UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF FLORIDA

Case No: 10-civ-23580-UU

MOTOROLA MOBILITY, INC.,

Plaintiff,

v.

APPLE, INC.,

Defendant.

APPLE, INC.,

Counterclaim Plaintiff

v.

MOTOROLA, INC. and MOTOROLA MOBILITY, INC.,

Counterclaim Defendants.

Claim Construction Order

I. Background

THIS CAUSE is before the Court for construction of certain claim terms

contained in Plaintiff's and Counterclaim Plaintiff's U.S. Patents.

THE COURT has considered the patents, the parties' submissions, the

arguments of counsel, and is otherwise fully advised on the premises. The matter is fully briefed and ripe for disposition.

The lawsuit involves twelve patents, six asserted by each party. In October

2010, Motorola Mobility, Inc. ("Motorola") filed a lawsuit against Apple, Inc.

("Apple"), alleging infringement of six Motorola patents.¹ (D.E. 1.) In November 2010, Apple filed its answer and asserted six counterclaims, alleging infringement of six Apple patents.² (D.E. 17.) The Court has jurisdiction over all the claims, which arise under federal statute and patent laws. 28 U.S.C. § 1331; 1338(a).

The construction of patent claims is a matter of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). The Court is therefore called upon to determine whether disputed claim terms require construction and, if they do, to interpret them. On July 28, 2011, Apple and Motorola submitted claim construction briefs. (D.E. 93-94.) In an effort to limit the case to the true claim terms in controversy, the parties filed a joint chart reflecting only those claim terms in dispute. (D.E. 145.) The Markman hearings occurred over three days in October 2011. (D.E. 144.)³

In section II, the Court sets forth the legal principles that apply to claim construction. In sections III and IV, the Court applies these principles to seven disputed claim terms in Motorola's patents and seven disputed claim terms in

¹ U.S. Patent Nos. 5,710,987, 5,754,119, 5,958,006, 6,008,737, 6,101,531 and, 6,377,161 (collectively referred to as "Motorola's patents").

² Apple's responsive pleading added "Motorola, Inc.," as a counterclaim defendant, and alleged that Motorola had infringed the following patents: U.S. Patents 5,583,560, 5,594,509, 5,621,456, 6,282,646, 7,380,116 and, 7,657,849 (collectively referred to as "Apple's patents"). (D.E. 17.)

³ During the Markman hearing, the parties announced that they had resolved certain disagreements regarding the claim terms. The joint chart that the parties filed on the eve of the Markman hearing reflects these agreements. (D.E. 145.) This chart replaced the previous one that the parties had filed (D.E. 125.) See also D.E. 147-49.

Apple's patents.

II. Legal Principles of Claim Construction

Claim construction is the process of construing disputed terms within a patent claim. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). The goal of claim construction is to give the disputed terms their "ordinary and customary meaning" as the term would mean to "a person of ordinary skill in the art in question. . . as of the effective filing date of the patent application." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). A person of ordinary skill in the relevant art is the standard used because patents are addressed to others skilled in the pertinent art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005).

As a preliminary matter, the Court must consider whether the disputed term requires construction. O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed. Cir. 2008) (recognizing that claim construction is necessary only "[w]hen the parties present a fundamental dispute regarding the scope of a claim term.") Even when a term requires construction, the Court's task is a limited one. The Court must construe only those terms that are in controversy, and "only to the extent necessary to resolve the controversy." Vivid Techs., Inc. v. Am. Sc. & Eng'g, Inc., 200 F.3d 795, 803 (Fed. Cir. 1999).

Claim construction involves defining a term in its appropriate context. "[T]here is no magic formula. . . for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze the sources in any specific sequence[.]" *Phillips*, 415 F.3d at 1324. The claim itself often provides substantial guidance as to the meaning of particular claim terms. *See Vitronics*, 90 F.3d at 1582. Because claim terms are normally used in a consistent manner throughout a patent, usage of a term in one claim can illuminate the meaning of the same term in another claim. *Phillips*, 415 F.3d at 1324.

Furthermore, a patent's 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." *Vitronics*, 90 F.3d at 1582. For this reason, the specification is "the primary basis for construing the claims." *Phillips*, 415 F.3d at 1315. "The construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.*, at 1316 (citing *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir 1998)).

Courts also consider a patent's prosecution history, if it is in evidence, to illuminate a disputed term. *Markman*, 52 F.3d at 980. A patent's prosecution history can consist of the complete record of the proceedings before the United States Patent Trademark Office ("USPTO") and can include the prior art cited during the examination of the patent, which, like the specification, can shed light on how the inventor and USPTO understood the patent. *Phillips*, 415 F.3d at 1317. However, courts are wary of placing too much emphasis on the prosecution history

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because it reflects an ongoing negotiation between the USPTO and the inventor, and thus can lack the clarity needed to be a helpful resource. *See Athletic Alternatives, Inc. v. Prince Mfg.*, Inc., 73 F.3d 1573, 1580 (Fed. Cir. 1996) (concluding that the evidence in the patent's prosecution history produced contradictory interpretations). Nonetheless, when the prosecution history in evidence clearly disclaims an interpretation, the disclaimed interpretation should be excluded from the claim construction. *ZMI Corp. v. Cardiac Resuscitator Corp.*, 844 F.2d 1576, 1580 (Fed. Cir. 1988).

The Court may also rely upon extrinsic evidence, such as treatises and dictionaries, to illuminate the meaning of claim terms. Because extrinsic evidence is external to the patent, sometimes authored by persons not skilled in the art in question, and does not have the benefit of being created at the time of, or in view of, the asserted patents, it is considered less reliable, and thus, holds less weight in claim construction. *Phillips*, 415 F.3d at 1318 (explaining reasons why extrinsic evidence is generally less reliable than intrinsic evidence in determining how to read claims).

In sum, the Court construes only those claim terms which require construction, and only then to the extent necessary to resolve the dispute. Where claim construction is required, the Court looks first to the claim itself and the specification. The Court may also consider the patent's prosecution history and various extrinsic sources, though extrinsic evidence is weighted less than intrinsic evidence in claim construction.

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III. The Disputed Claim Terms of Motorola's Patents

A. The '119 Patent

Disputed term (1): "Responsive to receiving the second message, transmitting a third message." (Claims 1 and 2)

Motorola's proposal: Ordinary meaning-this phrase requires no additional construction.

Apple's proposal: transmitting a third message as a direct result of receiving the second message.⁴

Disputed term (2): "Indicative of the second status." (Claims 1, 2, and 5)

Motorola's proposal: Ordinary meaning-this phrase requires no additional construction, or, in the alternative, "providing an indication of the second status."

Apple's proposal: "descriptive of the changed status."

Disputed term (1) "Responsive to"

The parties dispute two claim terms in the '119 Patent. With respect to the first, "responsive to," the parties contest whether the term requires a direct response to the received second message. In support of its position that a direct response is necessary, Apple cites the specification ('119 Patent, 5:45-46 and 10:50-53) and a brief that Motorola filed in a parallel suit against Apple. (D.E. 159, pp. 4-5.) Motorola interprets these same sources as supporting its position that no

⁴Apple revised its proposed construction (*compare* D.E. 159 and D.E. 145) following the Markman hearing. Motorola filed a response in opposition to Apple's revised proposed construction. (D.E. 176.)

construction is necessary. It also notes that the '119 Patent never once uses the term "direct." (D.E. 176, p. 4.) The Court agrees with Motorola.

Apple asserts that the specification discloses "that the phrase 'responsive to' in claim 1 connotes a direct causative relationship between two events." (D.E. 159, p. 3.) The language Apple cites from 5:45-46 states that depressing a button "causes the status of message 205 to change from 'unread' to 'read." Similarly, 10:50-53 indicates that the invention provides a method corresponding with the following event: "[w]hen a first status in a transceiver is changed to a subsequent status as a result of a subsequent input." In neither case, however, does the description require that the cause (in the case of 5:45-46) or the result (in the case of 10: 50-53) be "direct." Furthermore, the claim language itself requires that the recited change be "responsive to" an input. (See '119 Patent, claim 1.) Thus, the disputed claim term, construed in light of the specification, supports Motorola's conclusion that the inventors used "responsive to" to connote a causal relationship, and not to imply that the disclosed cause was necessarily "direct." See Vulcan Eng'g Co. v. Fata Aluminum, Inc., 278 F.3d 1366, 1376 (Fed. Cir. 2002) ("This court has often explained that the claims are construed in light of the specification[.]")

Nor does Apple's references to Motorola's Reply Brief from the parallel suit in Germany persuade the Court to narrow the disputed term "responsive to." In this Reply Brief, Motorola maintains that "responsive to' merely requires a causal connection." (D.E. 159, p. 4.) This statement is entirely consistent with Motorola's position in the present case. Motorola agrees that "responsive to" describes a "causal connection." (D.E. 176, p. 5.) It objects to Apple's proposal to modify "causal connection" by requiring that the input directly cause the status change. In the Reply Brief, Motorola also writes that "responsive to" means: "when the server sends a synchronization message to the other receiving device without the user or his receiving device needing to initiate such a synchronization message, then the sending of this third message occurs 'responsive to' the second message." (D.E. 159, p. 4.) This merely states that a message is sent without the user or the user's device initiating the message. Motorola never disclaimed all other possible causes, apart from the receipt of the second message, that could prompt the third message.

Finally, Apple refers to the '119 Patent's Notice of Allowability, where the Examiner described the method of claim 1 as one "wherein status changes (e.g. changes to received messages, alarm times, alter thresholds and key words alerts) made on a first pager are wirelessly communicated to an infrastructure which automatically communicates such status changes to other pagers, thus causing the other pagers to make corresponding status changes in their status." (D.E. 159, p. 4). The Examiner's indication that an "automatic" transmission causes the status change does not imply that the cause is necessarily "direct." As Motorola points out, the fact that the transmission of the status change occurs "automatically," does not mean that the ultimate change is "directly" caused by this transmission. There could be multiple additional steps in the process. (D.E. 176.)

