*, 415 F.3d at 1323.

The cases cited by Respondents and Staff relied on more compelling facts than I can find in the intrinsic record of the Asserted Patents. In *Decisioning.com*, the court relied on the specification's emphasis of several features unique to publicly-accessible kiosks to exclude personal computers from the term "remote interface." 527 F.3d at 1310-11. In *Alloc v. ITC*, the specification emphasized the advantages of a "play" limitation and the court was able to cite statements in a parent application emphasizing its importance. 342 F.3d at 1369-72. In *Multi-Tech*, the court identified a statement by the applicant during prosecution describing its invention as operating over a standard telephone line. 357 F.3d at 1348-49. While the present record has similarities to those Federal Circuit cases, I find that Respondents' and Staff's arguments fall short. The specification here does not discuss the advantages of a receiver for signals from an alarm unit in comparison to a more general radio receiver. And there is no evidence that the inventors incorporated a remote alarm radio receiver to distinguish their invention from the prior art. The intrinsic record of the Asserted Patents is weaker here than in the cases relied upon by Respondents and Staff, and I thus find that although it is a close call, the consistent description of a remote alarm switch unit in the specification is not enough to limit the "second receiver" terms to a remote alarm radio receiver. The facts here are similar to those considered by the Federal Circuit in *Laryngeal Mask Co. Ltd. v. Ambu*, which the court characterized as a "close case" after reviewing the claim language, specification, and file history. 618 F.3d 1367, 1371 (Fed. Cir. 2010). Despite finding "a specification replete with discussion of a tube joint," the court declined to read this limitation into the construction of the term "backplate,"

concluding that "[t]he term backplate has a somewhat self-descriptive nature" with a broad meaning. 618 F.3d at 1370-1374. *See also Liebel-Flarsheim*, 358 F.3d at 908-909 (finding that statements regarding the "present invention" were insufficient to support a narrow construction where there was no clear disavowal of the plain and ordinary meaning); *i4i v. Microsoft*, 598 F.3d at 842-44 (finding "no clear intent to limit the claim scope" in the specification despite the identification of certain advantages of the limitation in the specification).

Complainant, Respondents, and Staff all cite the prosecution history to support their proposed constructions, but the statements from the examiner regarding the "second receiver" limitations are inconsequential to the present claim construction dispute. While Staff is likely correct that the patent examiner understood the claims to be limited to an alarm system during prosecution, there is no explicit statement from either the examiner or the applicant limiting the invention to a "second receiver" that receives signals from an "alarm unit." The patentees may have received a patent with broader claims than the examiner intended, but there is no clear statement of that intent in the record. The prosecution history thus does not affect my claim construction of the "second receiver" terms.

The lack of a definitive statement in the specification or prosecution history further weighs against adopting Respondents and Staff's construction because the scope of an "alarm unit" limitation in the claims would be unclear to a person of ordinary skill in the art. Complainant rightly points out that the terms "remote alarm switch unit," "alarm unit," and "alarm device" would require further construction if applied to prior art or to accused devices. (CMIB at 23-24). There is no reference to an "alarm" in the claims of either the '124 or '795 Patents, and no party has taken a position in the *Markman* briefing on whether an "alarm unit" limitation would have a plain and ordinary meaning or would be limited to the implementations disclosed in the

specification. Respondents argue that this dispute would not materialize because the accused products would not infringe an "alarm" limitation under any interpretation, (RMRB at 27-28), but Complainant's have not conceded this argument. The lack of clear statements in the specification and file history would make it difficult to define the scope of the claims in an invalidity or infringement analysis, particularly in the areas of obviousness or the Doctrine of Equivalents. I am therefore disinclined to adopt Respondents' and Staff's constructions for the additional reason that the scope of their constructions is poorly defined.

Accordingly, I construe the term "second receiver" in the '124 Patent and '795 Patent to have its plain and ordinary meaning, which is a radio receiver different from the first receiver. I construe "second receiver adapted to receive a third signal" in the '795 Patent to be a second receiver designed to receive a third signal. And I construe "second receiver adapted to receive a nearby signal" in the '795 Patent to be a second receiver designed to receive a nearby signal, where "nearby" is read in the context of the "device in proximity to the cellular device" limitation as construed below in Section IV.C.v.

iii. "Security Code"

The parties dispute the construction of the term "security code," which appears in claims 1, 23, 27 and 30 of the '795 Patent.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
security code	Plain meaning Or a code that prevents unauthorized access to the device	sequence entered to first power the device into service where it can sense an alarm condition	Plain and ordinary meaning: For example, unique number or sequence

a. The Parties' Positions

Complainant argues that the term "security code" has a plain and ordinary meaning in the electronics space. (CMIB at 24-26). The specification describes a security code that allows access "by an authorized person," ('795 Patent at 10:21-24), and Complainant contends that this is consistent with the ordinary meaning for this term. (CMIB at 25). Complainant criticizes Respondents' proposed construction for improperly importing follow-on limitations from the specification, describing one possible result of entering the security code rather than construing the term itself. (*Id.* at 25-26).

Respondents propose the construction: "sequence entered to first power the device into service where it can sense an alarm condition." (RMIB at 30-32). This construction is based on the specification of the '795 Patent, which states:

> As shown in FIG. 5, the portable signaling unit 20 is first put into service by an authorized person, parent, or guardian who enters a security code at the main power on/off key pad 22. The portable signaling unit 20 is now in a stand-by mode so as to conserve battery power. In the stand-by mode only those circuits essential to sensing an alarm condition are powered on.

('795 Patent at 10:21-27). Respondents argue that this description limits the term "security code" to the specific purpose of powering on the device. (RMIB at 30-31). Respondents criticize Complainant's construction for focusing on unauthorized access when in the preferred embodiment, anyone has access to the device after the code is entered. (*Id.* at 31). Respondents suggest that the "security code" described in the patent is used primarily to prevent the deactivation of alarm features rather than to control access. (*Id.*) And Respondents argue that the "security" referred to in the patent is the security of the user, not the security of the device. (*Id.* at 31-32). Respondents also criticize Staff's proposed construction for reading the term "security" out of the claim. (*Id.* at 32).

The Staff interprets the claims and specification to use "security code" consistent with its

plain and ordinary meaning of a unique number or sequence to authenticate a valid user. (SMIB at 26-27). The Staff emphasizes that the term "security code" is only used once in the specification. (SMIB at 26; SMRB at 19-20). The Staff does not find any novel definition of "security code" in the specification or any disavowal of the plain meaning. (SMIB at 27). Staff thus argues that the term need not be construed. (*Id.*; SMRB at 19-20).

