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

CELLULAR COMMUNICATIONS EQUIPMENT LLC,	§	
Plaintiff,	§	**Case No. 6:13-cv-507**
v.	§	**CONSOLIDATED LEAD CASE**
HTC CORPORATION, ET AL.,	§	
Defendants.	§	

MEMORANDUM OPINION AND ORDER

This Memorandum Opinion construes disputed claim terms in United States Patent Nos. 8,055,820 ("the '820 Patent"), and 7,218,923 ("the '8923 Patent") asserted in this suit by Plaintiff Cellular Communications Equipment LLC. On April 9, 2015, the parties presented oral arguments on the disputed claim terms at a *Markman* hearing. For the reasons stated herein, the court **ADOPTS** the constructions set forth below.

BACKGROUND

Plaintiff alleges that Defendants, a group of mobile device manufacturers and mobile network carriers, infringe five of its patents. The patents-in-suit were acquired from Nokia Siemens Networks and generally relate to mobile communications. Docket No. 361 at 1. This is the second claim construction ruling in this case. The Court previously addressed terms from all of the patents-in-suit, including the '820 and '8923 Patents, in a first Memorandum Opinion, which issued on March 9, 2015. Docket No. 363. This second Memorandum Opinion construes three disputed terms that were not construed in the first Memorandum Opinion.

APPLICABLE LAW

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

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

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am.*

Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002). In the specification, a patentee may define his own terms, give a claim term a different meaning that it would otherwise possess, or disclaim or disavow some claim scope. *Phillips*, 415 F.3d at 1316. Although the Court generally presumes terms possess their ordinary meaning, this presumption can be overcome by statements of clear disclaimer. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343–44 (Fed. Cir. 2001). This presumption does not arise when the patentee acts as his own lexicographer. *See Irdeto Access, Inc. v. EchoStar Satellite Corp.*, 383 F.3d 1295, 1301 (Fed. Cir. 2004).

The specification may also resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. For example, "[a] claim interpretation that excludes a preferred embodiment from the scope of the claim 'is rarely, if ever, correct.'" *Globetrotter Software, Inc. v. Elam Computer Group Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) (quoting *Vitronics Corp.*, 90 F.3d at 1583). But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed language in the claims, particular embodiments and examples appearing in the specification will not generally be read into the claims." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988); *see also Phillips*, 415 F.3d at 1323.

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

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

DISPUTED TERM IN THE '820 PATENT

The '820 Patent, titled "Apparatus, System, and Method for Designating a Buffer Status Reporting Format Based on Detected Pre-Selected Buffer Conditions," issued on November 8, 2011 and bears a priority date of November 5, 2007. The Abstract of the '820 Patent states:

> An apparatus, system and method for increasing buffer status reporting efficiency and adapting buffer status reporting according to uplink capacity. User equipment is configured a [*sic*, to] monitor a usage of a plurality of buffers, detect one of a plurality of pre-selected conditions corresponding to at least one of the plurality of buffers, designate one of a plurality of buffer status reporting formats depending on the pre-selected condition detected, communicate a buffer status report to a network device in accordance with the buffer status reporting format designated. The buffer status reporting format is configured to minimize buffer status reporting overhead created by the communicating of the buffer status report.

A. "usage" (Claims 1, 12, and 24)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning; no construction necessary.	"an act, way, or manner of using"

Plaintiff argues that "[t]he specification describes monitoring 'usage' in broad terms, commensurate with the plain claim language." Docket No. 361 at 4. Plaintiff also argues that Defendants' proposed construction, which "selectively adopt[s] — and omit[s] — phrases from the extrinsic evidence [Defendants] identify," is "arbitrary and improper." *Id.* at 5–6. Plaintiff

urges that, for instance, "'monitoring a usage of a plurality of buffers' may be accomplished by looking at the buffers to discern whether (or not) the buffers are used or employed." Docket No. 369 at 2.