For the reasons herein stated, the Court rejects Apple's proposal to construe "responsive to" as requiring that the transmission of the third message occur as a "direct result" of the receipt of the second message. Because the Court does not believe-nor do the parties argue-that "responsive to" is a term of art, it declines to substitute a synonym, such as "cause," for the language that the inventors chose. ("If a claim term is non-technical, is in plain English, and derives no special meaning from the patent and its prosecution history, then the court has no need to function as a thesaurus." Peter S. Menell, et al., Patent Case Management Judicial Guide §5-23 (2009)). Accordingly, the Court applies the plain and ordinary meaning to the disputed term.

Disputed term (2) "Indicative of"

The issue here relates to what kind of content is conveyed when the wireless messaging infrastructure "transmit[s] a third message indicative of the second status."

Apple summarizes its view as follows: "Apple's construction requires that the status change message include the content of the status change (e.g., that a particular message has been deleted on the device) and not just a general indication that there has been some type of status change." (D.E. 93, p. 18.) On several occasions, Motorola appeared to concur with Apple's interpretation. "This phrase," Motorola responds in its brief, "has a plain and ordinary meaning: providing an indication of the second status." (D.E. 94, p. 42.) At the Markman hearing, Motorola's counsel further explained: "The message status here basically contains three bits.... the change of whether [the bit is] 0 or 1 will indicate to the rest of the system that there is a changed status of some type. The specification," he continued,

"expressly states that these three bits indicate *the corresponding status*." (D.E. 156, p. 437.) (emphasis added) And later, Motorola's counsel offered the following description of how the invention works: "That's the second message and the third message. So they are both indicative of status changes. That's all it needs to be. It just needs to indicate, guess what, I *deleted* this at work, I don't need to *delete* it at home." (*Id.*, at 439.) (emphasis added)

Motorola, in short, never directly contests Apple's fundamental point, which is that the term "indicative of" means that the message conveys some information about the precise status change that has occurred-be it due to the reading or the deleting of a message. At times, Motorola actually echoes Apple's central point, as when Motorola's counsel described the type of message that could be conveyed in the present invention as indicating whether a message was "deleted" at work. Rather than oppose the substance of Apple's proposed construction, Motorola objects to Apple's formulation. The responsive message, insists Motorola, is not "descriptive" of a status change-only "indicative."

The patent makes clear that the responsive message in fact conveys information about the exact status change that has occurred. Consider the following excerpts from the specification: "[S]tatus changes made on a first pager (130 and 530) are wirelessly communicated to an infrastructure (110 and 510) which communicates the status changes to other pagers (150 and 550) so that the other pages make corresponding status changes." ('119 Patent at abstract); "Message 640 communicates the change in status by communicating a reconfiguration of memory in pager 530." (*Id.* at 6:53-54); "Thus, the change in status of pager 530 is able to be communicated by identifying at least one record, and its contents, in its virtual memory that has been modified by the status change or changes occurring during step 620 and delay 630." (*Id.* at 7:61-65.)

Since the patent supports the conclusion that "indicative of the changed status" is to say that the responsive message conveys how the status has changed, the Court's real question is whether to construe the disputed term. The Court follows the guidance from U.S. Surgical Corp v. Ethicon, Inc.: "Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement." 103 F. 3d 1554, 1568 (Fed. Cir. 1997). Apple has raised a possible ambiguity in the term "indicative of," which the Court finds is necessary to construe to resolve the scope of the disputed claims. At the same time, the Court is mindful of Motorola's concerns with Apple's proposed construction. As Motorola points out, substituting "descriptive of" could be interpreted as requiring that the responsive message in the '119 Patent describe in some detail the particular status change despite their being no intrinsic evidence to support such a construction. See Motorola, Inc. v. VTech Comm, Inc., 2009 WL 2026317, *8 (E.D. Tex. July 6, 2009). ("With regard to meaning, where additional language may be unduly limiting, confusing, or redundant, it is in a court's power to determine that no construction is necessary.")

Accordingly, while the Court accepts, in essence, Apple's position, it adopts

the following construction for the disputed term: "expressive of the changed status."

B. The '006 Patent

Disputed term: "data units not sent from the host to the communication

unit." (Claim 26)

Apple's proposal: data units present at the host and not sent to the

communication unit.

Motorola's proposal: Ordinary meaning-the phrase requires no construction.

Clause (a) of claim 26 contains the sole construction dispute that the parties

have as to the '006 Patent. The relevant portion of claim 26 describes the following invention:

A controller of communication unit adapted for requesting data over a wireless communication channel from a further data processing host via a communication server, the controller comprising: (a) a summary store to store identifying information received from the host via the communications server about data units not sent from the host to the communication unit and not received at the communication unit.⁵

The dispute raised by the claim language is whether the data units corresponding to the identifying information sent from the host to the communication unit must themselves be present at the host. The Court finds that the '006 Patent contemplates no such requirement.

⁵The quoted section is from the '006 Patent as amended pursuant to the Ex Parte Reexamination Certificate issued under 35 U.S.C. 307.

The Court looks first to the claim language. A court "must presume that the terms in the claim mean what they say and, unless otherwise compelled, give full effect to the ordinary and accustomed meaning of the claim terms." *Johnson Worldwide Associates, Inc. v. Zebco Corp.*, 175 F. 3d 985, 989 (Fed. Cir. 1999).

As to the claim language, Apple makes two arguments. First, it asserts that because the claim describes a process by which the "controller of the communication unit" is responsible for "requesting" data "from a further data processing host," such data must reside at the host. (D.E. 93, p. 13.) According to Motorola, however, the claim merely states that the data is *requested* from the host. It never requires that the data be located at the host. "It is certainly conceivable," Motorola explains, "that the requested data 'reside' in network attached storage that can be accessed or controlled by the host (e.g. to send the requested data units directed to the communication device)." (D.E. 96, p. 41.) The Court agrees that, given its ordinary meaning, the claim language does not require the data units to be located at the host. Therefore, unless Apple can overcome the presumption in favor of the ordinary meaning of claim terms, the Court is compelled to accept Motorola's argument that the data is merely requested from the host, and not necessarily present there.

Apple argues that in the other '006 claims, the data units not sent to the communication unit reside at the host. Apple cites claim 1, which describes the process by which data is transmitted to a communication unit. According to the claim, the data is divided into an "identifying information part" and an "additional part." With respect to "non-qualifying data units," claim 1 discloses that the host server sends to the communication unit the "identifying information part without the additional part." For the host to complete this task, Apple asserts that both parts of the data unit must reside at the host. (D.E. 93, p. 14.) Yet Apple never shows why the Court should accept this assertion. (*See* D.E. 93, pp. 13-15, D.E. 156, pp. 454-470, 487-491). Unless compelled otherwise, the Court reads the claim language according to "the ordinary and accustomed meaning" of the terms. *Johnson Worldwide*, 175 F. 3d at 989. Without additional evidence, the Court cannot accept Apple's assertion that the method of communicating data units disclosed in claim 1 necessarily means that the data units must be present at the host.

Apple's argument that the specification supports its proposed construction references a single portion of the patent ('006 Patent, 10:17-23; D.E. 93, p. 14), which describes a "preferred embodiment" of the invention. (*See* '006 Patent 10:12-13). The Court is mindful of the Federal Circuit's frequent admonitions against importing a claim limitation from a preferred embodiment. "This court has often explained that the claims are construed in light of the specification, and are not limited to a designated 'preferred embodiment' unless that embodiment is in fact the entire invention presented by the patentee." *Vulcan Eng'g Co.*, 278 F.3d at 1376. Thus, while the "preferred embodiment" supports Apple's proposed construction, it does not, by itself, dispose of the question.

The Court next considers Apple's claim that the invention's purpose of

limiting the costs of remote communication (*see* '006 Patent, 1:50-54) illuminates the scope of the claim. Here again, Apple's argument is unconvincing. While storing data units at the host is one way to reduce the amount of information transmitted to a remote device, this may not be the only way of reducing the costs of communication. As Motorola points out, another method of accomplishing this is to use the host as a "byway," which solicits user-requested information without ever storing it. (D.E. 156, 476-77.) Moreover, while framing their invention as relevant to the reduction of costs associated with remote communications, the present inventors never described the storing of the data units at the host as essential to their invention. Thus, the Court cannot import into their invention the single method identified by Apple for achieving their stated purpose.

In support of its proposed construction, Apple has provided evidence entirely from one "preferred embodiment." Without further support from the claims, specification, and prosecution history, this is insufficient. *See Abbott Labs v. Sandoz*, Inc., 566 F. 3d 1282, 1288 (Fed. Cir. 2009) (holding that a court may limit a construction to the disclosed embodiment(s) when "the claims themselves, the specification, or the prosecution history clearly indicate that the invention encompasses no more than that confined structure or method.") Accordingly, the Court rejects Apple's proposal to insert the limitation "present at the host" into the disputed claim term. Since the parties have no further requests to construe the other terms in the disputed claim term, the Court applies the "plain and ordinary" meaning to claim 26 of the '006 patent.

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C. The '531 Patent

Disputed term (1): "filtered data unit" (Claims 1, 2, and 11)

Motorola's proposal: Plain meaning; or "a data unit that has been filtered;" in the alternative: "a data unit that has passed a filter;" in the alternative: "a data unit that has passed a set of user-selected criteria."

Apple's proposal: "one of a subset of data units at the host device that are selected for download to the client communication unit based on having passed a filter;" in the alternative: "a data unit that is selected for download to the client communication unit based on having passed a set of user-selected criteria."

Disputed term (2): "wireless network" (claims 1, 2, and 11)

Motorola's proposal: Ordinary meaning; in the alternative: "two or more devices whose interconnection(s) is implemented, at least in part, without the use of wires."

Apple's proposal: "a network in which the communication server is connected to both the host device and the client communication unit through a completely wireless path."

Disputed term (1) "filtered data unit"

The parties dispute here whether "filtered data units" refers to data units that have been selected by the user for downloading or to data units that have passed some set of user-defined criteria.

Motorola concedes that the "filtered data units" may be selected for

downloading, stating on the record that the '531 Patent discloses a method whereby the "data units" are first filtered and then downloaded. (D.E. 153, p. 559.) However, Motorola argues that the downloading occurs when the data units are "communicated" to the mobile user, which, in the claims at issue, happens after the data units are filtered (D.E. 153, p. 559; '531 Patent, claims 1, 11.) According to Motorola, defining "filtered data units" by importing the term "selected for download" reworks the method of the '531 Patent. To Motorola, timing, in short, is everything. The Court agrees.