In Reply, Complainant emphasizes that care must be taken not to "improperly import[] a limitation from the specification into the claims." *Retractable Techs.*, 653 F.3d 1296, 1305 (Fed. Cir. 2011) (citing *Phillips*, 415 F.3d at 1323). (CMRB at 36-38). Complainant refutes Respondents' arguments regarding the use of the term "security" by citing to the explicit reference to "an authorized person" in the specification, which shows that the patent was in fact concerned with restricting unauthorized users. (CMRB at 39-40). Respondents' Reply Brief argues that the "security code" in the '795 Patent should be analogized to a home alarm system, where a code is used to power on the alarm circuits. (RMRB at 31). Respondents also argue that Complainant's construction would exclude the preferred embodiment, where a security code is only used to power on the device but is not subsequently needed to prevent unauthorized access by others. (RMRB at 32-33). Respondents further criticize the Staff's construction for imposing a limitation that the code be "unique," which is not supported in the specification. (*Id.* at 33-34).

At the *Markman* hearing, counsel for Complainant explained that its plain meaning construction encompassed the specific embodiment that Respondents identify in the specification but argued that it was improper to limit the construction to that embodiment. (Tr. at 106:19-109:6). Complainant argued that the term "security code" is clearly used in the specification to refer to a code entered on a keypad, and not to refer generally to the personal security of the user as discussed elsewhere in the patent. (*Id.* at 112:17-113:11). And Respondents' arguments about the

device being universally accessible after the security code is entered would apply to any security system. (*Id.* at 113:18-114:8). Counsel for Respondents again emphasized that in the preferred embodiment, the security code is used to turn on the device and place it into a stand-by mode. (Tr. at 115:19-122:14). The Staff argued that it is at least ambiguous whether the security code described in the specification powers on the device, or if there is a separate on/off button that is pressed prior to entering the security code. (Tr. at 131:1-135:23).

b. Analysis

After considering the parties' arguments, I find that the term "security code" should have its plain and ordinary meaning. Respondents' proposed construction reads too much from the short passage in column 10 of the specification, and there is nothing there that limits the term "security code" to anything other than its ordinary meaning. (*See* '795 Patent at 10:21-27). I agree with Complainant and Staff that it is at least ambiguous whether entering the security code powers on the device in the preferred embodiment. I also find that Respondents mischaracterize the scope of the proposed constructions of the Complainant and Staff. There is nothing in the plain meaning constructions for this term that would require a "security code" to foreclose access from all unauthorized users at all times. I do agree with Respondents, however, that there is no explicit reference to "unauthorized access" or a "unique number or sequence" in the specification. I thus decline to explicitly adopt either Complainant's or Staff's constructions for this term, although I agree that the term is used in the patent consistent with its plain and ordinary meaning.

Accordingly, I construe the term "security code" in the '795 Patent to have its plain and ordinary meaning, which is a code that allows an authorized person to access the device.

iv. "Standby Mode" Terms

The parties dispute the construction of the term "standby mode," which appears in claims 8, 17, 23, 30 and 33 of the '795 Patent, the term "leave the standby mode," which appears in claims 8, 23 and 33 of the '795 Patent, and the term "leaves the standby mode," which appears in claims 18 and 19 of the '795 Patent.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
standby mode	Plain meaning Or a battery conservation mode	mode in which only those circuits essential to sensing an alarm condition are powered on	mode in which only those circuits essential to sensing an alarm condition are powered on
leave[s] the standby mode	Plain meaning Or exit[s] a battery conservation mode	power[s] on all of the remaining circuits that were powered off in standby mode	power[s] on the non-essential circuits

a. The Parties' Positions

Complainant argues that "standby mode" has a plain and ordinary meaning, which is a low-power mode, such as a sleep mode. (CMIB at 26-29). Complainant cites a case from the Eastern District of Texas where "standby mode" was accorded its plain and ordinary meaning. *See SmartPhone Techs. LLC v. Research in Motion Corp.*, Nos. 6:10cv74 LED–JDL, 6:10cv580 LED–JDL, 2012 WL 3150756, at *16-17 (E.D. Tex. Aug. 2, 2012). Complainant criticizes Respondents' and Staff's constructions for "leave[s] the standby mode" for being inconsistent with their proposed construction for "standby mode." (CMIB at 28). And Complainant argues that Respondents' and Staff's constructions create ambiguities regarding the terms "alarm condition" and "non-essential circuits" that would require additional construction. (*Id.* at 28-29).

Respondents propose to construe "standby mode" as a "mode in which only those circuits

essential to sensing an alarm condition are powered on." (RMIB at 32-36). This construction comes directly from the specification of the '795 Patent, which states: "In the stand-by mode only those circuits essential to sensing an alarm condition are powered on." ('795 Patent at 10:25-27). Respondents argue that the "standby mode" cannot be merely a mode to conserve power, because the claims explicitly recite: "wherein the portable signaling unit has a standby mode to conserve power." (*Id.* at 15:35-36 (claim 8), 16:23-13 (claim 17)). *See also id.* at 16:45-46 (claim 23: "the cellular device has a standby mode to conserve power"), 18:10-11 (claim 30: "the cellular device has a standby mode to conserve power")). Respondents argue that construing "standby mode" to merely conserve power would violate the well-established rule that "claims are interpreted with an eye toward giving effect to all terms in the claim." *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006). (RMIB at 33-34). The Staff agrees with Respondents' construction, and argues that the statements in the specification define a novel meaning for "standby mode" in the context of the '795 Patent. (SMIB at 28-29).

Respondents' construction for "leave[s] the standby mode" is also grounded in the specification, which states: "The remainder of the circuits remain off until an alarm input is detected." ('795 Patent at 10:25-37). Respondents thus propose the construction: "power[s] on all of the remaining circuits that were powered off in standby mode." (RMIB at 36). The Staff's construction ties in the earlier sentence in the specification referencing "essential" circuits, proposing that "leave[s] the standby mode" means "power[s] on the non-essential circuits." (SMIB at 29-30).

In Reply, Complainant argues that the claim language is definitional: "a standby mode to conserve power" means that the standby mode is a power conservation mode. (CMRB at 41-42). Complainant argues that this is consistent with the ordinary meaning of the term and the

specification, which states: "The portable signaling unit 20 is now in a stand-by mode so as to conserve battery power." ('795 Patent at 10:24-25). (CMRB at 42-43). In Respondents' Reply, they argue that Complainant has offered no evidence for the ordinary meaning of "standby mode" in the timeframe of the '795 Patent. (RMRB at 35). Respondents also argue that Complainant's broad construction would allow a "standby mode" where the alarm circuits in the preferred embodiment were powered off, which would be counter to the purpose of the invention. (*Id.* at 36). Finally, Respondents downplay the potential ambiguity that would result from importing constructions referencing an "alarm condition" into the claims, citing case law where courts have revisited their interpretations in a rolling claim construction process. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 806 (Fed. Cir. 2007) (holding that claim construction process need not "purge every shred of ambiguity"); *Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308 (Fed. Cir. 2010) (noting that the district court's additional claim construction during trial was "not unusual"); *Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1377 (Fed. Cir. 2005) ("'[D]istrict courts may engage in rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.'").

