**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

CORE WIRELESS LICENSING	§	
S.A.R.L.,	§	**Case No. 2:14-cv-0911-JRG-RSP**
	§	**(lead)**
vs.	§	
	§	
LG ELECTRONICS, INC., AND LG	§	**Case No. 2:14-cv-0911-JRG-RSP**
ELECTRONICS MOBILECOMM	§	**(consolidated)**
U.S.A., INC.	§	

MEMORANDUM OPINION AND ORDER REGARDING THE GROUP 2 PATENTS

On September 3, 2015, the Court held a hearing to determine the proper construction of disputed terms in the seven United States Patents: Patent Nos. 6,266,321 ("the '321 Patent"), 6,978,143 ("the '143 Patent"), 7,383,022 ("the '022 Patent"), 7,599,664 ("the '664 Patent"), 7,804,850 ("the '850 Patent"), 8,165,049 ("the '049 Patent"), and 8,792,398 ("the '398 Patent") (collectively, the "Asserted Patents"). The Court, having considered the parties' claim construction briefing (Dkt. Nos. 122, 136, and 150)[1] and their arguments at the hearing, issues this Memorandum Opinion and Order Regarding the Group 2 Patents construing the disputed terms.

BACKGROUND AND THE ASSERTED PATENTS

Core Wireless Licensing S.a.r.l. ("Core") brings two actions against LG Electronics, Inc. and LG Electronics Mobilecomm U.S.A., Inc. (collectively, "LG"). The disputed terms in the

---

[1] Citations to docket numbers reference the docket numbers in Case No. 2:14-cv-0911.

two actions were grouped into three consolidated patent groupings for claim construction briefing and argument purposes. This opinion and order relates to the Group 2 patents.

The patents in Group 2 are alleged by Core to be standard-essential patents. Four of the seven Asserted Patents were previously construed in another case in this District. *Core Wireless Licensing S.A.R.L. v. Apple Inc.*, Case No. 6:12-cv-100-JRG-JDL, Dkt. 263. ("*Apple I* Order").[2] Core and LG have agreed to accept all the claim constructions determined in *Apple I*. Dkt. No. 122 at 1; Dkt. No. 136 at 1–2.

The Asserted Patents relate to cellular communication systems. In general, the '321 Patent relates to techniques to send information from two different channels (e.g., data and control information) by spreading the signals according to spreading codes and then combining the spread signals. For example, the '321 Patent abstract recites:

> To simultaneously transmit data related to two channels using code division data related to a first channel (DTCH) are spread parally using a first spreading code (C_I) and a second spreading code (C_Q), data related to a second channel (PCCH) are spread parally using a first spreading code (C_I) and a second spreading code (C_Q), the power level of a signal representing said data related to the second channel (PCCH) after the spreading is changed (G) with respect to the power level of a signal representing the data related to the first channel (DTCH) after the spreading, and a transmission is compiled from spread data related to the first channel and spread data related to the second channel the power level of which has been changed.

'321 Patent Abstract.

In general, the '143 Patent details the ways in which a cell phone, rather than a base station, may determine whether to use a dedicated channel or a common channel for packet data transfer based on a threshold of a parameter. The threshold is provided from the network to the cell phone. The '143 Patent abstract recites:

> A method and an arrangement for managing packet data transfer in a cellular system such as the Universal Mobile Telecommunications System, UMTS. The

---

[2] The '321 Patent, '049 Patent and '398 Patent were not construed in *Apple I*. *Apple I* Order at 1.

decision about the channel used for the transfer of packet data is made based on a channel selection parameter and values of the parameters needed in the decision-making are sent to the mobile station. The parameters are advantageously sent on a common channel such as the BCH or FACH. Parameters sent advantageously include the maximum packet size on the RACH, current RACH load, a threshold value for amount of data in RLC buffers, etc. The parameters may concern all mobile stations, a subset of the mobile stations or one mobile station in the area in which the parameters are sent. The invention minimizes the transfer capacity load associated with signaling and the transfer of packet data can be performed with minimal delays caused by signaling.

'143 Patent Abstract.

In general, the '022 Patent and its continuation '664 Patent describe filtering the signal of mobile equipment ("ME"), such as a cell phone, to account for the various conditions experienced by a particular ME as it travels through different areas. This is done by using a "forgetting factor," which is used to discount the importance of certain older data relating to older conditions, when appropriate. The '022 and '664 Patents disclose two ways for altering the "forgetting factor:" (1) "adjusting the default value of [the forgetting factor];" or (2) replacing the forgetting factor by computing a new forgetting factor with ME specific data. '022 Patent col. 6:52–7:2. The '022 Patent abstract recites:

> A method for operating a mobile equipment (ME 10) in a wireless network (12) includes determining a parameter that is indicative of a signal quality experienced by the ME, such as by determining a speed of the ME; calculating in the ME an indication of link quality, the calculation employing a filtering operation having a filter length that is a function of the determined parameter, such as speed or derivative of the speed of the ME; and reporting the calculated indication of link quality to the wireless network. The step of determining includes steps of (a) deriving an indication of ME speed in the wireless network; and (b) transmitting the speed indication to the ME using a point-to-point message.

'022 Patent Abstract.

In general, the '850 Patent relates to techniques to minimize interference from multiple devices transmitting simultaneously. The '850 Patent describes limiting the amount of uplink data transmissions by setting a minimum time interval, virtual transmission time interval

3

("virtual TTI"), between subsequent new transmissions. For example, the '850 Patent abstract

recites:

> A system and methods for slow medium access control entity (MAC-e) for autonomous transmission during High Speed Uplink Packet Access (HSUPA), and for service specific transmission time control in HUSPA, wherein a control parameter that is independent from the air interface transmission time interval (TTI), hybrid automatic repeat request (HARQ) processes or enhanced dedicated transport channel (E-DCH) scheduling is used. This control defines the minimum time interval between subsequent new transmissions. The control has no impact on retransmissions, which are performed normally.

'850 Patent Abstract.

In general, the '049 Patent and its continuation '398 Patent relate to techniques for filtering messages (such as Multimedia Messaging Service, or MMS) so that a user can limit the types of messages "pushed" to a mobile station. A filtering parameter is sent to the mobile station so that the mobile station may decide whether the message should be sent or not. For example, the '049 Patent abstract recites:

> The object of the invention is a system, a device, a terminal and a method for filtering electronic information to be transferred to the terminal through a telecommunication connection. The invention comprises attaching a specific filtering parameter (30-32) by the device transferring the electronic information to the electronic information for the purpose of filtering before the electronic information is transferred to the terminal through the telecommunication connection, and informing the terminal of said filtering parameter (30-32) before the electronic information is transferred to the terminal through the telecommunication connection. In the terminal, the steps comprise checking said informed filtering parameter (30-32) and allowing or preventing the receiving of the electronic information on the basis of said filtering parameter (30-32). In response to said allowing of the receiving, the electronic information is transferred to the terminal through the telecommunication connection, and in response to said preventing of the receiving, the electronic information is not transferred to the terminal through the telecommunication connection.

'049 Patent Abstract.

4

APPLICABLE LAW

1. Claim Construction

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *Id.* at 1313; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. The general rule—subject to certain specific exceptions discussed *infra*—is that each claim term is construed according to its ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003); *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) ("Generally speaking, we indulge a 'heavy presumption' that a claim term carries its ordinary and customary meaning.")

The claims themselves provide substantial guidance in determining the ordinary meaning of claim terms. *Phillips*, 415 F.3d at 1314. "The claim construction inquiry . . . begins and ends in all cases with the actual words of the claim." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). First, a term's context in the asserted claim can be instructive. *Id*. Other asserted or unasserted claims can also aid in determining the claim's meaning, because claim terms are typically used consistently throughout the patent. *Phillips*, 415 F.3d at 1314. Differences among the claim terms can also assist in understanding a term's

meaning. *Id*. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id*. at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id*. (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id*. (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. "[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

The prosecution history is another tool to supply the proper context for claim construction because, like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent. *Id.* at 1317. However, "because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes." *Id.* at 1318; *see also Athletic Alternatives, Inc. v. Prince Mfg.*, 73 F.3d 1573, 1580 (Fed. Cir. 1996) (ambiguous prosecution history may be "unhelpful as

an interpretive resource").

Although extrinsic evidence can also be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id*. at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are entirely unhelpful to a court. *Id*. Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id*.

2. Departing from the Ordinary Meaning

There are "only two exceptions to [the] general rule"[3] that claim terms are construed according to their plain and ordinary meaning: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of the claim term either in the specification or during prosecution." *Golden Bridge Tech., Inc. v. Apple Inc.*, 758 F.3d 1362, 1365 (Fed. Cir. 2014) (quoting *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)); *see also GE Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) ("[T]he specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal."). The standards for

---

[3] Some cases have characterized other principles of claim construction as "exceptions" to the general rule, such as the statutory requirement that a means-plus-function term is construed to cover the corresponding structure disclosed in the specification. *See, e.g.*, *CCS Fitness*, 288 F.3d at 1367.

finding lexicography or disavowal are "exacting." *Id.*

To act as his own lexicographer, the patentee must "clearly set forth a definition of the disputed claim term," and "clearly express an intent to define the term." *Id.* (quoting *Thorner*, 669 F.3d at 1365); *see also Renishaw*, 158 F.3d at 1249. The patentee's lexicography must appear "with reasonable clarity, deliberateness, and precision." *Id.*

To disavow or disclaim the full scope of a claim term, the patentee's statements in the specification or prosecution history must amount to a "clear and unmistakable" surrender. *Cordis Corp. v. Boston Sci. Corp.*, 561 F.3d 1319, 1329 (Fed. Cir. 2009); *see also Thorner*, 669 F.3d at 1366 ("The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.") "Where an applicant's statements are amenable to multiple reasonable interpretations, they cannot be deemed clear and unmistakable." *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013).