The '531 Patent discloses a method of giving the mobile user the ability to filter data, thereby making wireless data transmission faster and cheaper. The '531 inventors describe the filtering process throughout the patent, but never once describe the downloading of the filtered data units as a step in the filtering process.

In figure 4, the '531 inventors indicate that the filtering occurs prior to the data transmission. "[C]lients are now provided ... with a means for effecting prestage filtering of their communications by virtue of the communications server and definable filter settings, rather than having to choose between receiving no messages or receive (sic.) all messages." ('531 Patent, 8:56-63.) Next, the patent explains that the "prestage filtering is preferably performed at the host server," and proceeds to describe the various steps of this process. (*Id.*, 8:64-69; *see also* figure 4.) Only after the filtering process has run its course are the filtered messages transmitted to the user's mobile device: "The filtered messages are then encapsulated and forwarded to the QM, which similarly forwards the filtered

messages (with appropriate protocol translation) to the client." (*Id.*, 9:7-10.) It is apparent that the data transmission follows the data filtering because the filtering steps are numbered 408-412, while the transmission steps are 414-416. (*Id.*, 9:3-10.) Finally, in the same section of the '531 Patent, the inventors note that the communications server can also filter messages. Under this method, the communication server also filters the data in a series of steps, only after which is the filtered data transmitted to the client. (*Id.*, 9.)

The inventors' descriptions of figures 5 and 6 are further evidence that the disclosed invention involves a sequence of first filtering then transmitting the data. "In Fig. 5," they write, "a series of five reject filters are applied to each message. If a mail message does not meet any of the criteria... then it is left unprocessed (steps 502-16). Once all unreviewed messages ... have been filtered, those not rejected are forwarded (step 518)." (*Id.*, 10:2-9.) Figure 6 flows identically. "Once filtered, the message is sent." (*Id.*, 10:16-17.) As in figure 5, the transmission step (616 in figure 6) follows the filtering steps (602-606.)

Turning to the claim language, the Court is further convinced that the invention contemplates a sequential process of filtering followed by downloading. The method disclosed in claim 1 begins by "filtering data units based on first set of user-selected criteria to produce filtered data units[.]" (*Id.*, 16:32-33.) The focus of this step is on producing filtered data units, not downloading them. After "filtering," the next step in the process involves "communicating the filtered data

units to the client communication unit[.]" (*Id.*,16:34-35.) Later in claim 1, the inventors disclose that the same steps can occur a second time, after the communication server has received a "second-set of the plurality of user-selected criteria[.]" (*Id.*, 16:36-18). As earlier, the method provides for the "filtering [of] subsequent data units" and then "communicating the subsequent filtered data units to the client communications unit." (*Id.*, 16:41; 44.)

Additionally, in claim 11, the filtering of the data units based on the first and second sets of user-selected criteria, and the communicating of the filtered units, each occur at the communication server. (*Id.*, 18:10; 13; 15.) The sequence is, thus, the same as claim 1. First comes the filtering, then the communicating.⁶ (*Id.* 18:10-15.)

Viewing the claim language in light of the specification, the Court is not persuaded that an additional step should be inserted in the filtering process, as each of Apple's proposed constructions requires. If Apple's proposed constructions accurately reflected the patent, the Court would expect to find a description of how the selection for downloading occurs at the filtering process. Yet the undersigned finds nothing of the kind despite the inventors being quite specific as to how they wanted their invention to work. Meanwhile, the intrinsic evidence on the opposing side is substantial. The '531 inventors meant only for the filtering process to

⁶ Claim 2 also contains the contested term. However, claim 2 is dependent on the process detailed in claim 1. It reads: "The method according to claim 1 further comprising truncating a filtered data unit if the filtered data unit exceeds a first filter size."

"produce filtered data units." (*Id.*, 16:32.) Accordingly, the Court declines to import the limitation "selected for download" into the contested terms. The Court adopts Motorola's proposed construction: "a data unit that has passed a set of user-selected criteria."

Disputed term (2) "wireless network"

Apple wishes to construe "wireless network" as requiring a completely wireless path between the host device and the client communication unit. Motorola asks first for the ordinary meaning of "wireless network," then defines the term, in the alternative as, well, something less than one hundred percent wireless. As Miracle Max said in *The Princess Bride* (1987), "There's a big difference between mostly dead and all dead." In the instant matter, the big difference is between mostly wireless (Motorola's position) and all wireless (Apple's position). The Court agrees with Motorola.

Motorola prevails because its alternative proposal construes the claim in light of the specification. The contested term appears in the preambles of claims 1 and 11.⁷ Both these claims require a "method of communicating data units over a wireless network between a client communication unit and a host device via a communication server[.]" (531 Patent, 16:27-30; 18:6-8.)

The specification clarifies the term "wireless network." None of the embodiments discloses a completely wireless path between the client

⁷ Because claim 2 is dependent on the method of claim 1, it too implicates the contested term. As a dependent claim, however, claim 2 refers to claim 1 without repeating the contested term.

communication unit and the host server. In figure 1, a lightening bolt denotes the wireless connection linking the client communication unit (a computer) with the communication server. A solid line between the communication server and the host server depicts a wired connection. The figure's description explains, "[i]n order to keep connectivity costs to a minimum, the [communication] server 110 is preferably connected the LAN/WAN on which the host 115 is also connected, via any standard LAN/WAN communication channel (e.g., a bus or backbone)." (*Id.*, 4:45-49.) A standard LAN/WAN channel includes wired or wireless communication. (D.E. 94, p. 38.) A "bus" is a wired network, while a "backbone" can be either. (*Id.*)

In figure 2, an alternative embodiment of the invention, a lightening bolt shows the wireless connectivity between the communication server (201) and the base site (218), which feeds the communication server. As in figure 1, the communication between the server and the host systems (240, 255, and 260) is shown as wired. The channel that links the server and host systems 255 and 260 is a public telephone network (250)-wires and all. (*Id.*, 5:3-5.)

The Federal Circuit has a strong presumption against adopting a claim construction that excludes a disclosed embodiment. *In re Katz Interactive Call Processing Patent Lit.*, 639 F. 3d 1303, 1324 (Fed. Cir. 2011). Here, the "completely wireless" construction preferred by Apple excludes both the preferred and alternative embodiments. Defining a term to exclude the inventors' preferred embodiment-to say nothing of a construction that forbids all the disclosed figures-"is rarely, if ever correct and would require highly persuasive evidentiary support[.]" Vitronics, 90 F. 3d at 1583.

Apple looks beyond the patent to defend its construction. In 2010, ten years after the '531 Patent issued, the USPTO reexamined the patent to determine whether the prior art references in two earlier patents-"Pepe" and "Hamalainen"⁸presented a substantial new question as to the patentability of claims 1 and 11. (D.E. 93-4.) The Examiner ultimately confirmed Patent '531. (D.E. 93-6.) Apple contests that Motorola consented to a "completely wireless" construction of the disputed term by failing to comment on the Examiner's stated basis for allowing the '531 patent. Apple points to a regulatory change to support its claim that an inventor's silence equates to assent to the examiner's rationale. Before USPTO reexamined the '531 patent, 37 C.F.R. § 1.109 (1996) was rescinded. This provision had stated: "Failure to file such a statement shall not give rise to any implication that the applicant or patent owner agrees with or acquiesces in the reasoning of the examiner." 37 C.F.R. § 1.109 (1996). According to the USPTO, the old rule fell because "[t]he examiner's statement of reasons for allowance is an important source of prosecution file history, the failure of an applicant to comment on damaging reasons for allowance would give rise to a presumption of acquiescence to those reasons, and the negative inferences that flow therefrom." 65 Fed. Reg. 54604, 54633 (USPTO Rules and Regulations, Sept. 8, 2000).

Even if the Court accepted Apple's interpretation of the current regulations,

⁸ "Pepe" and "Hamalainen" are, respectively, U.S. Patent Nos. 5,742,905 and 5,802,465.

Motorola's failure to respond to the USPTO's rationale for allowing the '531 Patent does not, as Apple argues, amount to a disavowal of a partially wireless network.⁹ Apple emphasizes the fact that among the examiner's reasons for allowing the '531 Patent was the observation that Pepe "does not communicate data units over a wireless network because the network of Pepe is a wireline network (#29) between the communication server (#30) and the host server (OFFICE) and wireless (#39) between the client communications unit (#30) and the communications server (#40)." (D.E. 93-6.) To Apple, the Examiner's description of Pepe proves that the significant difference between the '531 Patent and Pepe must be that, unlike Pepe, the '531 Patent involves a completely wireless network. Apple maintains that Motorola's silence in the face of the examiner's statements as to Pepe's wired features provides further support for Apple's conclusion.

The Examiner did not ultimately base confirmation of the relevant claims of the '531 Patent, however, on a finding that it was completely wireless. Rather, the examiner cited a different feature: "Pepe does not disclose or suggest a method of communicating data units over a wireless network between a client

⁹ Motorola argues that Apple is "making much ado" about the regulatory change. From Motorola's view, the current regulations do not impose a duty on a patent holder or applicant to rebut or consent to an examiner's rationale. Motorola cites *Black & Decker v. Robert Bosch Tool Corp.*, in which a district court explained that Congress's "revision of §1.104(e) does not provide any new policy, but rather tracks the state of the case law established in the decisions of the Supreme Court and the Federal Circuit." 389 F.Supp. 2d 1010, 1024 (N.D. Ill. 2005), *aff'd in part and vacated in part on other grounds*, 260 Fed. Appx. 284 (Fed. Cir. 2008). Support is lacking in current Federal Circuit case law for attaching an affirmative duty. *See Salazar v. Procter & Gamble Co.*, 414 F. 3d 1342, 1347 (Fed. Cir. 2005) (an "examiner's unilateral remarks alone do not affect the scope of the claim, let alone show a surrender of a claimed subject matter.") However, this Court need not resolve the disagreement because, as explained *supra*, the Examiner's confirmation of the claims did not depend on whether the network is completely wireless.

communications unit and a host device via a communications server *in combination with the other features set forth in the claims.*" (D.E. 93-6.) (emphasis added) Thus, in remaining silent in the face of this rationale, Motorola did not foreswear any claim to a partially wireless network. It proves only– if the undersigned is to assign Motorola's silence any relevance– that the inventors believed that the '531 Patent disclosed a method of communicating data over a wireless network that, when combined with the patent's other features, constituted a novel invention.