At the *Markman* hearing, Complainant's counsel again argued that "standby mode" has a plain and ordinary meaning, which is referenced directly in the claim language: "standby mode to conserve power." (Tr. at 137:13-140:15). Complainant criticized Respondents and Staff for importing an "alarm condition" limitation into the claims, (*id.* at 141:5-144:1), and argued that one of ordinary skill in the art would understand the plain meaning of standby mode to be a battery conservation mode. (*Id.* at 144:8-148:9). Respondents' counsel emphasized the specification, pointing to the specific description of a standby mode where circuits essential to sensing an alarm condition are powered on. (Tr. at 156:9-161:9). The Staff argued that there is no straightforward

meaning for "standby mode," which requires turning to the specification. (Tr. at 163:21-165:4).

b. Analysis

After considering the parties' arguments, I find that the term "standby mode" should be construed as a mode where only essential circuits are powered on. And I adopt Staff's proposed construction for "leave[s] the standby mode," construing this phrase to mean "power[s] on the non-essential circuits." I reject Complainant's contention that there is a plain and ordinary meaning for "standby mode." There is no evidence in the record from any party providing an ordinary meaning for this term in the timeframe of the priority date for the '795 Patent. A standby mode may be different in different devices, and this is apparent from the standby mode described in the patent at issue in *SmartPhone Technologies*, a case cited by Complainant where Judge Love in the Eastern District of Texas declined to construe the term "standby mode." 2012 WL 3150756 at *16-17. In *SmartPhone Technologies*, the patent specified that the "standby mode is a power-conserving mode relative to said awake mode," and "when in standby mode, the responder device remains connectable but not discoverable." *Id.* at *17. Complainant argues that *SmartPhone Technologies* adopted the plain and ordinary meaning for "standby mode," but that is an incomplete characterization. The Judge considered the explicit claim limitations and held that "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." *Id.* In the patent at issue, this included specific claim limitations requiring that the device remain "connectable but not discoverable" in standby mode. *Id.*

The "standby mode" in the '795 Patent also has specific requirements defined by the claims and specification. Complainant argues that the patent defines "standby mode" to be a mode that conserves battery power, but this renders the term "standby" superfluous, since the claim already requires the mode "to conserve power." (*See, e.g.* '795 Patent at 15:35-36). The

term "standby" connotes standing by ready or waiting, and Complainant's construction improperly reads that meaning out of the claim. Respondents and Staff identified the relevant statement in the specification: "In the stand-by mode only those circuits essential to sensing an alarm condition are powered on." ('795 Patent at 10:25-27). The device is thus "standing by" to sense an alarm condition by leaving "essential" circuits powered on. And by limiting the circuits that are powered on, the invention also conserves power: "The portable signaling unit 20 is now in a stand-by mode to conserve power." (*Id.* at 10:24-25). This approach of powering on only essential circuits is not an incidental feature of the invention but is explicitly identified in the Summary of the Invention: "It is another object and advantage of the present invention to provide for circuits in the signaling unit not required in the actual sensing of an alarm to remain off or in the standby mode therefore conserving battery power." (*Id.* at 5:34-37, 6:58-62).

The claims of the '795 Patent also reflect a "standby mode" where only essential circuits remain powered on to sense certain signals. For example, claim 8 includes this pair of limitations:

> wherein the portable signaling unit has a **standby mode** to conserve power;
>
> wherein the portable signaling unit is adapted to **leave the standby mode** in response to a signal received by the first receiver, and adapted to leave the standby mode in response to a signal received by the second receiver;

('795 Patent at 15:35-40). These paired limitations correspond directly to the description in the specification of a device where only certain essential circuits are powered on in the standby mode. The "conserve power" limitation implies that some circuits are powered off in the standby mode, while the "adapted to leave the standby mode" limitation requires that at least the first receiver and second receiver remain powered on to respond to signals for leaving the standby mode.[2] This corresponds to the preferred embodiment described in the specification, where, *inter alia*, the cellular receiver and remote alarm receiver remain powered on to receive signals relating to an

[2] The same pair of limitations appears in claim 23 and in dependent claims 18-19 and 33.

alarm condition during standby mode. (*See id.* at 10:24-37). The specification further explains that "[u]pon sensing any one of the above described alarm input conditions, the microcontroller [] then turns on the remainder of the circuits." (*Id.* at 12:25-28). The claims and specification of the '795 Patent thus consistently describe an invention whereby the device only powers on certain essential circuits when in standby mode, and those essential circuits are used to detect conditions for leaving the standby mode.

In the specification, the conditions for leaving the standby mode are called "alarm conditions," and Respondents and Staff seek to import the "sensing an alarm condition" language directly from the specification into the claims. While the specification of the '795 Patent is inarguably directed to an alarm system, I decline to insert an "alarm condition" limitation into this construction for the reasons discussed above in Section IV.C.ii. regarding the "second receiver" terms. Moreover, I find that the "alarm conditions" in the specification can be defined in reference to the standby mode without introducing a potentially vague "alarm" limitation. In the specification, the "alarm conditions" include the activation of alarm buttons, unauthorized removal of the remote alarm switch or portable signaling unit, a low battery condition, and an affirmative request for a device's location from the central dispatch station. (*See* '795 Patent at 10:38-12:28). These examples may fall within a broader class of alarm conditions that could be elaborated through expert testimony, but the patent itself provides a more concrete limitation: "Upon sensing any of the above described alarm input conditions," the non-essential circuits are powered up and the device is "activated to the alarm mode" from the standby mode. (*Id.* at 10:38-40, 12:25-28). An "alarm condition" in the context of the '795 Patent is simply any condition that causes the device to leave the standby mode. And the circuits that remain powered during standby mode are "essential" because they can sense these conditions.