3. Means-Plus-Function Limitations

The parties' disputed terms include alleged means-plus-function limitations. Where a claim limitation is expressed in "means-plus-function" language and does not recite definite structure in support of its function, the limitation is subject to 35 U.S.C. § 112, ¶ 6. *Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). In relevant part, 35 U.S.C. § 112, ¶ 6 mandates that "such a claim limitation 'be construed to cover the corresponding structure . . . described in the specification and equivalents thereof.'" *Id.* (citing 35 U.S.C. § 112, ¶ 6). When faced with a means-plus-function limitation, courts "must turn to the written description of the patent to find the structure that corresponds to the means recited in the [limitation]." *Id.*

Construing a means-plus-function limitation involves multiple steps. "The first step . . . is

a determination of the function of the means-plus-function limitation." *Medtronic, Inc. v. Advanced Cardiovascular Sys., Inc.*, 248 F.3d 1303, 1311 (Fed. Cir. 2001). "[T]he next step is to determine the corresponding structure disclosed in the specification and equivalents thereof." *Id.* A "structure disclosed in the specification is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim." *Id.* The focus of the "corresponding structure" inquiry is not merely whether a structure is capable of performing the recited function, but rather whether the corresponding structure is "clearly linked or associated with the [recited] function." *Id.* The corresponding structure "must include all structure that actually performs the recited function." *Default Proof Credit Card Sys. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). However, § 112 does not permit "incorporation of structure from the written description beyond that necessary to perform the claimed function." *Micro Chem., Inc. v. Great Plains Chem. Co.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999).

For mean-plus-function limitations implemented by a programmed general purpose computer or microprocessor, the corresponding structure described in the patent specification must include an algorithm for performing the function. *WMS Gaming Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999). The corresponding structure is not a general purpose computer but rather the special purpose computer programmed to perform the disclosed algorithm. *Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008).

4. Claim Indefiniteness

Patent claims must particularly point out and distinctly claim the subject matter regarded as the invention. 35 U.S.C. § 112, ¶ 2. "[I]ndefiniteness is a question of law and in effect part of

claim construction." *ePlus, Inc. v. Lawson Software, Inc.*, 700 F.3d 509, 517 (Fed. Cir. 2012). A

party challenging the definiteness of a claim must show it is invalid by clear and convincing

evidence. *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1345 (Fed. Cir. 2007).

The definiteness standard of 35 U.S.C. § 112, ¶ 2 requires that:

[A] patent's claims, viewed in light of the specification and prosecution history,
inform those skilled in the art about the scope of the invention with reasonable
certainty. The definiteness requirement, so understood, mandates clarity, while
recognizing that absolute precision is unattainable. The standard we adopt
accords with opinions of this Court stating that "the certainty which the law
requires in patents is not greater than is reasonable, having regard to their subject-
matter."

Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120, 2129–30 (2014) (internal citations

omitted).

AGREED TERMS

Prior to the oral hearing, the parties have agreed to the following constructions. Dkt. No.

159-1 at 1–2.

Term	Agreed Construction
"select a transport format combination for the at least one protocol data unit as a function of the virtual transmission time interval" ('850 Patent Claim 25)	Plain and ordinary meaning / no construction necessary.

Term	Agreed Construction
"cellular telecommunication connection" ('049 Patent Claims 11-14, 17) (Term 15)	Plain and ordinary meaning / no construction necessary.

Term	Agreed Construction
"configured not to receive" ('049 Patent Claim 28; '398 Patent Claim 10) "arranged not to receive" ('049 Patent Claim 11) (Term 16)	Plain and ordinary meaning / no construction necessary.

Term	Agreed Construction
"arranged to receive" ('049 Patent Claim 12;	Plain and ordinary meaning / no construction

| '398 Patent Claim 10) (Term 17) | necessary. |

Term	Agreed Construction
"allow or prevent the receiving of the electronic information on the basis of said filtering parameter" ('049 Patent Claim 11) "allow or prevent the receiving of electronic information through the wireless network on the basis of said filtering parameter" ('398 Patent Claim 10) "allow or prevent the receiving of the content information of the multimedia message on the basis of said filtering parameter" ('049 Patent Claim 28) "allowing or preventing the receiving of the electronic information on the basis of the filtering parameter" ('049 Patent Claim 14) (Term 18)	Plain and ordinary meaning / no construction necessary.

Term	Agreed Construction
"user interface for marking in advance the receiving of the electronic information as being allowed or prevented on the basis of the filtering parameter" ('398 Patent Claim 10) "user interface for marking in advance the receiving of the electronic information as being allowed or prevented on the basis of a specific ('049 Patent Claim 12) (Term 19)	Plain and ordinary meaning / no construction necessary.

Term	Agreed Construction
"filtering parameter" ('049 Patent Claims 11-15, 28; '398 Patent Claims 10, 11, 13) (Term 23)	"an indication transmitted to the mobile terminal that is used as the basis for allowing or preventing the receiving of electronic information"

At the oral hearing the parties agreed to one construction. Dkt. No. 216 at 92.

Term	Agreed Construction
"the receiving of electronic information" ('398 Patent Claim 10) (Term 24)	Plain and ordinary meaning / no construction necessary.

The parties have also agreed to be bound by the constructions determined by the Court in *Apple I*. Dkt. No. 122 at 1; Dkt. No. 136 at 1–2. The relevant constructions are listed below. Dkt. No. 159-1 at 3–5.

Term	*Apple I* Court's Construction
"means for sending uplink packet data to the system using a selected channel, wherein the selected channel is either a common channel (RACH) or a dedicated channel (DCH)" ('143 Patent Claim 17)	**Function**: Sending uplink packet data to the system using a selected channel **Structure**: Antenna 801, switch 802, control unit 803, burst generator 822, modulator RF transmitter 823, as shown in Fig. 8 and in Fig. 6, steps 670 and 690, and as described in the patent at 7:4-13; 7:17-20; 7:24-28; and statutory equivalents thereof.

Term	*Apple I* Court's Construction
"means for comparing said threshold value of the channel selection parameter to a current value of the channel selection parameter for basis of said channel selection" ('143 Patent Claim 17)	**Function**: Comparing said threshold value of the channel selection parameter to a current value of the channel selection parameter for basis of said channel selection **Structure**: A control unit 803 wherein the control unit 803 is programmed to control the comparison of the threshold value of the channel selection parameter to the current value of the channel selection parameter in accordance with the algorithm shown in Fig. 6, step 650, and described in 6:20-39; 7:17-20; and 7:24-28 of the '143 specification; and statutory equivalents thereof.

Term	*Apple I* Court's Construction
"means for receiving a threshold value of a channel selection parameter from the system" ('143 Patent Claim 17)	**Function**: Receiving a threshold value of a channel selection parameter from the system **Structure**: An antenna 801, switch 802, control unit 803, RF receiver 811, and detection demodulator 812, as shown in Fig. 8, for receiving a threshold value of a channel selection parameter from the system,

	where the control unit 803 is programmed to control the reception blocks in accordance with the algorithm described in 6:56-62; 7:1-3; 7:14-17; and 7:24-28 of the '143 specification; and statutory equivalents thereof.

Term	*Apple I* Court's Construction
"means for storing said threshold value of the channel selection parameter" ('143 Patent Claim 17)	**Function**: Storing said threshold value of the channel selection parameter **Structure**: A memory 804 for storing said threshold value of the channel selection parameter, as described in 5:60-62 and 6:64-7:1 of the '143 specification; and statutory equivalents thereof.

Term	*Apple I* Court's Construction
"means for making said channel selection on the basis of the result of said comparison" ('143 Patent Claim 18)	**Function**: Making said channel selection on the basis of the result of said comparison **Structure**: A control unit 803 wherein the control unit 803 is programmed in accordance with the algorithms shown in Fig. 6, steps 650-660, and described in 6:14-43; 7:12-13; 7:17-20; and 7:24-28 of the '143 specification and statutory equivalents thereof.

Term	*Apple I* Court's Construction
"virtual transmission time interval" ('850 Patent Claims 1, 2, 8, 11, 12, 18, 21, 22, 28, 30 and 32)	"a parameter that defines the minimum time interval between subsequent new transmissions"

TERMS NOT BEFORE THE COURT

After the September 3, 2015 hearing, Core provided an updated notice of asserted claims.

As a result of such notice, certain terms that were subject to briefing and/or oral hearing are no

longer contained in any asserted claim. The Group 2 terms that are no longer at issue are Term

Numbers 14, 20, 21, and 22.[4] Dkt. No. 178 at 3. This Order does not address those terms.

<div align="center">

DISPUTED TERMS

</div>

I.   U.S. Patent 6,266,321

1.   "spreading" - Claims 8-10, 14 (Term 1)

Core's Construction	LG's Construction
spreading or scrambling	No construction necessary.

The parties dispute whether or not scrambling, by itself, is spreading.

Positions of the Parties

Core seeks to make clear that "spreading" encompasses "scrambling." Core states that in

Apple I, Apple asserted that "scrambling" did not meet the "spreading" claim limitation. Core

argues that the two terms are used synonymously in both the intrinsic and extrinsic evidence. Dkt.

No. 122 at 5. Core notes that the '321 Patent states: "[s]crambling can be considered a special

case of spreading...." '321 Patent 5:1. Core also asserts that the description of the embodiments

of Figures 2a and 2b refer to spreading codes C_I and C_Q in blocks 47 through 50 as performing

either spreading or scrambling. *Id.* at 4:66-67, 5:11-13, 5:21-25. Core argues that this conforms

to how one of ordinary skill in the art would interpret the terms. Dkt. No. 122 at 6 (citing

Chandler Decl.). Core notes that in the preferred embodiment the first and second spreading

codes recited in claim 8 correspond to codes C_I and C_Q. Core's expert opined that these are the

codes described in a preferred embodiment as "scrambling." Dkt. No. 150 at 1. Core asserts that

---

[4] As used herein, the term numbers reference the term numbers as used in the parties' claim construction briefing.

LG is thus excluding a preferred embodiment. Core also cites to extrinsic evidence U.S. Patent 6,833,770 as noting that "spreading codes...are also called scramble codes." Dkt. No. 122 at 6 (quoting Dkt. No. 122 Ex. 2 U.S. Patent 6,833,770 at 2:66-3:3).

LG observes that the term "spreading" is used 182 times in the patent. LG argues that the term is well understood in the art as referring to increasing the bandwidth of a signal and is typically accomplished by multiplying the signal by another signal or "spreading code" which has a higher frequency than the original signal. Dkt. No. 136 at 3. LG asserts that Core agreed, in *Apple I*, that the term need not be construed.