Notwithstanding Apple's attempt to reinterpret the '531 Patent in light of the reexamination, the intrinsic evidence of the patent is convincing. The claim terms and the specification, taken together, lead the Court to adopt Motorola's alternative construction: "two or more devices whose interconnection(s) is implemented, at least in part, without the use of wires."

D. The '987 Patent

Disputed term: "the antenna. . . is disposed between an outside surface of the housing and the at least a portion of the user interface" (claims 13-14)

Motorola's proposal: Ordinary meaning; in the alternative: "the antenna. . . is arranged between an outside surface of the housing and the at least a portion of the user interface"

Apple's proposal: "the entire antenna is placed between the outside surface of the receiver's case and the portion of the user interface surrounded by the antenna"

The '937 Patent "relates generally to antennas and more particularly to concealment of a pager antenna external to a radiotelephone/pager unit." ('987

Patent, Field of the Invention.) The central dispute between the parties is whether the entire antenna in claims 13 and 14 must be located outside the housing of the radiotelephone/pager unit ("the unit"). Apple claims that it does. Motorola responds that Apple's construction would negate all of '987's disclosed embodiments since the embodiments clearly show that the antenna couples with the radio circuitry inside housing. Additionally, the parties dispute the final clause of claims 13-14 ("and the ... user interface.").

With respect to the dispute concerning the antenna, the Court sides with Apple. However, the Court declines to accept Apple's request to construe the final portion of the disputed term as "the portion of the user interface surrounded by the antenna."

The antenna

The term "antenna" has an undisputed "plain and ordinary meaning." However, this does not end the Court's inquiry. Claim construction may still be appropriate if the parties dispute "not the *meaning* of the words themselves, but the *scope* that should be encompassed by this claim language." *02 Micro*, 521 F. 3d at 1361 (emphasis in original). The instant dispute goes to the scope of the claim language. Apple's construction limits the scope of the claims to units that have their entire antenna placed outside the unit housing. Motorola's construction includes no such limitation. There being a genuine dispute over the scope of the term, the Court will consider the merits of Apple's proposed construction.

First, Apple points to the disputed claims to show that when the patentee

stated "the antenna" in claim 13, he meant "the entire antenna." (D.E. 93, p. 21-2.) The relevant portion of claim 13 reads: "the antenna forms a loop surrounding *at least a portion of* the user interface[.]" (emphasis added). Apple highlights the italicized text as evidence of the fact that the patentee knew how to limit the reach of the antenna. By Apple's account, in expressly stating that the antenna covered only some of the user interface, but not stating whether all or some of the antenna formed a loop around the user interface, the patentee implied that *all* of the antenna covered at least *some* of the user interface.

Next, Apple points to the specification. "The discussion for each of the four preferred locations for the pager's antenna," it reads, "describe the pager antenna being located within a recess of the front housing." ('987 Patent, 4:37-39.) The detailed description of the preferred embodiments further emphasizes that the preferred embodiments illustrate a "unique element of the present invention." (The patent mentions "an alternative design," but does not illustrate it in any figure (Id., 4:39-48.)) "The "unique element" is that "the pager antenna is located outside the radiotelephone's housing and yet noticeable to a user." (Id., 2: 37-41.) In each of the figures depicting the four preferred locations for the pager's antenna, the entire antenna (number 212) is outside the housing (figures 2, 4-6.)

Motorola draws the opposite conclusion from the specification. It asserts that the specification makes clear that part of the antenna in fact resides inside the housing. Motorola refers specifically to the pager antenna terminals–numbers 201 and 202 in figure 3. The specification states that the terminals "couple" the pager antenna to the pager receiver circuitry. (*Id.* 3:57-58.) Shortly thereafter, the specification uses identical terms to describe the function of the terminals in a different preferred embodiment: "The pager antenna terminals 201 and 202 couple to the pager receiver circuitry 218 via a hole 506 in the front housing." (*Id.* 4: 4-6; *see also, Id.*, 4:26-28) (describing a terminal component in figure 6). According to Motorola, since the pager antenna terminals connect with the pager receiver circuitry inside the housing, part of the pager antenna must be located inside the housing. "The patent shows," Motorola's counsel summarizes it, "this as one continuous piece of metal, and the 201 and 202, there is no dispute, is the thing that connects to the receiver inside the housing." (D.E. 155, p. 708.)

The ultimate dispute between the parties is thus reduced to whether the pager antenna terminals are part of the pager antenna. Apple, agreeing that the pager antenna terminals reside inside the housing, defines the terminals as separate components, distinct from the antenna. (D.E. 155, p. 691.) This is because the terminals perform a unique function as the components that couple the antenna and receiver circuitry. (*Id.*) Apple's position is supported by the fact that the patent assigns the terminals separate numbers (201, 201) from the antenna (212) and the receiver circuitry (218).

Construing the claims in light of the specification, the Court is persuaded that when the inventor stated in the disputed claims that the antenna was "outside the surface of the housing," he meant entirely outside. By the same token, the patent makes clear that the coupling of the antenna and the receiver circuitry occurs inside the housing. Thus, the Court construes the disputed term as follows: "wherein the antenna forms a loop that surrounds at least a portion of the user interface, but excludes the terminals, and therefore is disposed entirely between an outside surface of the housing and the at least a portion of the user interface."

The Court declines Apple's request to change the final portion of the disputed term ("and the ... user interface") because Apple has failed to give a reason why the dispute here concerns the scope of the term. *02 Micro*, 521 F. 3d at 1361 (holding that construction is appropriate where the parties dispute the claim scope).

E. The '737 Patent

Disputed term: "Address identifying the portable communication device." (Claim 9).

Motorola's proposal: Ordinary meaning—this term requires no construction. In the alternative, some reference uniquely identifying the portable communication device.

Apple's proposal: "an address used to direct messages that uniquely identifies a portable communication device."

The '737 Patent discloses a method and apparatus for registering software applications to a portable communication device. In claim 9 of the patent, the portable communication device transmits an "external authorization request" to the "fixed portion." The transmitted request includes the disputed term—"an address identifying the portable communication device."

Under Apple's proposed construction, the "address," in addition to identifying the portable communication device, must also serve as the return address to which messages can be directed from the fixed portion back to the device. Motorola rejects Apple's attempt to construe "address" to serve these dual purposes. The Court agrees with Motorola, and declines to construe the disputed term as including the second of these functions.

The present inventors were meticulous about distinguishing between two different addresses. The "address" included in the external authorization request is one, and the "selective call address" is the other. The first "address" is part of the message that the portable communication device sends to the fixed portion. The "selective call address" is part of the message that is sent back to the portable communication device after the authorization process has occurred.

Significantly, wherever the inventors describe the "address" in the external authorization request, they disclose that this address need only identify the portable device manager from which the authorization request came. See '737 Patent, abstract ("an address (313) identifying the portable communication device"); Id., 3:43-46 ("a portable device address 218 corresponding to the address of a portable communication device 122 is used to search the data base of portable device records 216."); Id., 5:26-30 ("The external authorization request ... comprises ... an address identifying the portable communication device 122."); Id., 5:45-53 (detailing "list checker element's use of "address"); Id., 10:57-59 ("Once the secure CRC is determined, the processor 308 prepares an external authorization request message comprising an authorization request command, the address of the portable communication device..."); *Id.*, 13:15-16 ("an address 434 corresponding to the portable communication device 122"); *Id*, 14:14-17 ("In step 506 the controller 112 identifies the portable communication device 122 requesting the authorization by the address 434 received."); *Id.*, 15: 19-26 (describing another use of "the address 434 of the portable communication device 122).

By contrast, when the inventors refer to the "selective call address," they make clear that, unlike the "address" in the external authorization request, the "selective call address" is used to direct outbound messages back to the portable communication device. *See Id.*, 2:21-23 ("The radio signals comprise selective call addresses and messages transmitted to the portable communication devices[.]"); *Id.*, 5: 11-15 ("The class processing element 232 handles the processing of an incoming call for a called party and for controlling the transmitted 202 to send a selective call message to the portable communication device 112."; *Id.*, 12:50-52 ("The selective call address 408 identifies the portable communication device 122 for which the outbound message 412 is intended.")

Apple's argument turns on an ungrounded assertion. Referring to figure 5, Apple's counsel explains why, from Apple's view, the term "address" (here marked 434) from the inbound message should be defined identically as the term "sel. call address" (marked 408) from the outbound message. Apple claims that the "selective call address" must be the same as the "address" because "there is no other place it could have come from," meaning that the address-related data that allows the "selective call address" to transmit messages back to the device can only come from the "address." (D.E. 155, p. 32.)

Logical though the Apple argument may be, it asks too much. Apple offers no direct evidence from the claims or specification that the inventors here limited their invention such that the data that comprises the critical address information contained in the "selected call address" must come from the "address" in the external authorization request. Apple's inability to point to anything beyond the apparent convenience of linking the address information from the inbound and outbound addresses is explained by the fact that the patent itself is completely silent on the matter. The claims and specification of the '737 Patent nowhere disclose how messages are transmitted back to the portable communication device other than indicating that a "selected call address" is used for this purpose.

Furthermore, as demonstrated by the abstract, the focus of the present invention was on an apparatus and method through which a portable communication device processes a request for authorization to utilize a software application. This process goes only so far. It begins when the portable communication device receives a request to add a software program. "In response," the abstract states, "the portable communication device (612) seeks a usage authorization for utilizing the software by generating (614) an external authorization request that includes," among other data, "an address (313) identifying the portable communication device." Tellingly, the abstract then ends without mentioning how the fixed portion, which receives the "external authorization request," communicates whether or not it has approved this request back to the portable communication device. This shows that the inventors' emphasis was on the inbound communication, a fact that provides the Court another reason to avoid construing "address" in light of the little the patent says about the outbound communication.

In sum, Apple lacks factual support for its construction. The claims and specification consistently define "address" and "selected call address" as distinct terms. Since "address" is used in all cases as an "address" for the sole purpose of "identifying" the portable communication device, the Court rejects Apple's proposal and applies instead the following construction: "an address uniquely identifying the portable communication device."