Complainant argues that an "essential circuits" limitation in this construction would also create problematic ambiguities, but the identification of certain essential and non-essential circuits is inherent in the claim language of the '795 Patent. As discussed above, certain claims already identify the first receiver and second receiver as circuits essential to detecting when to leave the standby mode. And in any given device with a standby mode where certain circuits are powered off, a person of ordinary skill in the art should be able to identify whether the circuits remaining on are only those essential to sense the conditions for leaving the standby mode. For example, if the system described in the preferred embodiment were analyzed in the context of claim 8, essential circuits would include the claimed first receiver, second receiver, decoder, and microcontroller, which are all used to detect the alarm conditions that take the device out of standby mode, but may not include the claimed speaker, microphone, display, transmitter, or unit identifier, which are only used after the device is in alarm mode. (*See* '795 Patent at 10:24-37, 14:54-15:9, 15:24-43). The '795 Patent describes a standby mode where the claimed device only powers on the circuits it needs to sense conditions for leaving the standby mode, and I find that a construction reflecting these limitations is the one "that stays true to the claim language and most naturally aligns with the patent's description of the invention." *Phillips*, 415 F.3d at 1316.

Accordingly, I construe the term "standby mode" in the '795 Patent to be a mode where only essential circuits are powered on. And I construe "leave[s] the standby mode" to mean power[s] on the non-essential circuits. In the context of these constructions, the essential circuits are only those circuits necessary to sense the conditions for leaving the standby mode.

v. "Device in Proximity to the Cellular Device"

The parties dispute the construction of the term "device in proximity to the cellular device," which appears in claims 23, 27 and 30 of the '795 Patent.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
device in proximity to the cellular device	Plain meaning Or device that is very near to the cellular device	a remote alarm switch unit within a preset boundary of the cellular device	where the alarm device is within a preset location range of the cellular device

a. The Parties' Positions

The Complainant argues that "device in proximity to the cellular device" should be given its plain and ordinary meaning of a "device that is very near to the cellular device." (CMIB at 29-34). The term "device" is used multiple times in the prosecution history and specification to refer to a broad class of electronic devices, including a "wrist-mounted device," "field monitoring device," "personal security device," "communication device[s]," "transmitting device," "charging device," and "cellular device." ('795 Patent at 2:25-26, 2:31-34, 3:6-8, 8:25-29, 15:12-13, 15:21-23, 15:51-57, 16:2-3, 18:18-21, 16:31-18:29). The term "proximity" appears once in the summary of the invention: "It is a further object and advantage of the present invention to provide an automatic means for summoning an emergency response without the necessity of intervention by the individual in distress should the portable signaling unit be separated from the proximity of the remote alarm switch." ('795 Patent at 5:1-5). Complainant argues that the usage of the terms "device" and "proximity" do not impart a special meaning to these terms or support a disavowal of claim scope. Citing the Commission opinion in *Certain Wireless Communication Devices, Portable Music & Data Processing Devices, Computers & Components Thereof*, Inv. No. 337-TA-745, Complainant argues that the term "proximity" should be given its plain and ordinary meaning. Comm'n Op. at 47-57 (September 17, 2012). Complainant also cites extrinsic dictionary definitions to support its plain meaning construction of "very near." And Complainant

criticizes Respondents' and Staff's constructions for introducing ambiguities that would require additional construction. (CMIB at 33-34).

Respondents construe this term as "a remote alarm switch unit within a preset boundary of the cellular device." They argue that "device in proximity to the cellular device" is part of the claim phrase "second receiver adapted to receive a nearby signal from a device in proximity to the cellular device" and as they argued for the "second receiver" terms, the referenced "device" must be the remote alarm switch referenced in the specification. (RMIB at 20-21). Respondents also cite statements from the examiner in the prosecution history where the "device in proximity to the cellular device" is mapped to the remote alarm switch unit. (*Id.* at 21-22). The Staff agrees generally with Respondents' construction but includes the limitation "within a preset location range" rather than "a preset boundary," which comes directly from the description of the remote alarm switch in the specification and describes the ability to "determine that the remote alarm switch unit 40 is within the preset location range of portable signal unit 20." (SMIB at 30-31; '795 Patent at 9:29-35).

In its responsive brief, Complainant argues that Respondents did not dispute the construction of "proximity" in claim 21, and the term should therefore be given its plain and ordinary meaning in all of the claims of the '795 Patent. (CMRB at 27-30). Complainant again rejects Respondents' "definition of the invention" argument and criticizes the Staff's brief for relying on one embodiment of the remote alarm switch. (*Id.* at 30-31). Respondents reply brief cites the statement from the Summary of the Invention describing an object of the invention in reference to "the proximity of the remote alarm switch." (RMRB at 38-39). And Respondents cite the specification passage relied upon by Staff to support the limitation for a "preset boundary." (*Id.* citing '795 Patent at 9:29-35). The specification further discusses adjustments to "the

separation distance" between the remote alarm switch and the portable signaling unit. ('795 Patent at 11:66-67-12:2). Respondents thus argue that Complainant's construction is divorced from the invention described in the specification. (RMRB at 39-41).

At the *Markman* hearing, I raised questions about indefiniteness of the term "proximity." (Tr. at 165:5-173:24). Complainant's counsel argued that the invention disclosed in the patent is a system composed of two separate aspects, a portable signaling unit and a remote alarm switch unit, and that the asserted claims do not have to claim the system as a whole. (Tr. at 173:25-180:10). Complainant argued that the claims of the '795 Patent are directed to the portable signaling unit alone, without directly claiming the alarm switch unit. (*Id.* at 180:11- 181:9). Complainant further argued that Respondents' and Staff's constructions, which reference a "preset" distance or boundary, do not provide any more definiteness regarding the meaning of "proximity." (*Id.* at 182:6-184:18). Respondents' counsel argued that the specification supports a "preset" limitation. (Tr. at 186:24-197:3). The Staff argued that the preset distance relevant to the '795 Patent would be a distance measured in feet related to objects that are worn or carried by an individual person, which would correspond to the alarm functionality described in the specification. (Tr. at 200:17-207:10).

Respondents addressed the indefiniteness issue in their supplemental brief, citing case law holding that terms of degree are insolubly ambiguous only if the specification provides no guidance to those skilled in the art as to their scope.[3] *See e.g., Young v. Lumenis,* 492 F.3d 1336, 1344 (Fed. Cir. 2007) (near not indefinite); *Seattle Box Co. v. Industrial Crating and Packing Co.,* 731 F.2d 818, 826 (Fed. Cir. 1984) ("When a word of degree is used the district court must determine whether the patent's specification provides some standard for measuring that degree.").

[3] The Supreme Court has overruled the "insolubly ambiguous" standard for indefiniteness. *See infra.* n.4.