LG argues that spreading and scrambling can occur at the same time, but they are not the same thing, nor does one encompass the other. *Id*. LG asserts that the patent confirms this:

> Scrambling can be considered a special case of spreading in which the bandwidth used does not grow any more but in which the data contents of the symbol stream scrambled are divided pseudo-randomly in a manner determined by the (spreading) code used.

'321 Patent 5:1-5.

> Prior to the coding with said first and second codes the bit streams of the channels may be separately coded using e.g. so-called short codes so that the short codes function as spreading codes proper and the first and second codes can be used for signal scrambling.

'321 Patent 3:36-40. LG argues that Core's attempt to broaden the plain meaning of the term should be rejected.

Analysis

The specification makes clear that "spreading" and "scrambling" are not the same concept. Core seeks to include in its construction "or scrambling," which would define "spreading" to encompass scrambling even when no spreading occurs. Core relies primarily upon extracting part of one sentence: "[s]crambling can be considered a special case of

15

spreading….” ’321 Patent 5:1. However, the full passage and the remainder of the specification

provide context that contradicts Core’s attempt to use this one snippet to argue that scrambling is

spreading. In particular, the passages make clear that “spreading” and “scrambling” are different.

Though scrambling is a “special case” of spreading, the specification describes that special case

as scrambling that is applied as an additional step in the spreading process. The specification

does not teach that “scrambling” without any spreading is equated to spreading:

> The symbol stream generated in block 45 from the bit stream on the DTCH channel is taken to two parallel branches and further to blocks 47 and 50. **If the bit stream on the DTCH channel is spread as shown in block 45 of FIG. 2a, the operations performed on the symbol stream with codes C_I and C_Q in blocks 47 and 50 are called scrambling. Scrambling can be considered a special case of spreading in which the bandwidth used does not grow any more but in which the data contents of the symbol stream scrambled are divided pseudo-randomly in a manner determined by the (spreading) code used. If spreading according to blocks 45 and 46 is not used, the bit stream of the DTCH channel is taken to blocks 47 and 50 as shown in FIG. 2b and spread in block 47 with code C_I and in block 50 with code C_Q. Correspondingly, the PCCH channel bit stream or the symbol stream generated from it in block 46 is taken to two parallel branches in which the bit stream is spread or the symbol stream is scrambled in block 48 with code C_Q and in block 49 with code C_I.**

> Blocks 51, 52, 53 and 54 perform a non-return-to-zero conversion (a phase modulation method) between the bit values included in the symbols generated in the spreading and the corresponding positive or negative values. In multipliers 55 and 56, the signals carrying the PCCH channel data are multiplied by a gain factor G, whereafter signals to be taken to the I and Q branches of the radio-frequency part are generated in adders 57 and 58. The signal taken to the I branch is the difference of the **DTCH channel spread with code C_I (or spread with code SC_I and scrambled with code C_I) and PCCH channel spread with code C_Q (or spread with code SC_I and scrambled with code C_Q)**, where the latter is multiplied with the gain factor G. Correspondingly, the signal taken to the Q branch is the sum of the **DTCH channel spread with code C_Q (or spread with code SC_I and scrambled with code CQ) and PCCH channel spread with code C_I (or spread with code SQ_I and scrambled with code C_I)**, where the latter is multiplied with the gain factor G. The IQ modulation performed in the radio-frequency part by means of a local oscillator 59, multiplier 60, phase shifter 61 and multiplier 62 is in accordance with the prior art. The I and Q branch signals are combined in an adder 63 and taken to an antenna 64 for transmission.

'321 Patent 4:62–5:35 (emphasis added). Thus, as described in the patent, scrambling may be part of a spreading process, but the patent does not teach that scrambling alone, without spreading, is "spreading." This conforms to Figure 2a also as blocks 45 and 46 first spread the data before the application of any scrambling in blocks 47 and 50. '321 Patent Figure 2, 4:55–5:13. It is in this context that "scrambling is a special case of spreading" as scrambling is applied in addition to the spreading process. Further, even the particular sentence relied upon by Core continues to describe that special case as being "a special case of spreading in which the bandwidth used does not grow any more" and "is determined by the (spreading) code used." '321 Patent 5:1–5. This sentence implies that the bandwidth has already grown, as the sentence says "does not grow any more." Depending upon how a particular code is implemented and the signal conditions of a particular system, the code may achieve either scrambling or spreading. But nowhere does the patent teach that scrambling, without any spreading, is equated to spreading.

The conclusion that scrambling does not equate to spreading is further supported by the extrinsic evidence cited by Core:

> Here, where the spreading rate (chip rate) of the spreading codes (Ci, Cq) is equal to that of the other spreading codes (Si, Sq), the spreading codes (Si, Sq) provide a scrambling function, so that the spreading codes (Si, Sq) *are also* called scramble codes.

Dkt. No. 122 Ex. 2 U.S. Patent 6,833,770 at 2:66–3:3 (emphasis added). This passage conforms to the '321 Patent specification as indicating that in given circumstances codes that scramble may in other circumstances spread. However, the passage is clear that a different function results in such special circumstances: a "scrambling function." Again the extrinsic evidence, similar to the intrinsic evidence, does not teach that scrambling without spreading is "spreading," and in fact, teaches that scrambling and spreading are different functions. Thus, as described in the

17

patent, scrambling may be part of a spreading process, but the patent does not teach that scrambling alone, without spreading, is spreading.

The Court finds that "spreading" has its plain and ordinary meaning and no further construction is necessary.

2. "first spreading code" / "second spreading code" Claims 8, 9, 14 (Terms 2 and 3)

Core's Construction	LG's Construction
code used in spreading or scrambling data, which can include the real or the imaginary part of a complex spreading or scrambling code	No construction necessary.
code different from a first spreading code used in spreading or scrambling data, which can include the real or the imaginary part of a complex spreading or scrambling code	No construction necessary.

The parties' disputes raise two primary issues. The first issue is the same as in Term 1 regarding the inclusion of "scrambling." The second issue is whether constructions for Terms 2 and 3 should explicitly reference "real" and "imaginary."

Positions of the Parties

Core proposes its construction to make clear that the terms, as defined by the patent, can include the real and imaginary part of a complex spreading code. Dkt. No. 122 at 6. Core asserts that in *Apple I*, Apple argued that "spreading code" excluded the real and imaginary codes that were part of a complex valued code. *Id.* Core gives an example of a mathematical complex number: 2 +3i (also written as (2,3) for real part 2 and imaginary part 3 of the complex number). *Id*. at 6-7.

Core argues that the specification makes clear that the first and second spreading codes

can be the real and imaginary parts of a complex valued code, and that the specification calls these two spreading codes C_I and C_Q. *Id.* at 7, n. 25 (citing '321 Patent Abstract, 4:22-25, 5:22-28). Core asserts that it is well known in the art of modulating signals that the "I" component stands for the In-phase component and the "Q" component stands for the Quadrature-phase component. Core argues it is also well known that the "I" component is the real part, and the "Q" component is the imaginary part of a complex number. *Id.* at 7 n. 26 (citing multiple extrinsic evidence sources). Core asserts that by using the C_I and C_Q notation, the inventors were explicitly referencing that the two spreading codes of the invention were the real and imaginary parts of a complex valued code. Core further asserts that in the specification, it was stated "[c]odes C_I and C_Q can be e.g. long Gold codes, which are … known to one skilled in the art." '321 Patent 4:25-26. Core asserts that it was known in the art that Gold codes were used for complex valued codes with real (I) and imaginary (Q) parts. Dkt. No. 122 at 7 (citing Chandler Decl.)). Core asserts that the preferred embodiment, thus, comprises a first spreading code (C_I) and a second spreading code (C_Q) that are the real and imaginary parts of the complex code C. *Id.* at 8. Core's expert has opined that a complex code corresponding to the codes C_I and C_Q is the preferred embodiment and that these are the real and imaginary parts of the complex code C. Dkt. No. 150 at 1-2. Core therefore concludes that LG is attempting to exclude the preferred embodiment.

LG asserts that Core is again conflating "spreading" and "scrambling." LG points out that the '321 Patent never explicitly mentions real or imaginary parts of a complex spreading code. LG contends that the inventor admitted that the spreading codes are simply binary codes comprised of ones and zeros that do not have real and imaginary parts. *Id.* at 4.

19

<u>**Analysis**</u>

The "scrambling or spreading" issue has been decided above with respect to the "scrambling" term. The parties do not raise any real issue as to the meaning of "codes" as known in the art. Rather, the parties' dispute centers on the factual question of whether a complex number is one code or two codes. As described in the patent, C_I and C_Q are used in a technique as two codes. Figure 2b is illustrative. For example, with regard to the DTCH channel, one code is applied to the channel in block 47 to provide one output and the other code is applied to the channel in block 50 to provide another output. Whether such codes are separate codes or the different parts of a single complex number does not change that two codes are used. However, there could be other factual circumstances in which a complex number is only used as a single code, providing one output. Expert testimony can aid the fact-finder in distinguishing between these two circumstances. Thus, whether a particular complex number is used as two codes or one code is a question of fact. Core's proposed construction would result in jury confusion, impinging upon such a factual determination. It is noted, however, that though the Court adopts a plain and ordinary meaning, the Court is not finding that a single complex number is excluded from being used as two separate codes.

The Court finds that "first spreading code" and "second spreading code" have their plain and ordinary meaning, and no further construction is necessary.

5.   "changing the power level of said data" - Claims 8, 11-14 (Term 4)

Core's Construction	LG's Construction
changing the gain factor applied to data related to a second channel so as to produce a power difference between the first and second channels	No construction necessary.

Core's Construction	LG's Construction
Nothing in the claim requires this step to be performed after the spreading steps	

The parties' primary dispute is whether or not the claim includes some inherent step ordering.

Positions of the Parties

Core asserts that its construction is necessary to avoid the same two claim construction arguments that Apple made at trial in *Apple I*.