IV. The Disputed Claim Terms of Apple's Patents

A. The '849 Patent

Disputed term: "moving [an] [the] unlock image" (claims 1-10, 12-14, 16-18)

Apple's proposal: Ordinary meaning; in the alternative: "causing an unlock image to change position over time via continuous contact with the touch screen."

Motorola's proposal: "Translating the unlock image from one portion of the coordinate space of the touch-sensitive display to another;" in the alternative: "causing an unlock image to change from one location to another."

Motorola argues that the term "moving the unlock image" requires a construction. Apple contends that the fact-finder would understand this term clearly, and offers its own construction only in the alternative.

The Court must construe a claim term when the parties have a genuine dispute over the term and when reliance on a term's "ordinary meaning" does not resolve the parties' dispute. *02 Micro*, 521 F. 3d at 1361. "Claim construction is a matter of resolution of disputed meanings and technical scope ... It is not an obligatory exercise in redundancy." *U.S. Surgical Corp.* 103 F. 3d at 1568.

The parties have a genuine dispute over the meaning of movement. Apple's patent describes a method whereby a user unlocks a device, such as a smartphone, by using a finger to slide an unlock image across the device's touch screen. Apple believes that Motorola has infringed upon Apple's patent because Motorola's smartphones are unlocked in more or less the same way. (D.E. 149, pp. 376-77.) Motorola insists, however, that its unlock images do not move in a manner contemplated by the '849 Patent. When a user unlocks a Motorola smartphone, an image of a bar stretches from one side of the touchscreen to the other. Thus, its unlock images do not "move," in that they are not relocated from one point to another. Rather, the unlock image grows or is distorted. (*Id.*, p. 369.)

Not surprisingly, Apple argues that "movement" encompasses any motion, not just the relocation of an image. At the Markman hearing, Apple's counsel explained that a turtle that sticks its neck out from its shell has moved even if the turtle's feet have not. (*Id.*, p. 377) For Apple, movement is motion. By its account, stretching, flexing, twisting, bending, leaning, rotating, and a host of other things that a person or object can do without changing its physical location, all equal movement.

The parties, therefore, have a genuine dispute over what kind of movement the patent contemplates. Appealing to the ordinary definition of movement, furthermore, fails to settle the matter. Motorola's view of movement as location change and Apple's view of movement as position change both fall within the ordinary definition of movement. Thus, the Court must construe the claim term.

The Court begins with the presumption that the correct construction of movement here must be the same across the various claim terms. "[T]he use of a term within the claim provides a firm basis for construing the term." *Phillips*, 415 F. 3d at 1314. When the inventor uses the same term throughout a patent, the Court presumes, unless otherwise compelled, that the term "carries the same construed meaning." *Z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1348 (Fed. Cir. 2007).

Claims 1-10, 12-14, and 16-18 of the patent are method claims. Each patents a process by which a user can control an electronic device equipped with the invented technology through the movement of an unlock image. Each describes further how the movement occurs. For example, in claims 1, 12, and 16, the user controls the device by "moving an unlock image along a predefined display path." (*849 Patent, 19:21-22; 21:1-2; 22:15-16.) In claim 3, the predefined path upon which the movement occurs is specified to be a channel. (*Id.*, 19:37-38.) In claims 4, 14, and 18, the movement is "across the touch-sensitive display[.]" (*Id.*, 19:40-41; 21:53; 22:56.) In claim 5, the prescribed method is a "horizontal movement." (*Id.*, 19:46.) In claims 6, 13, and 17, the unlocking action occurs when the user moves "the unlock image along a predefined displayed path on the touch-sensitive display to a predefined location[.]" (*Id.*, 19:56-57; 21:25-27; 22:37-38.)

Some of the claims contemplate a movement from one location to another, such as when the patent describes moving the unlock image across the touch-screen and moving it to a predefined location. But the claims that require moving the unlocking image "along a predefined path" prevent the Court from interpreting the term so narrowly. The "predefined path" of claims 1, 12, and 16 is nowhere described as a path of any horizontal or vertical length. Instead, the "predefined path" need only correspond with a "predefined gesture." (*Id.*, 19:27; 21:9; 22:22.) The gesture that marks the "predefined path" could be a variety of movements. For example, the rotation of the user's finger, mimicking the turning of a key in a lock, could be the "predefined gesture." In this case, the unlocking image would move by rotating around in a circular motion without ever changing its physical location on the touch-screen.

Looking elsewhere in the patent, the Court is further convinced that the inventors here claimed more than just a method of unlocking an electronic device by moving an unlocking image across a touch-screen. The summary of the invention indicates that in some embodiments of the invention, the user will be able to control an electronic device by "moving an image corresponding to a user-interface unlock state of the device in accordance with the contact" where "the detected contact corresponds to a predefined gesture." (*Id.*, 2:3-5.) Figure 2 provides a flow chart describing the process of controlling a device through movement by an unlocking image that responds to a predefined gesture. The relevant portion of the corresponding text explains:

The unlock action includes contact with the touch screen. In some embodiments, the unlock action is a predefined gesture performed on the touch screen. As used herein, a gesture is a motion of the object/appendage making contact with the touch screen. For example the predefined gesture may include a contact of the touch screen on the left edge (to initialize the gesture), a horizontal movement of the point of contact to the opposite edge while maintaining continuous contact with the touch screen, and a breaking of the contact at the opposite edge (to complete the gesture). (*Id.*, 9:24-33.)

The effect of adopting a definition of movement that covers only the type of movement stated here is to disregard the inventor's intent to offer one example of potentially many ways in which an electronic device could be unlocked using the patented method. Moreover, the given example cannot be read to overcome the inventors' stated definition of the kind of gesture, and therefore movement, that could be employed to unlock a device under the patented technology. Once again, they provided: "As used herein, a gesture is a motion of the object/appendage making contact with the touch screen." (*Id.*, 9:26-28.) Thus, moving an unlocking image according to a predefined gesture could require the user only to effectuate some "motion" via contact with the touch-screen.

The intrinsic evidence is inconsistent with Motorola's proposed construction,

which narrows the scope of movement. A broader definition of movement is needed to construe the term "moving an unlocking image" accurately in each of the various claims at issue in this patent. The construction that captures the meaning of movement is one that, as contemplated by the patent itself, allows the movement to be horizontal or merely "motion."

Accordingly, the term at issue is hereby construed as: "motion of the unlock image in accordance with a particular gesture that the device recognizes as an unlocking gesture."

B. The Display Space Patents (Nos. '646 and '116)

The Display Space Patents (Nos. '646 and '116) have four disputed terms. The Court addresses first the two disputed terms that generally concern the role of the "device manager." These two terms are referred to herein as Disputed terms (1) and (2). Next, the Court addresses the remaining two disputed terms, (3) and (4), which concern the modification of the display space.

Disputed term (1): "determi[ning][es] whether [a] device ... is a video device" ('646 Patent claims 1, 10, 13, 14, 16, and 32)

Apple's proposal: Plain and ordinary meaning; in the alternative: "determine whether a device is or is not capable of displaying video."

Motorola's proposal: "Having the device manager, which is an operating system component and not a device driver, specifically determine that the device is a video display device." The Court first addresses whether the terms "determining" and "detecting"¹⁰ require, as Motorola proposes, that a "device manager" must perform these steps. Additionally, Motorola's construction asserts that the device manager "*specifically* determines." (emphasis added) Finally, Motorola defines "device manager" as "an operating system component and not a device driver." Apple opposes each element of Motorola's proposed construction.

Role of the "device manager"

Motorola makes two arguments in support of its device manager-specific construction of "determining." It asserts that (1) Apple disavowed a device manager-agnostic construction during prosecution, and (2) that the specification is most consistent with its device manager-specific view.

"A patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution." *Purdue Pharma L.P. v. Endo Pharms.*, 438 F. 3d 1123, 1136 (Fed. Cir. 2006). Here, Apple arguably disavowed that "determining" was device-agnostic by stating that "[i]n accordance with one aspect thereof, the present invention adds to the system of the Hendry et. al. patent by utilizing a device manager to provide hot-plugging capabilities." (D.E. 93, Ex. 10, p. 9.) However, Apple further explained

> ... that the distinctions between the present invention and the Hendry et. al. patent are brought out in each of the

¹⁰ Motorola construes "detecting" in the '116 Patent as "determining." Accordingly, Motorola applies the same construction for "detecting" in the '116 Patent that it proposes for "determining" in the '646 Patent.

rejected claims. For example, claim 1 recites the steps of detecting the addition or removal of an input/output device, and "determining whether an input/output device which has been added or removed is a video device, in response to said detection." It is respectfully submitted that the Hendry et al. patent does not disclose this step of determining whether an input/output device that is added or removed in a computer system is a video device. Further, it is noted that the rejection of claim 1 does not address this particular element of the claim. For at least this reason, therefore, it is not anticipated by the Hendry et al. patent. (*Id.*)

In other words, Apple called the examiner's attention to a difference between the instant invention and the prior art. The fact that the present invention used a device manager was not the basis for distinguishing the '646 Patent from the earlier Hendry et. al Patent; rather the new invention disclosed the novel feature of "determining" whether an added device was a video device. On the face of the quoted statement, this step of determining could occur with or without a device manager. Either way, according to the quoted statement, it would still be distinct from the prior art.

A party seeking to limit an adversary's claims on the grounds of disavowal of claim scope must focus on precisely what the adversary disavowed. *See Alloc, Inc. v. Int'l Trade Com'n*, 342 F.3d 1361, 1372 (Fed. Cir. 2003) ("Because the applicant invoked play to overcome the prior art, . . . Alloc cannot now contend that the '621 patent claims a flooring system and method for installing that system without play.") Apple distinguished the relevant '646 claim from the prior art by invoking the step of "determining." Motorola does not show that Apple made a "clear and unmistakable" disavowal of performing this step without the use of a device manager. Thus the Court cannot find, on the present facts, that Apple disavowed a device-agnostic construction of "determining."