Defendants respond that "Plaintiff conflates the different concepts of 'monitoring the buffers' and 'monitoring *the usage of* buffers.'" Docket No. 362 at 4. Defendants submit that "the claimed monitoring must be directed to the 'usage' of the buffers by other components (*e.g.*, applications) as opposed to monitoring directly the buffers themselves." *Id.* at 5–6. Thus, Defendants conclude, Plaintiff's interpretation "will confuse the jury because it improperly discards 'usage' from the claim limitation." *Id.* at 6.

Claim 1 of the '820 Patent is representative and recites (emphasis added):

> 1. A method, comprising:
>
> monitoring a *usage* of a plurality of buffers;
>
> detecting one of a plurality of pre-selected conditions corresponding to the plurality of buffers;
>
> designating one of a plurality of buffer status reporting formats comprising a long buffer status reporting format and a short buffer status reporting format depending on the pre-selected condition detected; and
>
> communicating a buffer status report to a network device in accordance with the buffer status reporting format designated, wherein the designating designates the long buffer status reporting format when there is sufficient uplink bandwidth to communicate using the long buffer status reporting format.

The specification does not limit the definition of "usage" to a particular meaning different from or narrower than the term's plain meaning. Defendants do not dispute that certain meanings of "usage" found in the dictionary excerpts attached to their briefing include or relate to the fact of use. *See* Docket No. 362-2 at 9 ("the fact of being used"); *id.* at 24 ("use"). Rather, Defendants argue that the patentee intentionally excluded these meanings because "the patentee made a conscious decision to forgo claiming 'monitoring buffers,' 'monitoring the use of

buffers,' and other possibilities." Docket No. 362 at 7. Defendants also contend that the patentee drew a distinction between "monitoring buffers" and "monitoring a usage of buffers" in a portion of the specification that states "[i]n certain embodiments, monitoring 310 buffers ***may include*** monitoring a usage of one or more communications buffers." *Id.* at 4 (emphasis added by Defendants) (quoting '820 Patent at 7:58–60).

Irrespective of whether or how the patentee intended "monitoring a usage of . . . buffers" to be a narrower concept than "monitoring buffers," the intrinsic evidence suggests that the "fact of being used" meaning of "usage" should not be excluded from the meaning of the term. The specification discloses "monitor[ing] a usage of the plurality of buffers" so as to allow for the detection of conditions, such as whether a buffer contains data:

> In some embodiments, the monitoring unit 210 is configured to *monitor a usage of the plurality of buffers 220*. In certain embodiments, the monitoring unit 210 and the detecting unit 230 cooperate to enable the detecting unit 230 to *detect one of a plurality of pre-selected conditions* corresponding to the plurality of buffers. The pre-selected conditions . . . may include, for example, any *data in one or more buffers,* data in one or more buffers beyond a pre-selected threshold.

'820 Patent at 6:1–9 (emphasis added); *see also id.* at 7:58–63, 8:6–20, 10:7–28. Thus, the specification links the monitoring of the usage of buffers to at least the determination of whether the buffers contain data or how much data is contained within the buffers. Defendants point to nothing in the specification that supports limiting the method by which the usage of a buffer—i.e., in certain embodiments, the amount of data in the buffer—is monitored.

Thus, the specification suggests that the patentee has used the term "usage" in accordance with its broad meaning in ordinary common parlance. Because Defendants' proposal would only limit the scope of this broad, generic term, Defendants' proposed construction is rejected. No

further construction is necessary. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be) required to construe *every* limitation present in a patent's asserted claims.").

The Court therefore construes **"usage"** to have its **plain meaning**.

DISPUTED TERMS IN THE '8923 PATENT

The '8923 Patent, titled "Control of Terminal Applications in a Network Environment," issued on May 15, 2007, and bears a priority date of December 18, 2003. The Abstract of the '8923 Patent states:

> A mechanism and method for controlling the rights and/or behavior of applications in a terminal, especially in a mobile terminal, are disclosed. At least some of the messages generated by an application residing in the terminal and destined for a communication network are diverted to an independent controlling entity also residing in the terminal. In the controlling entity, the messages are controlled before being transmitted to the network. Depending on the application and its behavior in the terminal, the control entity may modify the messages or even prevent their sending to the network. The modification may include inserting control data, such as a digest, which can be used to authenticate the application.