First, Core notes that method claim 8 merely recites two "spreading" steps followed by the "changing the power level" step. Core argues that the "changing the power level" step need not occur later in time than the two "spreading steps." Dkt. No. 122 at 8. Core contends that the claim language, on its face, does not recite an order, and that there is nothing to prevent the steps from being performed in the following order: changing the power level of data related to the second channel and then spreading the data whose power level has been changed. *Id*. Core asserts that, legally, steps need not be read sequentially. *Id*. at 9 n. 29 (citing *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369-70 (Fed. Cir. 2003)). Core asserts that nothing in the specification mandates the order shown in Figures 2a and 2b. Core also argues that the language of claim 10 is telling, as when an order was intended, an order was included in the claim by using the word "before." *Id*. at 9. Core asserts that LG misinterprets the grammar of the phrase: "spread data related to the second channel the power level of which has been changed." Core asserts that this does not mean that the power level is changed after the data is spread. Core maintians that the phrase "the power level of which has been changed" describes changing the power level of the second channel, not the spread data. Dkt. No. 150 at 2.

Second, Core seeks to clarify that changing the power level means changing the gain

applied to the data. Core asserts that in *Apple I*, Apple argued that changing the gain factor did not change the power level. Dkt. No. 122 at 9. Core cites to the specification: "[m]ultiplying the symbol streams generated from the PCCH channel by a gain factor G unequal to one produces a power difference between the DTCH and PCCH channels" where the two channels are the first and second channels shown in Figures 2a or 2b embodiments. *Id.* at 9-10 (quoting '321 Patent at 5:37-39). Core asserts that Apple's positions essentially excluded the preferred embodiment.

LG responds that Core is attempting to change the meaning of a term that needed no construction in *Apple I*. LG asserts that the sole issue in dispute is whether the claims require changing the power level after spreading. Dkt. No. 136 at 4. LG asserts that the specification never suggests changing the power level except after spreading. *Id.* (citing Figures 2A and 2B and the gain blocks 55, 56 shown after spreading).

LG argues that the claims themselves require an order as a matter of law. *Id.* (citing *Altiris*). LG asserts that its construction is not based on the use of "said data" in the "changing the power level" step of the claims. Rather, LG asserts that its position flows from the "compiling a transmission" step. *Id.* at 5. LG points to the language of that step: "spread data related to the second channel the power level of which has been changed." LG asserts that the "spread data related to the second channel" clearly refers to the output of the second spreading step. Thus, according to logic and grammar, the compiling step requires the power level change to be applied to the "spread data" not merely any data. *Id.*

At the oral hearing, Core agreed to a Court proposed construction of: "Plain and ordinary meaning, the claims do not impose an order on the first three method steps of claim 8. The fourth method step occurs after the first three steps." Dkt. No. 216 at 31.

Analysis

As LG has acknowledged, the sole issue in dispute is the order of the steps. Thus with regard to the gain factor issue, the plain and ordinary meaning of the term is sufficient, as it is clear that changing the gain factor changes the power difference: "[m]ultiplying the symbol streams generated from the PCCH channel by a gain factor G unequal to one produces a power difference between the DTCH and PCCH channels" '321 Patent 5:37-39.

Ordinarily, a method claim is not construed to require that its constituent steps be performed in a particular order unless the claim recites an order. *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1342 (Fed. Cir. 2001). A method claim that does not recite an order may nonetheless be construed to require that the claim's steps be performed in a particular order if (1) the claim language, "as a matter of logic or grammar" requires that the steps be performed in a particular order, or (2) the specification "directly or implicitly requires such a narrow construction." *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369-70 (Fed. Cir. 2003).

Here, the claim language directly indicates an ordering. The relevant claim language is found in the compiling step: "compiling a transmission from spread data related to the first channel and spread data related to the second channel the power level of which has been changed." '321 Patent Claim 8. Such language states that the transmission is compiled from "spread data" relating to the first and second channels. Further, the second channel spread data is referenced as "spread data related to the second channel the power level of which has been changed." This language clearly refers to the "power level" change of the "changing the power level of said data related to the second channel" step. Inherent in such language is that the data that the transmission is compiled from is the data having a changed power level ("the power level of which has been changed"). This language requires, as a matter of logic and grammar,

23

that the compiled transmission includes data that has had a power level changed. Thus, the surrounding claim language indicates claim step ordering. This also conforms to the specification as there appears to be no debate amongst the parties that the specification teaches compiling a transmission after the power level change. That step four (the compiling step) is performed after the first three steps (spreading, spreading, and changing power level), does not, however, mandate an order as to the first three steps. The first two steps relate to "spreading data related to a [first / second] channel…." Step three states "changing the power level of said data related to the second channel." Such language does not require a particular order between the spreading and changing steps, as "said data" in step three merely refers to "data related to the second channel" as found in the second step. This also conforms with the preamble which refers to "data related to two channels." LG's construction would require the claim to state "changing the power level of the <u>spread</u> data of the second channel." But the claim is not so limited. This is in contrast to step 4 which references compiling a transmission from "spread data" for which "the power level has been changed."

The Court construes "changing the power level of said data" to have its plain and ordinary meaning. Further, the Court finds that the claims do not impose an order on the first three method steps of claims 8 and 14. The Court finds that the fourth method step of claims 8 and 14 occurs after the first three steps.

II.   U.S. Patent 6,978,143

1.   "selected channel" - Claim 17 (Term 5)

Core's Construction	LG's Construction
a common channel (e.g., RACH) or a dedicated channel (e.g., DCH), without reference to where the channel is selected Nothing in claim 17 requires the selection of a channel to occur in the mobile station.	No construction necessary.

"for basis of said channel selection" - Claim 17 (Term 6)

Core's Construction	LG's Construction
which is a basis for selecting either a common channel (e.g., RACH) or a dedicated channel (e.g., DCH), without reference to where the channel is selected Nothing in claim 17 requires the selection of a channel to occur in the mobile station.	No construction necessary.

The parties dispute whether the claim requires selection of a channel to occur in the mobile station. The dispute raises questions as to both the claim terms at issue and the broader means terms ("means for comparing" and "means for sending") which encompass the disputed terms. The means terms were construed in *Apple I*, constructions to which Core and LG have agreed to be bound.

Positions of the Parties

Core asserts that the '143 Patent teaches that data may be sent either on a dedicated channel (DCH) allocated to a mobile device or a common channel (RACH). Core argues that, in claim 17, the "selected channel" does not impose a limitation on where the channel is selected. Dkt. No. 122 at 11-12. Core asserts that the means for channel selection is first introduced into dependent claim 18. Core asserts that based on claim differentiation, claim 17 cannot be read to

include selecting a channel or impose a limitation on where channel selection takes place. *Id*. at 12.

Core notes that, in *Apple I*, Apple argued that channel selection must take place in the mobile station. Core asserts that LG is taking the same position. Core asserts that Apple had contended that the means-plus-function elements of claim 17 required the channel selection to occur in the mobile device. Core notes that in *Apple I*, the "means for comparing" function was construed to be "comparing said threshold value of the channel selection parameter to a current value of the channel selection parameter for basis of said channel selection." Dkt. No. 122 at 12 (quoting *Apple I* Order at 15). Core argues that nothing in this function requires that the channel selection take place in the mobile station but instead only requires a comparison. Core asserts that the structure in the *Apple I* Order includes step 650 in Figure 6 but not the "CHANNEL SELECTION" of step 660:

> A control unit 803 wherein the control unit 803 is programmed to control the comparison of the threshold value of the channel selection parameter to the current value of the channel selection parameter in accordance with the algorithm shown in Fig. 6, step 650, and described in 6:20-39; 7:17-20; and 7:24-28 of the '143 specification; and statutory equivalents thereof.

Apple I Order at 15.

Core asserts that the "means for sending" also does not require channel selection. Core points to the *Apple I* Order function: "sending uplink packet data to the system using a selected channel." Core notes that the structure included steps 670 and 690 in Figure 6 (but again not step 660):

> Antenna 801, switch 802, control unit 803, burst generator 822, modulator RF transmitter 823, as shown in Fig. 8 and in Fig. 6, steps 670 and 690, and as described in the patent at 7:4-13; 7:17-20; 7:24-28; and statutory equivalents thereof.

Apple I Order at 15.

Core notes that claim 18 contains the "means for making said channel selection" and that

the *Apple I* Order construction for this term included step 660. Core further notes that this Court specifically rejected requiring the channel selection in the mobile device. Core notes that Apple's constructions for both the "means for sending" and the "means for comparing" included performing the channel selection in the mobile station. Core notes that, in *Apple I*, the Court removed Apple's addition of this subject matter from the final claim construction. Dkt. No. 122 at 14 (citing *Apple I* Order at 15-16). Core asserts that LG has agreed to be bound by this Court's previous construction, so this ruling applies equally to LG.

Core contends that LG will likely point to the inclusion of the passage at 7:17-20 in the structure for the "means for sending" and the "means for comparing." This passage states that "[c]hannel selection is advantageously performed in the control unit 803." '321 Patent 7:17-20. In addition, Core asserts that LG will likely point to the language that states that the means for comparing is done "for basis of said channel selection." Core asserts that, while true, that specification language does not impose performing channel selection in the mobile station into claim 17. Core asserts that control unit 803 performs many functions and is part of the structure of multiple means elements. Core contends that the fact that the control unit may also perform channel selection does not make such performance part of claim 17. Core also asserts that the statement that control unit 803 "advantageously" performs channel selection is permissive, and does not mandate that the channel selection must be performed in the control unit 803 or in the mobile station. Dkt. No. 122 at 15. Finally, Core asserts that the fact that a comparison is done "for the basis" of channel selection does not dictate where the selection occurs, as such selection could still be done by the network. *Id.*

LG asserts that the *Apple I* constructions for "means for comparing" and "means for sending" require an algorithm, and that algorithm includes channel selection in the mobile station.

LG asserts that claim differentiation cannot override §112(f): "a means-plus-function limitation is not made open-ended by the presence of another claim specifically claiming the disclosed structure which underlines the means clause or an equivalent of that structure." *Laitram Corp v. Rexnod, Inc.*, 939 F.2d 1533, 1538 (Fed. Cir. 1991). LG asserts that the limitations of claim 18 may add specificity but do not affect the structure of claim 17. LG asserts that Core's post-trial motion arguments to the contrary were rejected in *Apple I*.