Motorola also relies upon language in the specification to read device manager into the term "determining." This argument is persuasive. In particular, Motorola quotes the abstract, which refers to the "device manager," and the following statement from the summary of the invention: "In accordance with the present invention, the foregoing objective is achieved by utilizing a device manager to automatically recognize and react to changes in the configuration of a display environment." ('646 Patent, 2:23-30.) In this instance, the specification demonstrates that pursuant to the '646 Patent, the step of "determining" is always performed by the device manager. The cited text from the summary of the invention is significant because the statements are "not limited to describing a preferred embodiment, but more broadly describe[s] the overall invention." Microsoft Corp. v. Multi-Tech Sys., 357 F. 3d 1340, 1348 (Fed. Cir. 2004). Additionally, Apple stated in the summary of the '646 Patent that the use of a device manager to "recognize and react" to certain changes in the display environment was "[i]n accordance with the present invention," which is to suggest that this feature is necessary to the invention. ('646 Patent, 2:24-25.) When a patent "describes the features of the 'present invention' as a whole, this description limits the scope of the invention." TiVo, Inc. v. EchoStar Commc'ns Corp., 516 F. 3d 1290, 1300 (Fed Cir. 2008); See also Honeywell Int'l Inc. v. ITT Indus., Inc. 452 F.3d 1312, 1318-19 (Fed. Cir. 2006).

Furthermore, in the prosecution history, Apple commented that "[i]n accordance with one aspect thereof, the present invention adds to the system of Hendry et al. patent by utilizing a device manager to provide hot-plugging capabilities." (D.E. 148, p. 238.) As explained, this statement alone does not qualify as a "clear and unmistakable" disavowal. However, as in the summary of the invention, in this section of the prosecution history, Apple described the use of the device manager to be an aspect of the "present invention." Its description is relevant because "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.

In reaching the conclusion that Apple meant for the "device manager" to perform the "determining" function described in the '646 Patent, the Court has carefully considered Apple's argument that the presence of the term "device manager" in some, but not all, of the claims that use "determining" calls into question Motorola's attempt to import a "device manager" requirement into "determining" wherever this term appears in the patent. *See Elekta Instrument S.A. v. O.U.R. Scientific Int'l, Inc.* 214 F. 3d 1302, 1305-07 (Fed. Cir. 2000) (refusing to adopt a claim construction that would interpret claim language as superfluous). Here, presuming that Apple intended a consistent use of the term "determining," Motorola's construction arguably would render Apple's use of "device manager" superfluous in all the claims that recite both "determining" and "device manager." Still, the Court is bound to interpret the disputed claims in light of the specification, and not according to a uniform rule that drafters never use additional words-beyond what is minimally necessary- for the sake of clarity or emphasis. To quote *Phillips*: "[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." 415 F. 3d at 1315.

In sum, taking as a whole the prosecution history, the abstract, and, most importantly, the summary of the invention, the Court is convinced that Apple meant for the "device manager" to perform the "determining" function recited in the '646 Patent.

Defining device manager

Under Motorola's construction, the "device manager" is "an operating system component and not a device driver." Motorola identifies "device manager" as a coined term. Citing *3M Innovative Props. Co. v. Avery Denninson Corp.*, 350 F. 3d 1365, 1374 (Fed. Cir. 2003), and *Phillips*, it then looks to the specification to define the term and finds that "a portion of the computer's operating system that is referred to herein as a device manager" performs the detection of video devices. ('646 Patent, 5:15-21.) To show that a "device manager" cannot be a "device driver," Motorola also points to the specification and to Apple's statements during the prosecution of the Display Space Patents. (D.E. 100, pp. 11-12.)

In response, Apple characterizes as exemplary and, thus, non-definitional,

the portion of the specification that, in Motorola's view, defines device manager. Apple asserts further that there is nothing in the '646 Patent warranting the "negative limitation" that the "device manager" cannot be a device driver. (D.E. 93, p. 52.)

Before addressing the term's meaning, the Court must first consider Apple's additional assertion that the term "device manager" should not be construed because it is not "part of the disputed phrase that the parties seek to construe" (D.E. 97, p. 36.) For resolution of this issue, the Court follows the Federal Circuit's opinion in *Every Penny Counts, Inc. v. Am. Express Co.*, 563 F.3d 1378, (Fed. Cir. 2009).

In Every Penny, the Federal Circuit rejected plaintiff's argument that the district court erred in considering a definition of a proposed term. Significantly for the present question, the district court in Every Penny considered the definition of a term in a proposed construction precisely because the plaintiff was not proposing the traditional use of the term in question. Here, the Court might have declined to construe "device manager" outright had it not been a term of art. In any event, even though the district court in Every Penny did not adopt the construction that included the term it considered at the Markman hearing, the Federal Circuit clarified that the lower court would have erred had it adopted the proposed construction without defining the term in question. Had the district court done so, the Federal Circuit concluded, it would have "failed to assign a fixed, unambiguous, legally operative meaning to the claim." Every Penny, 563 F.3d at 1383. "[T]he

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court's obligation," the Federal Circuit explained, "is to ensure that questions of the scope of the patent claims are not left to the jury. In order to fulfill this obligation, the court must see to it that disputes concerning the scope of the patent claims are fully resolved." *Id.* In the case of 646 Patent, there is a dispute as to whether a "device manager" must perform the step of "determining" and a subsidiary dispute as to the meaning of the term "device manager," both of which go to the scope of the patent. Thus, the Court will consider Motorola's proposed definition of device manager.

The Court agrees with Motorola that the specification describes the device manager as an operating system component. The detailed description of figure 3 states that the detection of PC cards is "handled by a portion of the computer's operating system that is referred to herein as a device manager." ('646 Patent, 5:15-21.) Apple claims that this language is non-definitional because it "merely identifies one prior art means of detecting PC Cards." (D.E. 98, p. 35.) This is incorrect. The statement clearly identifies the device manager as part of the operating system. True, the statement also indicates that this component is "referred herein" as a device manager. However, the "referred herein" clause does not render the entire statement exemplary. Rather, it indicates simply that the inventors referred to a particular operating system component as a device manager throughout the patent. The plain reading of the clause "referred herein" is further supported by the fact that figure 4 later depicts the device manager as a subelement located within the operating system. Thus, the Court adopts Motorola's proposed construction as to the device manager being a "component of the operating system."

Finally, Motorola argues that "device manager" should be construed to include the qualifier "not a device driver." Motorola justifies its request for this negative limitation on the grounds that Apple includes Motorola's device drivers among the infringing components. (D.E. 148, pp. 202-203.) The Court concurs with Motorola that the nature of the "device manager" concerns the scope of the claims at issue, and therefore will consider Motorola's proposed construction. "[T]he court must see to it that disputes concerning the scope of the patent claims are fully resolved." *Every Penny*, 563 F.3d at 1383; *see also Silicon Graphics, Inc. v. ATI Techs.*, 607 F.3d 784, 798 (Fed. Cir. 2010) (commenting that claim construction is necessary "only '[w]hen the parties present a fundamental dispute regarding the scope of a claim term.")

Motorola's support for the proposed limitation, however, is insufficient. At the Markman hearing, Motorola pointed to figure 1 of the '646 Patent, which shows the overall display system architecture. It then argued that because this figure depicts the "video driver" and "display driver" as separate from the operating system, the Court must construe "device manager" to mean "and not a device driver." (D.E. 148, p. 202.) Motorola failed to explain exactly what relevance this has to the precise relationship between a device driver—a term that, incidentally, appears just one time in the background sections of each Display Space Patent ('646 Patent, 1:45)—and the device manager. Without this explanation, the Court is unable to adopt the proposed limitation based solely on figure 1.

Additionally, Motorola argues that Apple disclaimed claim scope during the prosecution of the '116 Patent when Apple asserted that the present invention was novel because the prior art did not allow the communications between the operating system and device drivers to occur until after the operating system had completed its initialization process. (D.E. 96-2, p. 12.) For Motorola, this snippet of the '116 Patent's prosecution history can only mean that the patent "explicitly refer[s] to the device driver as something separate from the operating system." But the quoted history is, in actuality, a reference to how the *prior art* worked. By relying on it alone, Motorola has failed to show that Apple made a "clear and unmistakable" disclaimer of the scope of the *present* Display Space patents. *See Purdue Pharma L.P.*, 438 F. 3d at 1136.

For the reasons herein stated, the Court declines to add "and not a device driver" to the term's construction.

Disputed Term (2): "detect[ing][s]... a display device"

Apple's proposal: Plain and ordinary meaning ; in the alternative: "detecting a device capable of displaying."

Motorola's proposal: "Having the device manager, which is an operating system component and not a device driver, specifically determine that the device is a video display device."

Motorola argues that "detecting" as used in the '116 Patent and

"determining" as used in the '646 Patent should be assigned the same meaning. However, the Court agrees with Apple that the inventors used "detecting" in the '116 Patent to mean something different than "determining" in the '646 Patent. The relevant claims of the '116 Patent describe the detection of a display device. By disclosing "detection," the inventors indicate that the precise function of their invention is to recognize the addition or removal of a display device, and not to identify whether such a device is a video device. By contrast, the "determination" described in the '646 Patent plainly contemplates this distinct step.

"[I]n the absence of any evidence to the contrary," the Federal Circuit advises, "we must presume that the use of. . . different terms in the claims connotes different meanings." *CAE Screenplates, Inc v, Heinrich Fiedler GmbH & Co.*, 224 F. 3d 1308, 1317 (Fed. Cir. 2000). To convince the Court to assign the same meaning to different terms from claims in separate patents, Motorola here points to the USPTO's initial rejection of the '116 Patent on the grounds that it was unpatentable over the '646 Patent. (D.E. 100, p. 13.)

However, the Examiner further clarified that the relevant claims from the '116 Patent were unpatentable not because the terms "detecting" and "determining" are synonymous, but more precisely because the patents presented a case of "nonstatutory obviousness-type double patenting." (D.E. 96-3, p. 2.) An obviousnesstype rejection applies not where the claim is of the same scope, but where it is obvious in light of the first patent. Manual of Patent Examination Pr. § 804 II. B. 1. Thus, the Examiner's initial rejection of the '116 claims cannot be interpreted as an indication that "determining" and "detecting" have the same meaning. Without additional evidence to convince it otherwise, the Court declines to accept Motorola's proposed construction of "detecting" as "determining."