(RMSB at 7). Respondents argue that the specification supports a meaning of "proximity" that is within the personal area of the individual carrying or wearing the claimed device. (RMSB at 7-8). Respondents cite the reference in the specification to a "normal" condition: "the portable signaling unit 20 is still being worn or carried by the individual." ('795 Patent at 9:29-35). And to support the "preset boundary" of Respondents' construction, Respondents cite the description of setting a separation distance for the alarm by adjusting the power output of the radio transmitter in the remote alarm switch unit. (*Id.* at 11:66-12:2). (RMSB at 8).

b. Analysis

After considering the parties' arguments, I find that "device in proximity to the cellular device" should be construed to mean a "device within a preset location range of the cellular device consistent with each device being worn or carried by an individual." I disagree with Complainant's assertion that "proximity" has a plain and ordinary meaning in the context of cellular devices. Complainant cites the Commission Opinion in *Certain Wireless Communication Devices, Portable Music & Data Processing Devices, Computers & Components Thereof*, but in that Investigation, the Commission construed "close proximity to a user" by relying upon the full context of the claim language and the examples of a proximity sensor in the specification. Inv. No. 337-TA-745, Comm'n Op. at 47-57 (September 17, 2012). The plain and ordinary meaning of "proximity" in the 745 Investigation was a position in which a touch sensor might be triggered due to "inadvertent actuation" by the user, *id.* at 56-57, but that is not the "proximity" at issue in the '795 Patent. Unlike the proximity sensor patent at issue in the 745 Investigation, the claim language in the '795 Patent does not provide any context for understanding the meaning of "proximity." The claims only reference a "nearby signal," and Complainant offers a corresponding dictionary definition of "very near." But in the context of cellular devices, "very

near" could be within an inch of a person's face, within a few feet of a person's body, within tens of feet of a person's home, or within a mile of a cellular tower. I cannot find a plain and ordinary meaning for this term without consulting the specification.

It is clear from the context of the '795 Patent that the claim language "nearby signal from a device in proximity to the cellular device" refers to the alarm signal from the remote alarm switch unit in the specification. The distance between the remote alarm switch unit and the portable signaling unit is a critical feature described in the Summary of the Invention, which is the only place the specification uses the term proximity:

> It is a further object and advantage of the present invention to provide an automatic means for summoning an emergency response without the necessity of intervention by the individual in distress should the portable signaling unit be separated from the **proximity** of the remote alarm switch.

('795 Patent at 5:1-5 (emphasis added)). The patent further explains how to implement this feature:

> removal of the portable signaling unit from the individual also automatically generates an urgent alarm signal when the portable signaling unit has been removed to a distance where it can no longer sense a periodic signal from the remote alarm switch.

(*Id.* at 6:50-53). This is specifically referenced in the description of a timer circuit,

> which enables remote alarm switch unit 40 to transmit a periodic signal so that portable signaling unit 20 can determine that remote alarm switch unit 40 is within the preset location range of portable signaling unit 20 (*i.e.*, a "normal" condition: the portable signaling unit 20 is still being worn or carried by the individual).

(*Id.* at 9:29-35). The patent further explains that an alarm condition may occur if the periodic signal is not received: "This failure to receive the signal may be when the distance between the portable signaling unit 20 and the remote alarm switch unit 40 becomes too great to detect the signal." (*Id.* at 11:48-51). And the patent discloses that this distance can be adjusted: "The separation distance at which the portable signaling unit 20 is activated is set by adjusting the

power output of the miniature radio transmitter 46 in the remote alarm switch unit 40." (*Id.* at 11:66-12:2). These passages in the specification breathe life and meaning into the term "device in proximity to the cellular device." The distance between the claimed devices is critical to one of the alarm features of the invention, and a "nearby signal" is only received while the devices are within a preset location range consistent with a "normal" condition of being worn or carried by an individual.

I do not import a "remote alarm switch unit" or an "alarm unit" into the claims because alarm functionality is not otherwise explicitly claimed, and a construction specifying an "alarm" could create further disputes regarding the scope of the claims, as discussed in Section IV.C.ii. above regarding the "second receiver" terms. But I agree with the Staff that a "preset location range" is essential to the construction of this term. Respondents' proposed construction references "preset boundaries" and "predefined boundaries," but these phrases are used in discussing another aspect of the invention where the location of an individual is monitored from the central station to comply with defined geographical restrictions. ('795 Patent at 5:25-29, 7:1-4, 14:15-22). The Staff correctly identifies the specification's reference to "a preset location range" to describe the relevant distance between the portable signaling unit and the remote alarm switch. (*Id.* at 9:29-35). But the discussion of these two very different distance ranges in the specification further confirms the necessity of a construction for this term. Complainant's plain and ordinary construction would be ambiguous and potentially indefinite.[4] I find that the specification provides

[4] The Supreme Court has established a new standard for indefiniteness under 35 U.S.C. § 112, ¶ 2: "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, U.S. Supreme Court Case No. 13-1369, slip op. at 1, 11 (June 2, 2014). Should the parties pursue any indefiniteness claims regarding this or any other terms in the Asserted Patents, they should be prepared to offer expert testimony under this new standard.

context and meaning for this term in reference to a "preset location range" and a "normal" condition of being worn or carried by an individual. (*Id.*).

Accordingly, I construe the term "device in proximity to the cellular device" in the '795 Patent to mean a device within a preset location range of the cellular device consistent with each device being worn or carried by an individual.

vi. "Determine a Location"

The parties dispute the construction of the term "determine a location," which appears in claims 1 and 5 of the '124 Patent.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
determine a location	Plain meaning or, to find out or come to a decision about by investigation, reasoning, or calculation a position or site occupied.	automatically processing the data to plot a point on a map	automatically determine a location

a. The Parties' Positions

Complainant contends that "determine a location" has a plain and ordinary meaning that is "readily apparent" from the claim language itself. (CMIB at 37-38). Relying on Webster's Dictionary definitions, Complainant submits that the widely accepted meaning of "determine a location is "to find out or come to a decision about by investigation, reasoning, or calculation a position or site occupied." (*Id.*). Complainant opposes the importation of an "automatically" limitation into this term because the term "automatically" was only used in reference to a canceled claim during prosecution. (*Id.* at 38-39).