LG asserts that Core's attempt to add a claim-wide limitation ("Nothing in claim 17…") is improper as adding a claim-wide negative limitation based only on "selected channel" without considering the claims as a whole, in context of the specification and file history. LG asserts Core agreed in its brief that the specification only teaches channel selection being performed by the mobile station. Dkt. No. 136 at 7 (citing Dkt. No. 122 at 15-16). LG also cites the specification passage: "channel selection is advantageously performed in the control unit 803" ('143 Patent 7:17-18) and "[t]he base station system sends the parameters associated with the selection of the packet data transfer channel to the mobile station **in accordance with the invention** and receives the packet data sent by the mobile station through a channel selected by the mobile station" ('143 Patent 7:37-42) (emphasis added). LG asserts that the prosecution history also confirms that channel selection is performed in the mobile station:

> [T]he present invention comprises a channel selection threshold value is [sic] sent from the system to the mobile station. At the mobile station the received threshold is compared with a current value, and then a channel selection is made. Thereafter, a data packet is sent. Thus there is a decrease in signal load and the delay in the starting data and transfer is minimized.

Dkt. No. 136 Ex. 2 at LGE0001021 (citations omitted).

> The current invention: Person A receives from Person B threshold type information in a timed manner/upon change in traffic scenario, on the basis of which A may conduct a <u>general</u> selection between taxis and busses as an applicable cargo delivery technique. This can be performed by comparison of

some local real-time parameter with a possibly slower-changing threshold type information. B may, as a receiving party, have a better knowledge of the overall congestion and bus/taxi allocation on the roads, and therefore, it's well-grounded to let B at least partially affect A's decision on the used delivery technique.

Dkt. No. 136 Ex. 3 at LGE0001057-58 (emphasis in original) (analogizing person A being a mobile, person B being a network, taxis being dedicated channels and busses being common channels). LG argues these statements were unequivocal descriptions that limit the claims. Dkt. No. 136 at 8.

LG also asserts that Core adds the RACH and DCH language in its construction but that such language is already explicitly in the claim ("a common channel (RACH) or a dedicated channel (DCH)").

In reply, Core argues that LG is incorrect to assert that the "means for sending" and "means for comparing" require selection to occur in the mobile station merely because the construction for those terms includes '143 Patent 7:17-20. Core asserts that the sentence does not state a rule regarding channel selection: "channel selection is advantageously performed in the control unit 803 which also controls the transmission blocks such that the packet data are transmitted on the selected channel." Core points out that the algorithmic step for channel selection is shown in Figure 6, step 660: "CHANNEL SELECTION," and that this step is not included in the construction of the means elements of claim 17, though Apple sought such inclusion. *Id.* Core asserts that the passage at 7:17-20 is included in the construction to show that the control unit 803 performs many functions and is part of the structure for multiple means elements. Core asserts that merely because half of one sentence also discloses that the "channel selection" is "advantageously" performed in the control unit does not make performing "channel selection" part of the algorithm for the means for comparing. *Id.* Core further argues that the use of "advantageously" does not mean that channel selection **must** be performed, just that it can

29

advantageously be performed. *Id*. at 3-4.

Finally, Core asserts that LG appears to be arguing that "channel section" is an inherent limitation in all claims. Core argues that it is improper to read a limitation in a claim merely because it is a preferred embodiment. Core asserts that LG has not pointed to any specification or prosecution statements of disavowal requiring channel selection to take place in the mobile. *Id*. at 5. Core notes that, in the prosecution history, it was explicitly stated that "it's well-grounded to let [the network] at least partially affect [the mobile's] decision on the used delivery technique." *Id*. (quoting Dkt. No. 136, Ex. 3 at LGE0001057-58).

<u>Analysis</u>

Core, in effect, is seeking to have the "means for sending" and "means for comparing" limitations construed by this Court. However, that question is not properly before the Court. The parties have agreed to be bound by all of the *Apple I* constructions. Dkt. No. 122 at 1; Dkt. No. 136 at 1-2. Core's claim-wide negative limitation is improper on these grounds alone. The *Apple I* terms that were construed include the "means for sending" and "means for comparing" of claim 17. Dkt. No. 159-1 at 3. The *Apple I* construction for both terms included a passage (7:17-20) that related to the control unit 803: "Channel selection is advantageously performed in the control unit 803." '143 Patent 7:17-18. In *Apple I*, Core agreed to the inclusion of this passage for the "means for sending" and both Core and Apple proposed the inclusion of this passage for the "means for comparing." *Apple I* Order at 7-8. When analyzing the terms actually before the Court for construction, "selected channel" and "for the basis of said channel selection," the plain and ordinary meaning of the terms does not mandate one way or the other where the channel selection occurs. As to "selected channel," this term merely requires that there be a selected channel, not where the selection occurs. As to "for basis of said channel selection," the context

30

of the surrounding claim language provides guidance. In particular, the surrounding claim language states that the comparison of the threshold value to the current value of the channel selection parameter is "for basis of said channel selection." Thus, the comparison must be for the basis of the channel selection. However, where the actual channel selection occurs is not recited. Finally, it is noted that the "common channel (RACH)" and "dedicated channel (DCH)" language is already part of the claim and not needed for further understanding of the terms before the Court.

The Court finds that "selected channel" and "for basis of said channel selection" have their plain and ordinary meanings and no further construction is necessary.

2. "making said channel selection" - Claims 18, 19 (Term 7)

Core's Construction	LG's Construction
deciding to send a request for transfer resources in the form of a dedicated channel or deciding to send data on the common channel autonomously	LG identifies the construction ordered in *Apple I* for the more inclusive term "means for making said channel selection on the basis of the result of said comparison:" **Function**: making said channel selection on the basis of the result of said comparison **Structure**: a control unit 803 wherein the control unit 803 is programmed in accordance with the algorithms shown in Fig. 6, steps 650-660, and described in 6:14-43; 7:12-13; 7:17-20; and 7:24-28 of the '143 specification; and statutory equivalents thereof.

Positions of the Parties

In the briefing, LG had originally proposed construing "making said channel selection" as "no construction necessary." Dkt. No. 139 at 9, Dkt. No. 139 Appendix A at 2. LG states that the parties agree that "making said channel selection" requires a decision made by a mobile station. LG states that the term naturally dictates that the mobile station must make that decision and no

further construction is necessary. Dkt. No. 136 at 9. Core asserts that construction is needed to counter an erroneous construction argument made by Apple in *Apple I*. Core asserts that Apple argued that "making said channel selection" meant actually allocating a dedicated channel to the mobile station. Core asserts that the actual allocation of the channel occurs in the network, not the mobile station. Core asserts that the network always has the final say in allocating a new dedicated channel to a mobile station because only the network knows whether it has capacity to do so. Dkt. No. 122 at 16 (citing '143 Patent 1:65-2:1, 3:10-14). Core asserts that the patent clearly distinguishes the allocation of a dedicated channel (box 680 of Figure 6) from channel selection (box 660 of Figure 6). *Id*. Core asserts that Apple argued for a construction that did not cover the preferred embodiment because the actual allocation does not occur in the mobile station. Core asserts that such a construction cannot, thus, be right. *Id*. At the oral hearing, Core agreed to a plain and ordinary meaning, with the caveat that the term does not require allocating a channel. Dkt. No. 216 at 56.

<u>Analysis</u>

The parties are in agreement that the term "making said channel selection" does not require construction. Moreover, LG has not contested that "making the channel selection" in its plain meaning does not require allocating a channel. As noted by Core, the patent specification also treats the allocating step as being separate from the selection step. In light of the parties' agreements, the term needs no further construction as the parties agree that the term does not require allocating a channel. The Court notes that this finding does not change the construction as agreed to by the parties for the more inclusive means-plus-function term as construed in the *Apple I* case.

The Court finds that "making said channel selection" has its plain and ordinary

32

meaning and no further construction is necessary.

III. U.S. Patents 7,383,022 and 7,599,664

1. "set a finite length of a filter" / "setting a finite length of a filter" - '022 Claim 1 / '664 Claim 1 (Term 8)

Core's Construction	LG's Construction
the length of a filter is set when the weighting coefficients can be considered as negligible	Plain and ordinary meaning / no construction necessary.

"filter having a finite filter length" - '022 Claim 7, '664 Claim 14 (Term 9)

Core's Construction	LG's Construction
filter having a length that is set when the weighting coefficients can be considered as negligible	Plain and ordinary meaning / no construction necessary.

The parties dispute whether an infinite filter that is weighted can be considered a finite filter.

Positions of the Parties

Core argues that it asks for construction to prevent LG from making an incorrect claim construction argument that Apple made in the *Apple I* trial. Core asserts that Apple argued that the filters used in Apple's products, and described in the preferred embodiments, have infinite lengths. Core asserts that Apple could only make this argument because the term was not previously construed. Core notes that this issue is now subject of post-trial motions in *Apple I*. Dkt. No. 122 at 19. Core asserts that it expects LG to make the same arguments in this case.

Core cites to the prosecution history:

> The filter length is theoretically infinite. However, from some point, ***the weighting coefficients can be considered as negligible***. Therefore the filter length can be considered as finite. This finite length should also be understood as the number of input data which is required to stabilize the filter output.

Dkt. No. 122, Ex. 10 at 9 (emphasis added). Core argues that, as described, the length of the filter

is not infinite. Core asserts that a filter is finite and set when the weighting coefficients can be

considered as negligible. Dkt. No. 122 at 19. Core asserts that this conforms to the specification:

> In general, a larger value of "a" causes Y_n to be dominated by the last few
> measurement data at higher speeds (a reduced filter length), whereas a smaller
> value of "a" causes Y_n instead to reflect a larger number of past measurement data
> at lower speeds (an increased filter length).

'022 Patent 6:54-59. Core also cites to inventor testimony as stating that the running average

filter in the patent is finite and that no filters used in real products can be infinite. Dkt. No. 122 at

19. Core asserts that LG's construction would exclude the preferred embodiment and cannot be a

proper construction. *Id*. at 20.

Core also argues that, in prosecution, the inventors made clear that adding the term "finite"

did not impact the claims:

> Each of the independent claims 1, 6-10, 17, and 19-20 are amended herein to
> remove the terms "filtering operation" and to recite that the filter length is a finite
> filter length.
> . . .
> ***None of the above changes are seen to change the scope of the claims*** as
> compared to previously used language.