Specifically

Since the Court has rejected Motorola's proposal to construe "detecting" in the '116 Patent as "determining," the Court also refuses to add the modifier "specifically" to any of the contested claims in this patent. As for the '646 Patent, which does include the term "determines," the Court also refuses to add a modifier because the proposed term is unnecessary and has the potential to confuse the jury.

Disputed terms (1) and (2) Conclusion

For the reasons herein stated, the Court construes the claim term "Determi[ning][es] whether [a] device ... is a video device" in the '646 Patent as: "Having the device manager, which is an operating system component, determine that the device is a video display device." The Court further adopts Apple's alternative construction—"detecting a device capable of displaying"—for the disputed term "detect[ing][s]... a display device" in the '116 Patent.

Disputed Term (3): "modifying the allocation of the display space" ('646 patent claims 1, 10, 13, 14, 16, and 32)

Apple's Proposal: Plain and ordinary meaning; in the alternative: "allocating or deallocating display space."

Motorola's Proposal: "Changing the allotment of the global coordinate space

available for use by display devices."

While both parties refer to the '646 and '116 patents as the Display Space Patents, they dispute the meaning of "display space." Apple argues that "display space" has no special meaning and is best left as is. Motorola insists that "display space" is really what an ordinary artisan would understand as "global coordinate space." By this, Motorola means several things. The "display space" must be singular and unified. Most importantly, it must be shared. As Motorola sees it, the Display Space Patents invented a way to modify the environment that several devices can use to display information. This shared environment is what Motorola defines as a "global" space. The Court agrees with Motorola, and adopts both of its proposed constructions.

The claims and the specification support Motorola's construction. Claim 1 of the '646 Patent discloses a method "for reconfiguring a computer system to accommodate changes in a display environment." Under the disclosed process, the computer system detects when a user adds or removes a video device. When a video device is added, new "display space" is not created. Likewise, when a video device is removed, "display space" is not deleted. Instead, the claim describes a step of "modifying the allocation of display space ... in accordance with the addition or removal of a video device." The claim itself thus contemplates a singular "display space," the allocation of which is modified by the inputting or outputting of video devices. Additionally, claim 4 "repositions objects in said display space," further demonstrating that the patentees understood "display space" as a shared space within which video devices could be moved. In instances such as this, where the patentees repeat the same claim term, the Court presumes, unless otherwise compelled, that the term conveys the same construed meaning. *Z4 Techs.*, 507 F.3d at 1348 ("We presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.")

Motorola also points to figures 2 and 5 in the specification. Figure 2, which illustrates an example of the display environment, calls out 30 as the "global display space." The figure shows two display devices and a menu bar within the "global" space. Elsewhere, the inventors explain that "[i]n one known implementation for computer systems, the display environment can generally be considered to be defined by a global coordinated space, as depicted in figure 2." ('646 Patent, 3:65-4:1.) Figure 5, which details how the display environment is modified, refers to the realm where video devices are added and removed as "the global coordinate space." The description states that inserted devices receive a "portion" of this space, again suggesting that "global space" is a singular, shared environment. (*Id.*, 6:47.)

In response, Apple concedes that figure 2 of Display Space Patents depicts a global display space, but protests against defining "display space" accordingly in the other claims. The Court is well aware of *Phillips*'s warning against confining claims to the embodiments described in the specification. 415 F.3d at 1323. However, in the present case, it is not clear what aspect of figure 2 the patentees intended to be exemplary-that is, non-essential to their invention. The description states that

figure 2 illustrates "an example of a display environment." The Court reads this statement to mean that a given display environment need not have the precise configuration of devices as the one depicted. However, in light of the rest of the patent, the undersigned is convinced that every display environment is a single, unified space, which can be shared by several devices. Similarly, the inventors' statement that "[i]n one known implementation for computer systems, the display environment can generally be considered to be defined by a global coordinate space," is not, as Apple suggests, an assertion that global coordinate space is a particular embodiment of global coordinate space. In light of the rest of the Display Space Patents, the statement most likely indicates that when implemented in a computer system, the display environment is typically a global coordinate space.

Throughout the claims and specification of both patents, the inventors used "display space" consistently as a term of art. Their patents read such that an ordinary artisan could not confuse the contested term—"display space"—with the various display spaces represented by the screens of the individual video devices added or removed from the unified, coordinated space disclosed in these inventions. Thus, the Court construes "display space" in accordance with its precise meaning, which is what Motorola proposes.

Disputed Term (4): "a portion of the display space to be modified" ('116 patent claims 1, 8-10, 16, 18-20, 27, 33, 36-38, and 42)

Apple's Proposal: Plain and ordinary meaning; in the alternative: "a part of the display space to be allocated or deallocated."

Motorola's Proposal: "an allotment of the global coordinate space, available for use by display devices, to be changed."

Finally, the Court agrees with Motorola that "changing the allotment" and an "allotment ... to be changed" accurately construe the effect of "modifying" the "global coordinate space." Here, the proposed construction does not differ significantly from the contested term. However, the Court believes that, the term "allotment" best captures what the patents describe – namely, the sharing of a global space by numerous video devices.

C. The Interactive Program Guide Patents (Nos. '456, '509, '560)

The Interactive Program Guide ("IPG") Patents (Nos. '456, '509, '560) describe a unique interactive user interface for television viewers. The Court here has two tasks. First, it must construe the corresponding structure for the terms "listing means" and "listing interface means." ¹¹ Additionally, the Court must construe the term "controller in communication with."

1. "Listing Means" and "Listing Interface Means"

The parties agree that the terms "listing means" and "listing interface means" are means-plus-function claims, and thus subject to 35 U.S.C. §112, ¶6, which provides:

[a]n element in a claim for a combination may be expressed

¹¹ Claims 1, 2, and 4 of the '456 Patent, and claims 15-20, 22-7, 51-2, 54-8, 60-3 of the '509 Patent contain "listing means." Claim 9 of the '456 Patent contains "listing interface means."

as a means or step for performing a specified function without the recital of structural, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

The parties further agree that the disputed terms perform the following corresponding function: (as to Patent '456) "causing an A/V display to selectively display a program listing;" (as to Patent '509) "causing an A/V display to selectively display a program listing that contains listing information related to A/V programs viewable on the A/V display." (D.E. 145, p. 7.) Motorola, however, seeks to include three components lacking in Apple's proposed corresponding structure: (1) an A/V decoder (2) a remote control device and (3) a wireless control unit.¹² The Court agrees with Apple and declines to adopt any of Motorola's proposed limitations.

In a means-plus-function claim, the "corresponding structure" must be "clearly linked" to the claimed function. *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F. 3d 1291, 1298 (Fed. Cir. 2005). Along these same lines, the Federal Circuit has held that "the statute [does not] permit incorporation of structure from the written description beyond that necessary to perform the claimed

¹² The parties had disputed whether "additional tuners/demodulators" were an essential structural element. Motorola's proposed construction asked for the following: "one or more tuners/demodulators, wherein one tuner/demodulator reads and displays a current program from one of the channels received, and additional tuners/demodulators (or the same tuner/demodulator, used in alternation) read and display data from the side-band channels in picture-in-picture (PiP) windows." (D.E. 145, p. 9.) At the Markman hearing, the parties reached an agreement. Apple noted that it had always agreed that "one or more tuners' demodulators." Motorola then explained that by "additional tuners/demodulators," it had meant "one or more" tuners or demodulators. "Then there's no dispute," replied Apple. (D.E. 149, pp. 348-9.) Accordingly, Motorola's proposed construction stands, with the words "one or more" replacing "additional," pursuant to the parties' agreement.

function. "*Micro Chem., Inc. v. Great Plains Chem. Co.,* 194 F. 3d 1250, 1258 (Fed. Cir. 1999). "It remains true, of course," the Federal Circuit further commented in *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.,* 296 F. 3d 1106, 1119 (Fed. Cir. 2002), "that corresponding structure need not include all things necessary to enable the claimed invention to work. It is equally true, however, that corresponding structure must include all structure that actually performs the recited function."

Therefore, the Court analyzes the following disputed structural components in light of these authorities.

(1) "A/V decoder"

Motorola asserts that the A/V decoder is essential to performing the function of "listing means" because listing information must pass through the main module, which includes the A/V decoder. (D.E. 94, p. 22.) Motorola argues further that Apple previously included the central processing unit ("CPU") as part of the corresponding structure without identifying the specific parts of the CPU that, in its view, are essential to the claimed function. Indeed, Apple's initial proposed construction included "the CPU module 62, which receives the data stream of program listings," a statement which Apple apparently copied verbatim from its prosecution of the '509 patent. (D.E. 93, p. 32; D.E. 149, p. 308.)

For Apple, the key point is the specified purpose-not the location-of the A/V decoder. As its counsel illustrated during the hearing, to conclude that an element is essential simply because it is located within a larger unit is akin to presuming that someone inside a courthouse must have entered every courtroom. (D.E. 149, p.

338.) To differentiate the A/V decoder from the claimed function, Apple argues that the A/V decoder converts analog data while the listing data is digital.¹³

The specification supports Apple's contention.¹⁴ It discloses different ways for dealing with, on the one hand, digital listing data, and, on the other, analog data. This is significant because the A/V decoder transmits "analogue data," and thus is not essential to the "listing means" function.

To begin, the summary of the invention introduces the different data sources-digital and analogue. "The present invention," it states, "assumes a service provider provides cable television and/or telephone (T/T) service to users via a T/T cable, including a digital channel of program/service listings, at least one digital back channel (from the user's home to a central file server), a number of analog TV channels, a number of digital pay-per-view channels, and other interactive services transmitted from remote storage devices such as digital file servers." ('456 Patent, 2:40-45.) The specification further describes the listing data as digital. "In operation, the cable or telephone service provider transmits an interleaved data stream preferably including a television program listing, together with program

¹³ Apple did not respond to Motorola's argument that Apple has backtracked from its prior statements that "the CPU module 62" was a part of the corresponding structure. According to Motorola, Apple indicated that its earlier reference to "the CPU module 62" was a "typo." (D.E. 149, p. 307.) While the Court cannot be certain, there is some evidence that Apple, in fact, made a mistake. Figure 2 of the '456 Patent does not show a CPU module bearing the numerical label 62. Rather, the figure includes a main module labeled "62," which contains a sub-component CPU labeled "63." In any case, the dispute between the parties is over whether the A/V decoder is necessary to the agreed function because, as Motorola argues, the A/V decoder is a sub-component of the main module, and not because the A/V decoder is a sub-component of the CPU. It clearly is not. *See* '456 Patent, figure 2.