The '8923 Patent is the subject of an inter partes review ("IPR") proceeding instituted January 15, 2015. *See* Docket No. 369, Ex. H, IPR2014-01133, 1/15/2015 Decision.

A. "a message of the messages" (Claim 24)

Plaintiff's Proposed Construction	**Defendants' Proposed Construction**
Plain and ordinary meaning; no construction necessary.	"one or more, but less than all, of the messages"

Claim 24 relates in part to a "diverting unit" in a terminal (e.g., mobile device) of a communication system that "divert[s] a message of the messages" originating from an application in the terminal to a "controlling entity" also in the terminal, rather than to the

communication network. '8923 Patent at 10:58–11:5 (claim 24). The parties primarily dispute whether diverting "a message of the messages" may include diverting *all* of the messages. Plaintiff argues that it may, and that Defendants' proposed construction is contrary to the intrinsic record, wherein the specification repeatedly states that the invention diverts "at least some of the messages." Docket No. 361 at 7–8 (citing '8923 Patent at Abstract, 2:38–45).

Defendants respond that "in response to an IPR petition directed to the '8923 Patent, Plaintiff distinguished certain prior art references on the basis that they diverted *all* of the messages." Docket No. 362 at 9. Defendants further argue that claim language "distinguishes between 'message' and 'messages'" such that "the set of messages diverted must be a subset of the set of messages sent." *Id.* at 12.

Claim 24 of the '8923 Patent recites (emphasis added):[1]

> 24. A terminal for a communication system, the terminal comprising:
>
> an application program configured to *send messages* towards a communication network; and
>
> a diverting unit configured to *divert a message of the messages* sent from the application program and destined for the communication network to a controlling entity residing in the terminal,
>
> wherein the controlling entity is configured to control, based on *the message* and before *the message* is transmitted to the communication network, whether the application program behaves in a predetermined manner in the communication terminal, and
>
> wherein the terminal is a terminal of a communications system.

Neither the claim language nor the specification supports the "but less than all" limitation proposed by Defendants. With respect to the claim language, the parties do not dispute that the

[1] The Court previously "construe[d] 'a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network' to have its plain meaning." Docket No. 363 at 35 (emphasis omitted).

word "a" can mean "one or more." *See* Docket No. 361 at 7; Docket No. 362 at 11; *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1342–43 (Fed. Cir. 2008) ("[A]n indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.'"). The fact that the term distinguishes "a message" from "the messages" indicates only that "a message" may be less than all of the messages; the language does not impose a ceiling on the number of messages.

Likewise, nothing in the specification suggests that the diverting unit must divert less than all of the messages. Defendants point to a number of passages in the description that include phrases such as "at least some," "at least one," or "selected" messages, *see* Docket No. 362 at 12 (citing '8923 Patent at Abstract, 1:60–63, 2:21–22, 2:26–27, 2:39), but these phrases are, at most, ambiguous on whether they may include all of the messages sent by an application. The specification is silent on whether all of the messages can be "selected," and the phrase "at least some" even supports the possibility that all of the messages may be included. Thus, the specification does not support imposing the negative limitation proposed by Defendants.

The patentee's arguments to the United States Patent Trial and Appeal Board ("PTAB") in the prosecution history, however, do support the negative limitation, "but less than all." In its preliminary response to a petition to institute an IPR of the '8923 Patent filed by some of the defendants in this case,[2] Plaintiff sought to distinguish the claimed invention from at least three prior art references: Richardson, D'Aviera, and Williamson. Docket No. 362-5 at 24–38.