Respondents seek to construe this term as "automatically processing the data to plot a

point on a map," which imports an "automatically" limitation and defines the term location in reference to a map. (RMIB at 37-39). Respondents submit that the originally-filed great-grandparent of the Asserted Patents, U.S. Patent No. 5,742,233, claimed a system where a human operator analyzed the data from the portable signaling unit to determine the location of the individual. (*Id.*) But during prosecution of the parent application to the '124 Patent, U.S. App. No. 10/628,094, the applicant argued that the prior art did not "teach or suggest using a computer at a central dispatch station to determine a location of the portable signaling unit based on GPS position received in a CDPD signal." (*Id.* at 38; U.S. App. No. 10/628,094 Amendment (October 4, 2005)). And during prosecution of the application that led to the '124 Patent, the applicants distinguished the prior art by noting that the claimed invention "teaches that the central communication facility automatically determines a location of the portable signaling unit, or otherwise automatically processes position information." (*Id.* at 38-39; U.S. App. No. 11/404,206 Amendment (March 18, 2009)). Respondents thus argue that these statements in the prosecution history limit the claims to "automatically" determining a location. (*Id.*). Respondents further argue that claim 1 refers to a "map having a symbol identifying the location," ('124 Patent at 14:62-65), which supports their construction of "location" as a "point on a map." (RMIB at 39). As further support for their construction, Respondents cite the specification's reference to a symbol "superimposed on a digitized map." ('124 Patent at 13:53-56).

The Staff proposes a construction of "automatically determine a location." (SMIB at 18-19). The Staff argues that the specification only discloses an automatic computer process for determining the location of the portable signaling unit. (*Id.*). The Staff also cites the prosecution history statement relied upon by Respondents, where the applicant described the invention as "automatically" determining a location. (U.S. App. No. 11/404,206 Amendment (March 18,

2009)). The Staff thus argues that "determine a location" should be construed to clarify that the process for determining a location is automated by the computer system and not manually determined by the dispatch operator. (SMIB at 19).

In reply, Complainant argues that the additional limitations proposed by Respondents and Staff are redundant of limitations already in the claims. (CMRB at 43-44). Complainant cites a specific teaching in the specification that determining a location can be activated on an "as needed" basis. ('124 Patent at 14:7-12). And Complainant argues that even if location has to be determined by a computer, this could be done on an "as needed" basis rather than automatically. (CMRB at 45). Complainant disputes Respondents' and Staff's interpretation of the prosecution history, arguing that the phrase "automatically determine a location" was only referenced in claims (later rejected and canceled) that explicitly included the term "automatically." (CMRB at 45-46). And Complainant argues that there is no explicit disclaimer based on an "automatically" limitation. (*Id.*) Respondents' and Staff's reply briefs highlight the description of an automatic computer process in the specification and again emphasize statements in the prosecution history regarding the "automatically determining a location" limitation. (RMRB at 43-44; SMRB at 8-9).

At the *Markman* hearing, counsel for Complainant argued for plain meaning based on the easily understood claim language and highlighted the difference between the asserted claims and the canceled claims in the prosecution history. (Tr. at 210:14-213:6). Complainant also argued that the terms "position" and "location" are used interchangeably in the specification, and the Staff agreed. (*Id.* at 215:14-216:25). Counsel for Respondents argued that although the prosecution history statements are not a disclaimer, they should be given weight as the applicant's characterization of the invention. (Tr. at 226:10-229:9). Respondents also provided additional support for their argument that the specification uses "position" to refer to geopositional data, such

as latitude and longitude, and "location" to refer to a point on a map. (*Id.* at 233:23-239:8). The Staff disagreed, referring to places in the specification where "position" and "location" are not used consistently with Respondents' definitions. (Tr. at 239:14-25). The Staff argued that the specification and file history consistently describe a computer determining location, and agreed with a construction requiring that a computer determines the location. (*Id.* at 240:1-245:21). Respondents continued to advocate for a "fully automatic" limitation, referencing the specification in column 4. (*Id.* at 246:1-23). Complainant pointed to the embodiment in column 14 where location is determined on an "as-needed" basis rather than "automatically," but Complainant did not dispute that the location is always determined by a computer. (*Id.* at 247:4-249:18). Complainant further identified the use of the word "location" in the claims of the '795 Patent as contradictory to Respondents' arguments regarding the meaning of this word. (*Id.* at 252:7-253:5). And Complainant also identified other statements in the specification using "position" and "location" interchangeably. (*Id.* at 253:19-254:1).

The parties submitted supplemental briefing on this term, and Complainant again emphasizes the "as needed" embodiment for determining a location. (CMSB at 9; '124 Patent at 14:7-12). Complainant also argues that there was no disclaimer in the prosecution history, noting that the cited statements relate to using a computer to determine a location, not a "fully automatic" system. (*Id.* at 9-10). Complainant further identifies multiple passages in the specification where "location" and "position" are used interchangeably and inconsistently with Respondents' proposed definition, *e.g.* "position on a map" ('124 Patent at 13:39) and "location coordinate information" (*Id.* at 6:60-63). (*Id.* at 10). Respondents identify the numerous places in the specification where "position" is used to indicate positional data and "location" as a point on a map, and they attempt to explain the contradictory uses identified by Complainant. (RMSB at

8-10). Respondents again cite the prosecution history as evidence that the applicant narrowed the invention to "automatically" determining location. (*Id.* at 10). Staff cites the same prosecution history statements to support a construction that clarifies that determining a location is not manually determined by the dispatch operator or other technician. (SMSB at 8-9).

b. Analysis

After considering the parties' arguments, I find that "determine a location" should be construed to have its plain and ordinary meaning with the requirement that the location is determined by the claimed computer. The context of claim 1 suggests this limitation by stating that data is transmitted to a computer, and "the data is used to determine a location." ('124 Patent at 14:57-61). Claim 5 explicitly states that "the data regarding the position of the portable signaling unit is used by the computer to determine a location." ('124 Patent at 15:7-9).[5] At the *Markman* hearing, all of the parties agreed that the claimed computer determines the location. (*See* Tr. at 245:18-21, 246:15-18, 249:10-18). Requiring that the computer determine the location is the most reasonable reading of the language of claim 1, and as discussed below, it is consistent with the specification and file history.