Dkt. No. 122 Ex. 12 at 9 (emphasis added). Core requests that the term be construed now, rather

than being left for construction at trial.

LG asserts that the terms have a well understood meaning and that the file history

confirms this. LG asserts that the specification does not attempt to redefine the understood

meaning and does not include the term "negligible," which Core attempts to inject into the

construction. Dkt. No. 136 at 10-11. LG asserts that in prosecution, the Examiner rejected the

use of the terms "filter operation," "filter length," and "determined parameter:"

> The calculation employing a filtering operation having a filter length that is [sic]
> function of the determined parameter" is cited in the claims. However, this

34

limitation is not clearly explained how it calculate [sic] and what the filter length and determined parameter are. Correction is required.

Dkt. No. 136 Ex. 4 at CORE_L-00408221. LG notes that the pending claims did not include the word "finite" at that time. LG asserts that the Applicants responded by quoting an extrinsic evidence paper (ETSI) that stated "the filter length is theoretically infinite. However, from some point, the weighting coefficients can be considered negligible." Dkt. No. 136 at 11 (quoting Dkt. No. 136 Ex. 5 at CORE_L-408243). LG notes that the Applicants then argued that "[t]he concept of 'filter length' is thus one that is clearly known in the prior art, and one skilled in the art would clearly understand what is meant by a filter length." *Id*. LG asserts that it agrees that the term is well known and understood, and thus, does not need construction. LG notes that the Applicants' response was rejected as the Examiner asserted that the incorporation of essential material into the specification from a publication was improper and that an amendment to the specification would be required to include the new material. LG notes no amendment was made. Dkt. No. 136 at 12. LG notes that the Examiner maintained that the "specification does not clearly describe or explain 'filter length.'" Dkt. No. 136 Ex. 6 at CORE_L-408254. LG asserts that, in response, the Applicants amended the claims to remove the term "filtering operation" and "to recite that the filter length is a finite filter length." Dkt. No. 136 Ex. 7 at CORE_L-00408292. LG asserts that subsequent prosecution raised new grounds for rejection, and the filter terms were not mentioned again. Dkt. No. 136 at 13.

In reply, Core Asserts that LG relies on misinterpretation of the file history. Core asserts that the Examiner did not reject Core's proposed constructions regarding the length of a filter. Core asserts that in a July 4, 2004 Request for Continuing Examination (RCE), the applicant amended the claims to include "a filter having a finite filter length" and explained:

Each of the independent claims 1, 6-10, 17, and 19-20 are amended herein to remove the terms "filtering operation" and to recite that the filter length is a finite filter length. **Support for these changes may be found in the written description at least at page 6, lines 2-11(wherein a filter length must be finite in order to be adjusted; changing from an infinite filter length to an infinite filter length is not an adjustment); page 10, lines 10-27 (running average filter).** As detailed at "ETSI SMG2 Working Session on EDGE #11 Tdoc 2E99-501: "EGPRS LQC Measurements Filtering", Nokia, 18-22 October 1999", a "running average filter" is defined at Section 2 as finite, representing knowledge in the art for that type of filter which is explicitly recited in the specification. A copy of this publication was previously supplied by the applicants in the IDS. This is not to imply that the claims are limited to only a running average filter, but to show support for the claim change and enablement of the amended claim. Claim 20 is further amended to recite "transmitting data from the filter to the wireless network", and is supported at page 8, lines 33-35. None of the above changes are seen to change the scope of the claims as compared to previously used language.

Dkt. No. 122 Ex. 12 at 9 (emphasis added). Core argues that in response to the RCE arguments, the Examiner did not reject the arguments but merely stated that the arguments "are moot in view of the new ground(s) of rejection." Dkt. No. 136 Ex. 8 at Core_L-00408298.

Analysis

Core takes the position that the term "finite" has been redefined in prosecution to include infinite filters in which the weighting coefficients can be considered as negligible. Under Core's interpretation, any infinite filter that progressively descends in weight would be "finite." The prosecution history, at best, is not clear on the issue. Because the prosecution history "represents an ongoing negotiation between the PTO and the applicant," it may lack the clarity of the specification and, thus, be less useful in claim construction proceedings. *Phillips*, 415 F.3d at 1317. On balance, neither the specification nor the prosecution history redefined "finite filters" to include "infinite filters." *See Omega Eng. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) ("As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on *definitive*

36

statements made during prosecution.") (emphasis added). Here, at best, the prosecution history is

muddled. The first passage Core cites to is provided context by the full passage in question:

> In addition, reference is made in the application to the document "ETSI SMG2
> Working Session on EDGE #11Tdoc2E99-501: "EGPRS LQC Measurements
> Filtering", Nokia, 18-22 October 1999", which describes an example of a
> "running average filter" as opposed to a "running average exponential filter". A
> copy of this publication was previously supplied by the applicants in the IDS filed
> on March 13, 2000. Tdoc 2E99-501 in Section 2 describes "filter length" as
> follows:
>
>> The filter length is theoretically infinite. However, from some point, *the
>> weighting coefficients can be considered as negligible*. Therefore the
>> filter length can be considered as finite. This finite length should also be
>> understood as the number of input data which is required to stabilize the
>> filter output.

Dkt. No. 122 Ex. 10 at 9. Thus, the passage in question was actually a quote from a prior art

reference that the Applicant cited to in order to support an argument that the concept of "filter

length" was known in the art. *Id*. This passage does not clearly disclaim or redefine "finite" to

mean "infinite." Moreover, the Examiner found that the use of the passage in question was an

attempt to import essential material by reference and stated that the specification did not clearly

describe "filter length." Dkt. No. 136 Ex. 6 at 2-4. This prosecution history does not support

Core's disavowal argument. The Applicant then filed an RCE Amendment in which the "finite"

language was added. The key passage Core cites to is equally unclear:

> Each of the independent claims 1, 6-10, 17, and 19-20 are amended herein to
> remove the terms "filtering operation" and to recite that the filter length is a finite
> filter length. **Support for these changes may be found in the written
> description at least at page 6, lines 2-11(wherein a filter length must be finite
> in order to be adjusted; changing from an infinite filter length to an infinite
> filter length is not an adjustment); page 10, lines 10-27 (running average
> filter).** As detailed at "ETSI SMG2 Working Session on EDGE #11 Tdoc 2E99-
> 501: "EGPRS LQC Measurements Filtering", Nokia, 18-22 October 1999", a
> "running average filter" is defined at Section 2 as finite, representing knowledge
> in the art for that type of filter which is explicitly recited in the specification. A
> copy of this publication was previously supplied by the applicants in the IDS.
> This is not to imply that the claims are limited to only a running average filter, but

to show support for the claim change and enablement of the amended claim. Claim 20 is further amended to recite "transmitting data from the filter to the wireless network", and is supported at page 8, lines 33-35. None of the above changes are seen to change the scope of the claims as compared to previously used language.

Dkt. No. 122 Ex. 12 at 9 (emphasis added). The highlighted passage, emphasized by Core, provides no clarity to support Core's redefinition argument. The next sentence references the prior art again and similarly provides no clear redefinition. A patentee may act as his own lexicographer; however, such lexicography must be clear and explicit. *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1380 (Fed. Cir. 2009) (citing *Phillips*, 415 F.3d at 1321).

The Court finds that "set a finite length of a filter," "setting a finite length of a filter," and "filter having a finite length" have their plain and ordinary meanings and no further construction is necessary.

IV. U.S. Patent 7,804,850

1. "integer" - Claims 1, 11, 21 (Term 10)

Core Wireless's Construction	LG's Construction
whole number greater than 1	Indefinite

The parties dispute whether the patent has redefined the term "integer" to mean only whole numbers greater than 1.

Positions of the Parties

Core asserts that when read in light of the specification, "integer" means whole number greater than "1" and does not include negative numbers. Core argues that the specification references integer "n." '850 Patent 3:53-55. According to Core, the use of "n" in mathematics and engineering fields relates to natural or whole numbers. Core asserts that, here, the recitation of "integer multiple of …transmission time interval" (claim 1) or "n*TTI" ('850 Patent 3:53-55)

describes the interval of time between subsequent new transmissions of packets. Dkt. No. 122 at 22. Core argues that an interval of time between transmissions cannot be zero or negative and such interpretation would be nonsensical.

Core also asserts that as used in the specification, the "integer" cannot be the number 1. Core quotes: "The MAC-e PDU is sent to the physical layer every n*TTI, **instead of once every transmission time interval (TTI)**." '850 Patent 3:53-55 (emphasis added). Core asserts if the integer "n" was "1," the MAC-e PDU would be sent once every TTI, which is expressly excluded by the specification. Dkt. No. 122 at 22. Core also asserts that in Figures 3 to 7, all "virtual TTI" (i.e., integer multiples of TTI) are positive and greater than one TTI.

Core therefore concludes that, in context of the specification, negative numbers and zero are not operable, a fact to which experts on both sides agree. Dkt. No. 150 at 7. Core asserts that it is well-settled law that a claim term must be read in light of the specification.

LG notes that the plain meaning applies to a term except in cases of lexicography or disavowal. Dkt. No. 136 at 14. LG argues that both exceptions must be manifested with clear and unmistakable expressions of intent to disclaim or redefine. *Id*. (citing various Federal Circuit cases). LG asserts that the term is easily understood (with even an elementary level math background) to include negative whole numbers, zero, and positive whole numbers. LG asserts that Core attempts to salvage the claims by urging the Court to rewrite the claims because claims containing "integer" are inoperable or cover the prior art under a plain meaning. *Id*. LG argues that lexicography cannot apply as the word "integer" is never used in the specification. LG asserts that Core points to the specification description of "n*TTI." LG agrees that "1*TTI" is obviously in the prior art. However, LG asserts that there is no clear disavowal of n=1 as "n" is undefined in the specification. LG asserts that Core's position that "n" only commonly refers to

"natural numbers or whole numbers" is inaccurate. First, LG notes that the claims do not recite "natural" or "whole" but recite "integer." Second, LG asserts that, in mathematics, if the range of "n" were meant to be limited, this would be spelled out (e.g. "n > 1"). *Id.* (citing Lanning Decl.). LG cites a variety of extrinsic evidence sources for the proposition that "integers" are negative whole numbers, zero, and positive whole numbers. *Id.* at 16, n. 72. LG asserts that even the plain meaning of "whole number" does not exclude 1. LG notes that in Core's infringement contentions, Core stated that the integer for TTI could be 1. *Id.* at 16, n. 72.