[2] Defendants submit that "AT&T, Sprint, T-Mobile, and Verizon have not participated in any way in the IPR proceedings." Docket No. 362 at 11 n.4.

With respect to Richardson, Plaintiff argued to the PTAB that "[i]n Richardson, regardless of whether a firewall is used or not, all communications or packets merely pass through the trusted agent 103 before transmitting to the network 104." *Id.* at 24. Thus, Plaintiff concluded, "[b]y pointing to the same thing (trusted entity) for both the controlling and diverting steps, Petitioner is vitiating a claim element, namely, the diverting step." *Id.*

With respect to D'Aviera, Plaintiff described an "isolator engine" in D'Aviera as "a standalone application, the execution of which can be initiated by double clicking on an icon." *Id.* at 30. "[W]hen the isolation engine 225 is executing," it "intercepts all outbound operations of an application program." *Id.* Because, Plaintiff argued, "in D'Aviera, outbound operations or messages from application program 210 merely pass through the isolation engine 225 before being transmitted to the network module 220, no outbound operation or message is actually 'diverted.'" *Id.* at 31.

Finally, with respect to Williamson, Plaintiff argued that the Virus Anti-Propagation Software ("VAPS") described in that reference "handles *all* requests to send outbound data." *Id.* at 35. Plaintiff emphasized that "Williamson does not disclose 'diverting' some of the requests (sent to the network) to the VAPS for processing." *Id.* Plaintiff concluded, "[b]ecause, all outbound requests from the application merely pass through the VAPS before being transmitted to the network, no request is actually 'diverted' to the VAPS." *Id.*

Here, Plaintiff frames its prior arguments to the PTAB as that the asserted references did not meet the "diverting" limitation rather than any argument relating to the "message of the messages" limitation. Docket No. 369 at 5. Plaintiff argues that it distinguished the IPR references "not because they 'diverted *all* of the messages' (as Defendants allege), but because

they did not divert *any* of the messages — that is, they fail to disclose any 'diverting' whatsoever." *Id.* at 4.

Plaintiff repeatedly argued to the PTAB, as set forth above, that the reason the asserted references did not meet the diverting limitation was because all of the messages were treated the same way or followed the same course. Plaintiff effectively equated the concept of diversion with handling some messages in one manner and other messages in a different manner. Accordingly, Plaintiff's arguments to the PTAB rise to the level of a clear and unmistakable disclaimer that "a message of the messages" does not include all of the messages. *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1381 (Fed. Cir. 2011) ("The patentee is bound by representations made and actions that were taken in order to obtain the patent."). Plaintiff may not now obtain a broader construction than the position it advocated to the PTAB. [3]

The Court therefore construes **"a message of the messages"** to mean **"one or more, but less than all, of the messages."**

B. "tamper resistant" (Claim 26)

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain and ordinary meaning; no construction necessary.	"resistant to being affected by a user or other parties that are beyond the control of the network operator"

Plaintiff argues that this term needs no construction because the word "tamper" is "widely-known and well-understood — it means 'to interfere in a harmful or unauthorized

[3] To whatever extent the petitioners in the IPR proceedings proposed constructions broader than what Defendants propose in the present litigation, the difference may be accounted for by the difference in claim construction standards between the two proceedings. *See Facebook, Inc. v. Pragmatus AV, LLC*, 582 F. App'x 864, 869 (Fed. Cir. 2014) ("The broadest reasonable interpretation of a claim term [under the PTAB standard] may be the same as or broader than the construction of a term under the *Phillips* standard. But it cannot be narrower.").

manner.'" Docket No. 361 at 9 (quoting *id.*, Ex. F, *Wiley Electrical and Electronics Engineering Dictionary* 771 (2004)). Plaintiff also argues that the intrinsic evidence contains no disclaimer or lexicography that would support Defendants' proposal. *Id.* at 9–10. Finally, Plaintiff submits, "one skilled in the art would know that manufacturers often maintain access to devices after their sale in order to distribute software updates for programs and data stored on them (including programs and data in tamper resistant areas)." Docket No. 369 at 8.