Respondents and Staff propose an "automatically" limitation for this term, but this is not supported by the intrinsic evidence. The Staff appears to understand "automatically" to simply exclude a dispatch operator manually determining a location, but Respondents seek to narrow the claims to require that the location be determined without any intervention by a person. There is nothing in the claims to support this narrow construction and the specification plainly discloses

[5] While the doctrine of claim differentiation may counsel against importing this limitation into claim 1, no party has raised this argument, and the specification and prosecution history are consistent with a computer limitation. *See Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005) (noting that claim differentiation is "not a hard and fast rule and will be overcome by a contrary construction dictated by the written description or prosecution history").

embodiments where a person initiates a computer to determine a location. Respondents and Staff point to the statement in the Summary of the Invention that "[i]t is a still further object and advantage of the present invention to provide a fully automatic personal security system and communication protocol ... to automatically summon an emergency response." ('124 Patent at 4:42-47). But later in the Summary of Invention, the patent states:

> The system of the present invention is a fully automatic personal security system and communication protocol that is operative under the most severe circumstances to summon an emergency response automatically in accordance with the specific personal needs of the individual. **Optionally, the system allows an individual to manually summon assistance in an emergency situation.**

(*Id.* at 6:29-35 (emphasis added)). And in another part of the Summary of the Invention: "A further object and advantage of the present invention is to provide a personal security system which gives the central dispatch operator control to initiate a request for the locating information." (*Id.* at 16-19). While the patent refers to a "fully automatic" system, the term "automatic" describes the system as a whole rather than the process for determining a location. The patent clearly discloses embodiments where an individual manually summons assistance and where a central dispatch operator manually initiates a request to determine a location on an "as needed" basis. (*Id.* at 14:7-12). When read as a whole, the specification does not support the importation of an "automatically" limitation as narrow as Respondents propose.

Respondents and Staff also cite the prosecution history, but the applicant only used the phrase "automatically determine a location" in reference to canceled claims that explicitly used the claim language "automatically determine a location." (*See* U.S. App. No. 11/404,206, Amendment at 6-7 (March 18, 2009)). The issued claims did not include the term "automatically," and the applicant did not use the term "automatically" when referencing these claims. Even if the prosecution history statements were interpreted to be limiting, the argument over the prior art was not for a "fully automatic" determination of location as characterized by Respondents. The

applicant distinguished the invention from a prior art system where personnel at a facility decided which position data source to use: "Because Clise clearly teaches that personnel decide which position data source to use, Clise does not suggest automatically determining a location of the portable signaling unit." (*Id.* at 7). The applicant used the term "automatically" to refer to using a computer rather than personnel to determine a location; there is no requirement for a "fully automatic" process without initiation by a person. The parent file history also supports this understanding of the scope of the invention. When addressing the same prior art reference in the parent file history, the applicant argued that "Clise only teaches that personnel interpret GPS position data at a location remote from a portable communicator, and does not suggest a computer." (U.S. App. No. 10/628,094, Amendment at 7 (October 4, 2005)). The prosecution history is thus consistent with a requirement that the location is determined by a computer, but it does not dictate the "fully automatic" limitation sought by Respondents.

Respondents' argument regarding the meaning of the terms "position" and "location" is also not supported by the intrinsic evidence. While the claims of the '124 Patent do use "position" to refer to data determined from the GPS signal, ('124 Patent at 14:55-6), and "location" in reference to a displayed map, (*id.* at 14:62-63), these are specific claim limitations rather than definitions of these terms. The words "position" and "location" are not defined explicitly, and they are not used consistently throughout the specification. The references to "position" in column 13 refer generically to a location on a map or a display console and not to a geographical coordinates. (*See* '124 Patent at 13:38-39, 13:53-56). The Summary of the Invention refers to "location coordinate information" without reference to a map. (*Id.* at 6:60-63). And the terms are used interchangeably in the claims of the '795 Patent. (*See, e.g.*, '795 at claims 8, 23, 30 ("transmit location data representing the location of the portable signaling unit.")). Respondents

have failed to identify any explicit definition or disclaimer for these terms in the intrinsic record, and I cannot impose a narrow definition for "location" based on ambiguous evidence.

Accordingly, I construe the term "determine a location" in the '124 Patent to have its plain and ordinary meaning with the requirement that the location is determined by the claimed computer.

vii. "Data"

The parties dispute the construction of the term "data," which appears in claims 1, 4, 5, 7, and 21 of the '124 Patent and claims 1, 3-9, 15, 23, 27, and 30 of the '795 Patent.

Claim Term	Complainant's Construction	Respondents' Construction	Staff's Construction
data	Plain meaning or information in numerical form that can be digitally transmitted or processed	information other than voice	information other than voice

a. The Parties' Positions

Complainant argues that the term "data" is a simple term used generically that should be given its plain and ordinary meaning. (CMIB at 39). The term "data" is used in the specification to refer to alarm data, historical data, location data, and cellular digital packet data. ('124 Patent at 4:25, 8:40, 13:47, 12:15). Complainant argues that the specification does not impart any special definition onto the term, nor does it expressly disavow any claim scope. (CMIB at 40). Complainant further argues that the term "data" cannot be limited by an embodiment. (*Id.*). Complainant also cites dictionary definitions for a plain meaning of "information in numerical form that can be digitally transmitted or processed." (CMIB at 41).

Respondents propose a construction for the term "data" limiting the term to "information other than voice." (RMIB at 43). Respondents argue that the frequent, close proximity of the term "data" and the term "voice" in the claims leads to the conclusion that data is not inclusive of voice. (*Id.*). Respondents highlight the specification's discussion of the "data-to-voice" switches as well as the preferred embodiment's different data and voice modes, stating they are descriptive of mutually exclusive meanings. (RMIB at 43-44). Respondents argue that a plain meaning construction of "data" as Complainant proposes would improperly include voice information. (*Id.*). Respondents further argue the plain meaning construction unnecessarily limits "data" to only information "in numerical form" and has no basis in intrinsic evidence. (*Id.*).

The Staff similarly proposes a construction for the term "data" limiting the term to "information other than voice." (SMIB at 33). Staff argues that the claims support an inference of mutually exclusive meanings as the broader construction of "data" would render the proximate term "voice" redundant and inconsistent. (*Id.*). Staff further argues that the specification distinguishes data from voice communications through discussion of data-to-voice switches. (*Id.*). Staff thus agrees with the Respondents' construction for the term "data."

In reply, Complainant argues that the meaning of the term "data" is "readily apparent" and needs no construction to supplant the plain meaning. (CMRB at 49). Complainant agrees with Respondents and Staff that the terms "data" and "voice" have different meanings, but argues that the definitions overlap where the term "data" includes voice data. (CMRB at 50). Complainant highlights the "Respondents' acknowledgment" that voice sounds can be converted into digital form, such as encoding voice-frequency signals using eight binary digit samples (*i.e.* pulse code modulation or "PCM") and other methods (*e.g.* ISDN, PCS, VOIP, etc.). (*Id.*). Complainant argues that the close proximate use of the terms "data" and "voice" was to cover all data and voice

communications, not to exclude the terms' definitional overlap. (CMRB at 51). Complainant emphasizes that the intrinsic evidence does not state any specialized definition for the term "data" and the addition of a narrowing modifier (*i.e.* "other than voice") to an unmodified, general term would be improper. (CMRB at 52). Complainant further argues that Respondents' and Staff's reliance on a preferred embodiment including data-to-voice switches for limiting the term "data" is fundamentally improper. (*Id.*).