LG asserts that, under a plain meaning of "integer," the claims are indefinite. LG argues that Core admits the plain meaning is not what the inventors regarded as their invention. LG asserts that Core's brief admits that negative numbers or zero would be "nonsensical." Dkt. No. 136 at 15 (quoting Dkt. No. 122 at 22). LG further asserts that Core has not pointed to any disavowal of the number "1," but that Core has only stated that the number "1" would claim the prior art. LG argues that merely recognizing that the claim, as written, may encompass the prior art does not constitute the required expression of disavowal. LG asserts that Core agrees that the claims written are not what the inventors intended, and, thus, the term is indefinite. *Id.* (citing *Allen Eng'g*, 299 F.3d 1336, 1349 (Fed. Cir. 2002)).

At the oral hearing, LG agreed to a construction of the term to be "plain and ordinary meaning." Dkt. No. 216 at 74.

Analysis

Core seeks to redefine a term which carries a clear ordinary meaning. The term "integer" is well known, and the intrinsic record has not restricted the scope as sought by Core. A statement of lexicography or disavowal must be clear. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992) (lexicography); *Arlington Indus., Inc. v. Bridgeport*

Fittings, Inc., 632 F.3d 1246, 1254 (Fed. Cir. 2011) (disavowal). There is no clear disclaimer or lexicography here. Thus, the plain meaning controls and Core's redefinition is rejected. In some regards, the facts before the Court are similar to those in *Allen Eng'g* where the patentee asked for "perpendicular" to be read to mean "parallel:"

> Allen argues that one of skill in the art would understand that the term "perpendicular" in the claim should be read to mean "parallel." Allen stretches the law too far. It is not our function to rewrite claims to preserve their validity. *Rhine v. Casio, Inc.,* 183 F.3d 1342, 1345, 51 USPQ2d 1377, 1379 (Fed.Cir.1999).

Allen Eng'g, 299 F.3d at 1349. It is noted that here, in contrast to *Allen Eng'g.*, the term "integer" is a broader term that has a plain meaning that encompasses the narrower construction the patentee seeks (as opposed to being the opposite). At the oral hearing, LG agreed to a construction of the plain meaning. Dkt. No. 216 at 74. The term "integer" is well understood and has not been redefined in the specification, thus, the term is reasonably certain and the plain and ordinary meaning is appropriate. *See Exxon Research and Eng'g Co. v. United States*, 265 F.3d 1371, 1382 (Fed. Cir. 2001) ("A patent claim to a fishing pole would not be invalid on indefiniteness grounds if it contained a limitation requiring that the pole be "at least three feet long" even though a 50 foot long fishing pole would not be very practical. By the same token, there is nothing indefinite about the claim language at issue in this case simply because it covers some embodiments that may be inoperable.")

The Court finds that "integer" has its plain and ordinary meaning and no further construction is necessary.

V.   "checking to determine" / "check to determine" - Claims 1, 11 / Claim 21 (Term 11)

Core Wireless's Construction	LG's Construction
Plain and ordinary meaning / no construction necessary.	Indefinite

LG argues that the claim language is not clear as to whether the checking is a check for autonomous transmissions or a check for any transmissions. LG asserts the term is, thus, indefinite.

Positions of the Parties

Core asserts that LG's indefiniteness position is based upon an interpretation that the "checking" recited by the claims is purportedly not the same as the "checking" disclosed in the specification. Core asserts that LG relies upon a portion of the specification that deals with "autonomous transmissions" (transmissions that occur without getting authorization from the network). Dkt. No. 122 at 22. Core asserts that other portions of the specification do not involve autonomous transmissions. Core therefore argues that LG is ignoring the relevant parts of the specification. Core points to portions of the specification related to checking to determine whether the medium access control entity is transmitting data packets from the apparatus in a current air interface transmission interval:

> Here, the MAC-d would check the RLC buffer of the UE once per virtual TTI, i.e., at the same interval as a normal TTI as defined in the 3GPP IS 25. 309 specification. As a result, packets received during the virtual TTI would be buffered at the RLC level. In addition, the MAC is permitted to check the RLC buffer more frequently in certain special cases, such as when it is not possible to clear the RLC buffer due to power limitations, the transmission of higher priority packets from other RLC buffer (e.g. SRB) or if there are bigger RLC SDUs (e.g., non-compressed headers or real time control protocol (RTCP) packets) that cannot be   transmitted   within   one   air   interface   TTI. ….
> Examples of the operation of the UE MAC under such conditions are as follows: (i) if the MAC is able to empty the RLC buffer during this air interface TTI, then

42

the MAC will check the RLC buffer at the next predetermined subsequent time interval after the virtual TTI; ….

'850 Patent 10:59-11:19. Core asserts that one skilled in the art would understand from these passages that the specification informs how to implement the checking step. Dkt. No. 122 at 23 (citing Chandler Decl.). Core also asserts that the dependent claims provide further detail as to the checking step. Core notes that dependent claim 3 recites, "wherein checking to determine whether the medium access control entity is transmitting data packets in a current air interface transmission time interval comprises checking to determine if the medium access control entity emptied its radio link control buffer."

LG argues that the issue is whether "checking to determine whether the medium access control entity is transmitting data packets" requires a check for <u>autonomous</u> transmission or <u>any</u> transmission. LG asserts that the heart of the dispute is whether portions of the specification that specify autonomous transmissions are relevant. LG asserts that a person of skill in the art cannot determine how to "check" for transmission without knowing what type of transmissions are covered. Dkt. No. 136 at 17.

LG argues that some dependent claims refer to autonomous transmission, while Core focuses on other dependent claims which require checking whether the MAC entity emptied its RLC buffer without specifying a type of transmission (claims 3, 6, 13, 16, 23, 26, and 33). LG asserts the RLC buffer claims are not asserted against LG. *Id*. LG asserts that the dispute is what the independent claims require. LG asserts that the specification is ambiguous about whether the RLC buffer check looks for any type of transmission or specifically for autonomous transmissions. *Id*. at 19.

LG asserts that the Title, Abstract, and rest of the specification repeatedly refer to "checking" elements in relation to autonomous transmission. LG cites to a number of passages

43

including the title: "Slow MAC-e for Autonomous Transmission …," the background explanation of the problems of autonomous transmissions ('850 Patent 1:44-67), the Summary of the Invention statement "a check is made to determine whether the transmission is autonomous. If the transmission is not autonomous…." ('850 Patent 3:42-44), "the present invention relates to a system and methods for slow medium access control entity (MAC-e) for autonomous transmission…" ('850 Patent 5:15-21), Figure 2 block 200 "Autonomous Transmission" and associated text "a check is made to determine whether the transmission is autonomous" ('850 Patent 6:53-54). Dkt. No. 136 at 18-19. LG also cites additional passages which describe autonomous transmission. *Id.*

LG also asserts that the file history limits "checking" for autonomous transmissions. Specifically, LG asserts that the file history indicates that the Examiner and Applicants interpreted the RLC buffer check dependent claims to be in addition to "checking" for autonomous transmissions. LG points to the Examiner statement of "[a]lthough Sarkar discloses checking to determine whether or not a mobile station is transmitting autonomously, Sarkar does not disclose [RLC buffer checking]. … It would have been obvious for one skilled in the art…to combine checking to determine [if RLC buffer is emptied]…." Dkt. No. 136 Ex. 16 at LGE0003043-05 (citations omitted). LG contends that the Applicants replied with an argument that Sarkar "teaches away from delaying an autonomous transmission, which would be the case if Sarkar were applied to claim 1…." Dkt. No. 136 Ex. 17 at LGE0003069. LG asserts that the Examiner then replied with a continued assertion that "Sarkar does teach delaying autonomous transmission." LG asserts that the Applicants ultimately never refuted the Examiner's position. Dkt. No. 136 at 20.

LG thus concludes that either (a) the Applicants disclaimed the checking to only checking

44

"autonomous transmissions" or (b) the lack of precision places the claim in a zone of uncertainty that renders the term indefinite because a person skilled in the art does not know what type of checking to perform. *Id*. at 20-21.

Analysis

A disavowal of claim scope must be clear. *See Arlington Indus., Inc. v. Bridgeport Fittings, Inc.*, 632 F.3d 1246, 1254 (Fed. Cir. 2011) ("[E]ven where a patent describes only a single embodiment claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words of expressions of manifest exclusion or restriction" (citation omitted)). Here, the specification does not provide such disavowal. Core has pointed to examples in the specification of "checking" to determine if the medium access control entity emptied its radio link control buffer. '850 Patent 10:59-11:30. Even LG acknowledges that this portion of the passage is not clearly limited to checking autonomous transmissions, as LG states that it is, at most, "ambiguous." Dkt. No. 136 at 19. It is further noted that some dependent claims recite checking whether the MAC entity emptied its RLC buffer without specifying a type of transmission (claims 3, 6, 13, 16, 23, 26, and 33) while other dependent claims recite that the transmission is an "autonomous uplink transmission" (claims 10, 20 and 30). That the various dependent claims are not asserted does not change the fact that the claims further support the conclusion that the "checking" is not limited to autonomous transmissions.

Further, the prosecution history does not provide the disavowal LG seeks. The Examiner merely stated that the prior art taught checking of autonomous transmissions. Such checking would be relevant to an interpretation of a claim that required a broader checking of any transmissions. Neither the Examiner nor the Applicants characterized the claim as requiring checking of autonomous transmissions. Prosecution arguments, by nature, are often not clear.

Phillips, 415 F.3d at 1317 (noting that the prosecution history represents an "ongoing negotiation" and "often lacks the clarity of the specification"). In order to show that the patentee disavowed the well-known meaning of a term in the art, the prosecution history must show that the patentee clearly and unambiguously disclaimed or disavowed its meaning during prosecution to obtain claim allowance. *Middleton, Inc. v. Minn. Mining & Manuf. Co.*, 311 F.3d 1384, 1388 (Fed. Cir. 2002). Again, such clarity has not been shown here.