Defendants respond that "[t]he meaning of tamper resistant is clearly and consistently set forth in the specification." Docket No. 362 at 14. Defendants also submit that "[t]here is no suggestion in the patent that manufacturers have access to the tamper resistant area of a terminal *after* the terminal is manufactured, *i.e.*, during the period in which Defendants are alleged to infringe the patent." *Id.* at 16. Further, Defendants argue, the dictionary definition of "tamper" that Plaintiff cites as an indication of the term's alleged plain meaning "injects ambiguity into the claim and will prove unworkable." *Id.* at 17; *see id.* at 18–19.

Claim 26 of the '8923 Patent recites (emphasis added):[4]

> 26. The terminal according to claim 24, wherein the controlling entity is configured to reside in a *tamper resistant* area of the terminal.

Defendants base their proposed construction on a sentence in the specification which states: "[t]he controlling entity resides in a tamper resistant area of the terminal, *so that its operation cannot be affected by the user or other parties that are beyond the control of the*

[4] Claim 24, from which Claim 26 depends, is reproduced in the discussion of the term "a message of the messages," above.

network operator." '8923 Patent at 2:3–11 (emphasis added). Some embodiments in the specification suggest that a purpose of the controlling entity is to ensure that controlled applications behave in accordance with the network operator's rules. For instance, the specification refers to "applications that behave contrary to the agreements made with the operator of the network" and "applications that are not approved by the operator." *Id.* at 1:43–47 & 7:1–3; *see id.* at 5:10–12 ("In another embodiment, the mechanism is utilized for ensuring that authorized applications obey the SIP policies of the operator."); *id.* at 6:27–31 ("[I]n one embodiment of the invention the applications are controlled to ensure that they obey the policies set by the operator. In this embodiment of the invention, the tamper resistant area includes the policy rules set for the terminals."). Thus, the specification indicates that one purpose of the tamper resistant area, which contains at least the controlling entity, is to prevent applications from exploiting network capabilities in violation of the agreements and policies that are designed to thwart such exploitation.

However, the portions of the specification cited by Defendants do not amount to clear lexicography or disclaimer that would require a departure from the plain meaning of the term. *See CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) ("[T]he claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and *clearly* set forth a definition of the disputed claim term in either the specification or prosecution history.") (emphasis added). To the contrary, the specification contains little guidance on the meaning of "tamper resistant." For instance, the parties dispute the meaning of statements in the description that explain that policy rules, certificates, and keys may be "stored in the tamper resistant area in the manufacturing phase of the terminal." '8923 Patent at 6:45–48 & 7:65–8:5;

see also Docket No. 361 at 11; Docket No. 362 at 15–16. The relevance of this disclosure to the identities of those entities that may tamper with the tamper resistant area before or after the manufacturing phase, let alone the manner of such tampering, is unclear. Absent sufficient guidance from the specification, Defendants' proposed construction too narrowly restricts the scope of the claim. Furthermore, it would improperly restrict the claim scope to a specific feature of some preferred embodiments. *See Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) ("Although 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.") (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)).

Accordingly, the Court rejects Defendants' proposed construction. In its place, the Court also does not adopt any specific dictionary definition of "tamper" or "tamper resistant" proposed by either party. Instead, the Court construes "**tamper resistant**" to have its **plain meaning**.

CONCLUSION

For the foregoing reasons, the Court hereby **ADOPTS** the claim constructions as set forth above. For ease of reference, the Court's claim interpretations are set forth in a table in Appendix A.

So ORDERED and SIGNED this 1st day of June, 2015.

K. Nicole Mitchell

K. NICOLE MITCHELL
UNITED STATES MAGISTRATE JUDGE

APPENDIX A

Terms, Phrases, or Clauses	Court's Construction
'820 "usage"	plain meaning
'8923 "a message of the messages"	"one or more, but less than all, of the messages"
'8923 "tamper resistant"	plain meaning