In Respondents' Reply, Respondents reject Complainant's argument that because no special definition or disavowal of claim scope exists in the specification, then the plain and ordinary meaning should apply. Respondents argue that the term "data" has been implicitly defined as the claim term is used throughout the patent "in a manner consistent with only a single meaning." *Bell Atl. Network Servs., Inc. v. Covad Comm'ns Grp., Inc.*, 262 F.3d 1258, 1271 (Fed. Cir. 2001). (RMRB at 44-45). Respondents state that the patents-in-suit "plainly and consistently" distinguish between "data" and "voice" information throughout the entire specification, excluding voice information from data. (RMRB at 45). Respondents also argue that the ability of the switching circuits to transmit encoded voice information is separate from the exclusion of voice information from the term "data." (*Id.*) Respondents argue that the several claims using both "voice" and "data" are more significant, contending that the plain meaning proposed by Complainant would render the term "voice" superfluous. (RMRB at 46). Respondents further argue Complainant's reliance on a dictionary definition is improper as it is inconsistent with the claims and specification that provide an implicit definition of "data" excluding voice information. (*Id.*)

At the *Markman* hearing, counsel discussed whether or not voice information is encompassed or implicitly excluded from the term "data." Counsel for Complainant argued that

the term "data" is a plain term only requiring the commonly understood meaning that can be ascertained from a dictionary definition. (Tr. at 256:7-24). Complainant further argued that while there is no dispute that the terms "data" and "voice" have two different meanings, the terms overlap as voice information can be data as in PCM, ISDN, PCS, and VOIP. (*Id.* at 258:1-10). Counsel for Respondents re-emphasized the points from their brief, arguing that the patents were consistently written to exclude "voice" from "data" and to determine otherwise would not embody the invention. (*Id.* at 273:6-9; 274:9-11; 277:21-278:1). Respondents highlighted the circuit switch with data mode and voice mode as demonstrative of this exclusion as only one mode can exist at one time. (*Id.* at 273:18-274:2). The Staff similarly argued that the term "data" and "voice" are consistently defined as exclusive, citing the patents' specification and claims as demonstrative of Complainant's improper implication of voice in their broad construction. (*Id.* at 287:13-288:9). At the end of the *Markman* hearing, and in a supplemental submission to the Court, Respondents' counsel admitted that the claimed "voice" in the claims of the '795 Patent could include voice information encoded in the mixed voice/data formats cited by Complainant. (*Id.* at 282:25-283:3, 295:24-296:11).

b. Analysis

After considering the parties' arguments, I agree with Respondents and Staff that the correct construction of the term data is "information other than voice." The Asserted Patents use the term "data" in a manner consistent with only one meaning, which is that the word "data" excludes voice. Claim 1 of the '795 Patent, for example, describes a portable signaling unit wherein "a transmitter is adapted to receive signals representing data and a voice of a user . . . [and] to transmit signals representing the data and the user's voice." ('795 Patent at 14:54-15:9). The use of "data" and "voice" conjunctively demonstrates the mutually exclusive meanings of these

terms. Inclusion of voice in a construction of "data" would render the term "voice" superfluous. A broader definition of "data" would also improperly expand claim 1 of the '124 Patent to include transmitting voice regarding the location of the portable signaling unit, which is not consistent with the disclosed invention. Further, the specification's discussion of "data-to-voice" switches further supports a construction of "data" as exclusive of voice because the switches must be in either data mode or voice mode, not both. (*See* '795 Patent at Figure 5, 10:5-10). As Staff rightly points out, voice and data are inputted, processed, and transmitted through separate channels of the circuit. I find that the term "data" is used consistently in the claims of the '795 Patent and the '124 Patent to refer to information other than voice.

Complainant's illustration of the relationship between data and voice with "mixed data/voice formats" (*i.e.* VOIP, ISDN, etc.) is unpersuasive. Construing "data" to exclude voice information does not necessarily exclude these mixed formats as the '795 Patent claims include "data and voice of a user," "data and the user's voice" and "voice and data." Respondents have conceded that this claim language encompasses digitally encoded voice information, including mixed data/voice formats. The '124 Patent claims "data regarding the position of the portable signaling unit" without reference to voice, but this limitation only requires that the position information be encoded as data. The format of other voice or data information unrelated to position would not be relevant to this claim limitation.

Accordingly, I construe "data" in the '124 Patent and the '795 Patent to be information other than voice.

V. CONCLUSION

I find that the disputed terms of the Asserted Patents shall be construed as follows:

- The term "display" in the '124 Patent is hereby construed as a computer monitor screen separate from the portable signaling unit.
- The term "second receiver" in the '124 Patent and '795 Patent is hereby construed to have its plain and ordinary meaning, which is a radio receiver different from the first receiver.
- The term "second receiver adapted to receive a third signal" in the '795 Patent is hereby construed as a second receiver designed to receive a third signal.
- The term "second receiver adapted to receive a nearby signal" in the '795 Patent is hereby construed as a second receiver designed to receive a nearby signal, where "nearby" is read in the context of the "device in proximity to the cellular device" limitation, as construed herein.
- The term "security code" in the '795 Patent is hereby construed to have its plain and ordinary meaning, which is a code that allows an authorized person to access the device.
- The term "standby mode" in the '795 Patent is hereby construed to be a mode where only essential circuits are powered on, the essential circuits being only those circuits necessary to sense the conditions for leaving the standby mode.
- The terms "leave[s] the standby mode" in the '795 Patent are hereby construed to mean power[s] on the non-essential circuits, the essential circuits being only those circuits necessary to sense the conditions for leaving the standby mode.

- The term "device in proximity to the cellular device" in the '795 Patent is hereby construed to mean a device within a preset location range of the cellular device consistent with each device being worn or carried by an individual.
- The term "determine a location" in the '124 Patent is hereby construed to have its plain and ordinary meaning with the requirement that the location is determined by the claimed computer.
- The term "data" in the '124 Patent and the '795 Patent is hereby construed to be information other than voice.

SO ORDERED.

Thomas B. Pender
Administrative Law Judge

IN THE MATTER OF CERTAIN WIRELESS DEVICES, INCLUDING MOBILE PHONES AND TABLETS II **337-TA-905**

CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **PUBLIC ORDER NO. 14** has been served upon the **Commission Investigative Attorney, Lisa Kattan, Esq.,** and the following parties as indicated on June 3 2014.

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IN THE MATTER OF CERTAIN WIRELESS DEVICES, INCLUDING MOBILE PHONES AND TABLETS II **337-TA-905**

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