¹⁴ The IPG Patents all share the same specification.

titles, program times, categories, channel numbers and the like, from a central file server on the digital channel of program listings to the transceiver." (*Id.*, 3:2-7.)

Additionally, none of the disclosed uses of the A/V decoder are "clearly linked" to listing means. The specification indicates that the A/V decoder's purpose is to reformat analog data. The device "is used to decode data encoded in the vertical blanking interval or special side-band cable channels into digital data¹⁵," "to convert analog audio-visual signals from the A/V connect module 66 into digital A/V data," "to resize audio-visual signals from the A/V connect module," and "to decompress certain analog or digital signals (such as MPEG motion video and the like)." ('456 Patent, 9:26-38).

In sum, the IPG Patents do not indicate that the A/V decoder is essential to the claimed function. They assign the A/V decoder a distinct function. Thus, the Court declines to include the A/V decoder as part of corresponding structure for the disputed terms.

(2) Remote control device

Motorola asserts that the remote control is essential because it operates the main module where, once again, the listing data is processed. (D.E. 94, p. 18.) However, as Apple pointed out during the hearing, Motorola's argument neglects the Federal Circuit's teaching that the essential components of the corresponding

¹⁵Asked for an explanation, Apple's counsel defined this function as follows: "It means that if a cable television is coming in in a particular format, it decodes it in a way so you can see it on your television." (D.E. 149, p. 339.)

structure are those that actually perform the recited function. *Cardiac Pacemakers, Inc.*, 296 F. 3d, at 1119. Here, the relevant action occurs inside the transceiver, not the remote control.

Figure 1 of the '509 Patent indicates that the transceiver consists of the A/V connect module, the main module, and an optional CD-ROM. The same figure also makes clear that the remote control is separate from the transceiver—a fact that Motorola recognizes in its claim construction brief: "the controller is separate and distinct (i.e. remote) from the transceiver." (D.E. 94, p 29.) Claim 15 of the '509 Patent further clarifies that the transceiver includes "interface generation means," which allow it to display "multiple levels of information" on a computer or television screen. The claim later states that "said interface generation means further includes listing means." ('509 Patent, 27:24-25.) By contrast, claim 15 also refers to "control means." (*Id.*, 27:19.) Yet it does so as an independent component of the invention, and not as an essential step for the display of listing information.

Pursuant to the cited claim and specification language, the Court will not construe the corresponding structure to include a remote control device.

(3) Wireless control unit

The analysis that the Court followed as to remote control device also resolves the question of whether to include the wireless control unit. The IPG patents disclose that the wireless control unit's purpose is to transmit signal to and from the remote control unit. Since the remote control unit is not essential, neither is the device that permits the remote control to communicate wirelessly with the transceiver. (See '456 Patent, fig. 2 and 8:53-58.)

For the reasons herein stated, the Court adopts Apple's proposed construction for the corresponding structure of the "listing means" and "listing interface means" in the IPG Patents.

2. "controller in communication with"

Disputed Term: "controller in communication with" ('560 patent claims 1, 2, 4-6, 8, 9, 11-13, and 15-16)

Apple's proposal: Plain and ordinary meaning; in the alternative: "controller that sends commands to"

Motorola's proposal: "A hand-held-remote control containing a transmitter for transmitting signals wirelessly to the transceiver;" in the alternative: "a remote control containing a transmitter for transmitting signals wirelessly to the transceiver;" in the alternative: "remote control in communication with."

The second dispute related to the IPG Patents concerns the construction of a claim term. Here, the parties are literally arguing over the remote. Motorola claims that the term "controller in communication qith" refers specifically to a "remote control." To be sure, Motorola is not arguing that the disputed term should be construed as requiring a "remote control" as that term is commonly defined. Rather, Motorola maintains that the "controller" in the disputed claims must be "remote" in the sense of being physically separate from the transceiver with which it communicates.¹⁶ Apple disagrees. The effect of Apple's assertion that "controller" here refers more generally to the component that "sends commands to" the transceiver is to leave the disputed term agnostic as to the location from which the "controller" works its technological magic. The Court sides with Motorola.

First, the Court must decide whether to construe the disputed term. While Motorola insists that the term must be construed, Apple's primary construction would be simply to apply the "plain and ordinary meaning."

"A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute." *O2 Micro*, 521 F.3d at 1361. As Motorola points out, "controller" has a range of "ordinary meanings." To many, "controller" may mean one thing in particular-the hand-held television remote control. However, to the ordinary airline pilot, flight attendant, perhaps even frequent flyer, the same term may provoke an image of an air traffic controller. Indeed, Motorola and Apple patents alike use the term "controller" to mean different things in different contexts. In the instant patent, for example, Apple refers to a "bus controller" in addition to a "remote control device." ('560 Patent, 8:43-51.)¹⁷

¹⁶ Motorola's counsel made this point clear at the Markman hearing when, to cite one example, he asserted: "So that language in and of itself I think shows that the remote control is separate from the set-top box. It's communicating with it. It's something separate." (D.E. 149, pp. 296-7.)

¹⁷ For Motorola patents using the term "controller" in multiple ways, see, e.g., '006 Patent, 4:17-22; '119 Patent, 4:17-22; '531 Patent, 11:57-61.

Even if the term had a singular ordinary meaning, applying it would not resolve the parties' present dispute. Applying the most generic ordinary meaning of "controller"—something along the lines of "a person or thing that controls"—fails to settle the parties' essential argument over whether the controller must be separate from the transceiver. Simply put, the parties agree that the disputed "controller" performs the action that is ordinarily referred to as "controlling." They disagree over whether Motorola's "remote location" requirement should be added as part of the disputed term's construction. Thus, the Court is also compelled the construe the term in order to resolve a genuine dispute that cannot be resolved by merely applying the "ordinary meaning" of the disputed term.

As to the construction of the disputed term, Motorola prevails because the specification describes the invention's controller in every instance as being separate from the devices that it controls. To give an idea of the pervasiveness of the notion of the physical remoteness of the controller within the '560 Patent, the term "remote control" appears therein ninety-four times by Motorola's count. (D.E. 149, p. 295.) In the promotional video that Apple sent to the USPTO, the user of the invention is seen with a remote control in hand. (*Id.*, 293.) Furthermore, the language from the abstract ("Additionally, a remote control device is provided..."), the invention's background ("a control device for controlling the system"), and the disputed claims themselves (where the controller is said to communicate "with"—not "within"—the transceiver), all reinforce the conclusion that the disclosed controller is separate from the transceiver.

Apple's only response is to cite numerous instances in which the inventors describe an illustration of a remote control device as "one embodiment," implying that the invention's remote control device was not to be limited to a single embodiment. (Id., pp. 320-328.) Yet this does not defeat Motorola's argument. In *Honeywell*, the Federal Circuit ruled that the district court correctly interpreted the disputed term "fuel injection system component" to refer only to a fuel filter where, as the District Court explained, "[t]he entire specification of the '879 patent, as well as the sole drawing, describe the elements and operation of a fuel filter with electrically conducive fibers. No other parts are described."¹⁸ 452 F.3d, at 1316. As in *Honeywell*, the '560 inventors described a controller device that was, in every instance, separate from the transceiver. None of the figures detailed in the Detailed Description of the Invention suggest a controller other than a "remote control." (560 Patent, 7:24 and corresponding figures.) Nor is the controller described anywhere in the patent as sharing its location with the transceiver. Thus, on issue of the physical remoteness of the controller, we have a case here-as in Honeywell-where the patent describes only one possibility.

For the reasons herein stated, the Court adopts the following construction of the disputed term: "a device physically separate from the transceiver that is in communication with the transceiver."

¹⁸ The Court declines to follow Motorola's other cited case, *Akamai Techs., Inc. v. Limelight Networks Inc.*, No. 2009-1372 (Fed. Cir. Dec. 20, 2010), because the opinion was vacated in April 2011. *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 419 Fed. Appx. 989 (Fed. Cir. 2011).

V. Final Order

Accordingly, it is hereby

ORDERED and ADJUDGED that the disputed terms shall be construed as follows:

(1) "Responsive to" from the '119 Patent: plain and ordinary meaning;

(2) "Indicative of" from the '119 Patent: "expressive of the changed status;"

(3) "Data units not sent" from the '006 Patent: plain and ordinary meaning;

(4) "Filtered data unit" from the '531 Patent: "a data unit that has passed a set of user-selected criteria;"

(5) "Wireless network" from the '531 Patent: "two or more devices whose interconnection(s) is implemented, at least in part, without the use of wires."

(6) "The antenna" from the '987 Patent: wherein the antenna forms a loop that surrounds at least a portion of the user interface, but excludes the terminals, and therefore is disposed entirely between an outside surface of the housing and the at least a portion of the user interface;"

(7) "Address" from the '737 Patent: "an address uniquely identifying the portable communication device;"

(8) "Moving unlock image:" from the '849 Patent: "motion of the unlock image in accordance with a particular gesture that the device recognizes as an unlocking gesture;"

(9) "Determining ... video device" from the '646 Patent: "having the device manager, which is an operating system component, determine that the device is a video display device;"

(10) "Detecting ... a display device" from the '116 Patent: "detecting a device capable of displaying;"

(11) "Modifying the allocation of display space" from the '646 Patent:"Changing the allotment of the global coordinate space available for use by display devices;"

(12) "[A] portion of the display space to be modified" from the '116 Patent: "An Allotment of the global coordinate space, available for use by display devices, to be changed;"

(13) "Listing means/listing interface means" from IPG Patents: Apple's corresponding structure (D.E. 145, p. 8);

(14) "Controller in communication with" from IPG Patents: "a device physically separate from the transceiver that is in communication with the transceiver."

DONE AND ORDERED in Chambers at Miami, Florida, this _1st_ day of December, 2011.

Wixulaliagaro

UNITED STATES DISTRICT JUDGE

copies provided to:

Counsel of Record