The Court finds that "checking to determine" / "check to determine" has its plain and ordinary meaning and no further construction is necessary.

V. U.S. Patents 8,165,049 and 8,792,398

1. "automatically" - '049 Claims 11, 14, 28 (Term 12)

Core Wireless's Construction	LG's Construction
based on settings input by the user in advance of receiving the filtering parameter and electronic information	occurring through action taken by the apparatus based on settings input by the user in advance of receiving the filtering parameter and electronic information

Core expresses concern that "action taken by the apparatus," proposed by LG, would exclude an apparatus that defaults to one condition (i.e., automatically default to reject but accept if the condition is met and vice-versa). LG raises an issue as to whether or not "automatically" has to be an operation at the terminal/apparatus.

<u>**Positions of the Parties**</u>

As to "automatically," Core notes that the parties' constructions are similar except to LG's inclusion of "occurring through action taken by the apparatus." Core asserts that this additional limitation should be rejected because it narrows the claim by requiring an affirmative action be taken by the apparatus to "allow or prevent" receiving a message. Dkt. No. 122 at 25.

Core asserts that nothing requires an affirmative action to be taken to allow or prevent something; the claim is broader than that because the processor may be configured to allow or prevent the receiving of a message through <u>inaction</u> too. Core uses an example of a phone that, by default, does not allow any messages to be received unless it affirmatively acts to allow them. Core asserts that, in this case, the phone would not prevent messages "through action taken by the apparatus" - it prevents messages by inaction. *Id*. Core asserts that it is often the case that when a choice must be made, one choice is the default and is made by doing nothing, while the other choice may require action. Dkt. No. 150 at 9 (making an analogy to a train switch where inaction enables one choice/direction and throwing the switch enables another choice/direction). Core asserts that LG's reliance on the preferred embodiment is not sufficient because claims are not limited to the preferred embodiment.

LG responds that, as claimed, the "automatic" action describes action taken by the terminal itself. LG asserts that in this manner, the claims that include this term are more limited than those claims that do not include the limitation. Dkt. No. 136 No. 21. LG argues that Core's construction reads out this requirement.

LG asserts that the dictionary definition of "automatically" means a "self-acting…mechanism that performs a required act." *Id*. at 22. LG asserts that this matches the specification which describes the preferred embodiment as "the attaching of said parameter is automatically carried out by the transmitted terminal." '049 Patent 3:61-63. LG asserts that the terminal itself performs this function to prevent a user from tampering with the parameter. Dkt. No. 136 at 22 (citing '049 Patent 3:63-66). LG also argues the specification uses the term to describe an embodiment where the process of reading the filtering parameter is carried out "automatically" with encrypted software so that the process is protected from manipulation. *Id*.

47

(citing '049 Patent 15:21-28). LG asserts that Core's construction renders "automatically" meaningless. LG notes that Core's construction for "automatically" is the exact same as Core's construction of "allow or prevent the receiving of the electron information on the basis of said filtering parameter" in the related '389 Patent (Term 18).

LG also argues that Core's construction is at odds with the prosecution of the '049 Patent parent, U.S. Patent No. 6,947,396 ("the '396 Patent"). LG notes that the Examiner had rejected the '396 Patent claims over a combination of references (Miller combined with Proust) that allows a user to choose whether information is received or not. LG notes that the Applicants stated that "Miller and Proust does not achieve a filtering system based on a classification parameter that automatically determines…." Dkt. No. 136 at 23 (quoting Dkt. No. 136 Ex. 23 at LGE0634453). LG asserts the Applicants went on to say "[n]othing in Proust pertains to terminal taking action with respect to an enhanced message based upon a profile…." *Id*. at (quoting Dkt. No. 136 Ex. 22 at LGE0634454). LG asserts that the '396 Patent method claim 1, thus, issued with the language: "the terminal, automatically, allowing or preventing…." LG asserts that the same claim term in the related '049 Patent is presumed to have the same meaning. Dkt. No. 136 at 24.

LG argues that Core's position that the term merely requires the action be taken based on setting input by the user in advance, is at odds with the parent '396 Patent dependent claims which recite that the action is based on user input (claim 14) and "without user intervention" (claim 15). LG asserts that "automatically" must mean something more than just what is stated in dependent claim 14 and that Core's construction cannot cover both based on user input and without user input.

In reply, Core cites to the prosecution history where the term "automatically" is directed

toward the determination of whether to accept or reject a message, not whether the choice is done actively or through inaction. *Id.* at 10 (citing Dkt. No. 136 Ex. 23 at LGE0634453). As to LG's prosecution history citation, Core argues that this is not a clear disavowal and that, in any event, the passage merely references "taking action" which would apply to taking some action for one choice and the other choice selected through inaction. *Id.*

At the oral hearing, the Court proposed the following construction: "occurring through action or inaction taken by the processor based on settings input in advance of receiving the filtering parameter and electronic information." Core agreed to the proposed construction. LG did not agree, objecting to the inclusion of "inaction." Dkt. No. 216 at 76-77.

Analysis

Core expresses concern that "action taken by the apparatus" would exclude an apparatus that is set to default to one condition (i.e., automatically set by default to reject but accept if the condition is met and vice-versa). In an ordinary meaning, an "automatic" selection between two choices could occur where one choice is set to be the default unless overridden. The parties do not appear to dispute this. However, LG asserts that the specification only references embodiments where the terminal takes affirmative action (as opposed to being set by default to inaction). In the specification, LG has only pointed to embodiments and has not identified any lexicography or disclaimer limiting "automatically" as sought. As to the prosecution history, the Miller reference was characterized as a reference in which the user manually elected whether to receive an email or not by pressing buttons. The Applicant distinguished that approach from the specification techniques in which a user profile is set up to make a determination or decision based upon message classification type. Dkt. No. 136 Ex. 23 at LGE0634451-55. It was in this context that "automatically" was added to distinguish Miller which taught that the user manually

49

determines desirable content. The prosecution history did not limit the term to exclude "automatic" configurations in which certain actions are preset to occur by default or "inaction" unless overridden by the system settings. Moreover, such a construction does not conform to the specification. LG pointed to a passage in which the terminal sends a notification that a message has been rejected. LG asserts that this teaches that an affirmative action is required. However, the passage in full states:

> After receiving said notification message 21, the wireless terminal MS makes a decision according to the invention on the retrieving of a multimedia message from the MM-SC, i.e. reads the parameters in the notification message added for filtering and compares them to the terminal's stored settings or requests the user (for specific classes) to give his approval or rejection for the receiving of the multimedia message in question. In case of acceptance, the terminal retrieves the multimedia message from the MM-SC. In case of rejection, the terminal sends the MM-SC a notification that it has rejected the message, whereupon the message will not be delivered to the terminal.

'049 Patent 12:34-45. This passage makes clear that when the rejection notification has been sent, the terminal has already determined that the message is rejected. Whether the system is configured to require an affirmative action to retrieve messages or an affirmative action to reject messages, vice-versa, or both, does not change that the process is automatic.

The fuller context of the term "automatically," as used in the claims, is "automatically allow or prevent" (claim 11 and 28) and "automatically allowing or preventing" (claim 14). It is further noted, that claims 11 and 28 explicitly require the processor to be "configured" for the "automatically allow or prevent." Thus, when the particular structure that is configured to perform the automatic process is required, the claims state so themselves.

The Court construes "automatically allow or prevent" and "automatically allowing or preventing" to mean "allowing or preventing based on settings input in advance of

receiving the filtering parameter and electronic information."

    2.   **"preventing the receiving of" - '049 Claim 14, '398 Claims 11-13 (Term 13)**

Core Wireless's Construction	LG's Construction
Plain and ordinary meaning / no construction necessary	take action to reject

The dispute presented is similar to that of Term 12 in that LG's construction requires an affirmative action taken to reject reception.

Positions of the Parties

Core asserts that the same rationale as discussed for "automatically" applies to the term "preventing the receiving of." Core asserts in both claim phrases, nothing requires an affirmative action to be taken to allow or prevent something.

LG asserts that active rejection of an electronic message is required. LG asserts that if inaction would satisfy the claims, then the process claim would be indefinite because a process is defined as "an act, or a series of acts." Dkt. No. 136 at 25 (citing *Diamond v. Diehr*, 450 U.S. 175, 183 (1981)). LG asserts that to particularly point out the claimed invention, the process must set forth the required acts. Dkt. No. 136 at 25. LG asserts that if the step of "preventing the receiving of the electronic information" could be carried out without any action, then this step is superfluous.

LG further asserts that each claim that includes the term also includes "allowing or preventing receiving of electronic information." LG asserts that the additional claim limitation "preventing the receiving of the electronic information" must have meaning. *Id*. LG asserts that its construction is consistent with the specification ('049 Patent 5:49-51) and the plain meaning.

Analysis

In '049 Patent claim 14, the term is found in context of a broader portion of the claim that includes Term 12 discussed above: "automatically allowing or preventing receiving of the electronic information." In the '398 Patent, the term is found in context of one claim limitation that states "allowing or preventing receiving of electronic on the basis of the filtering parameter" and the next claim limitation "preventing the receiving of the electronic information through the wireless network if the filtering parameter denotes the electronic information as information whose receipt is to be prevented." LG seeks to obtain a construction that would, in effect, avoid systems that are set to default to reject all messages by default based on the filtering parameter but allow certain messages that have the proper filtering parameter. Such a construction does not comport with the ordinary meaning of "preventing the receiving of." Similarly as discussed above with regard to Term 12 ("automatically allowing or preventing"), an affirmative action to prevent receiving is not required as "preventing the receiving of" may be accomplished through the use of preset settings or defaults and the like.

The Court finds that "preventing the receiving of" has its plain and ordinary meaning and no further construction is necessary.

CONCLUSION

The Court adopts the above constructions set forth in this opinion for the agreed and disputed terms of the Asserted Patents. The parties are ordered that they may not refer, directly or indirectly, to each other's claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction

proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 4th day of November, 2015.

_____
ROY S. PAYNE
UNITED STATES MAGISTRATE JUDGE