examination. (Tr. at 950, 1005.) Apples asserts Motorola echoed this newly-proffered construction in its brief, immediately after arguing that the phrase required no separate construction. (CIB at 156-157 ("According to Motorola's expert, the term 'software application' has a well-understood and plain meaning, and does not require separate construction. As Dr. Madisetti testified, a software application is a software program that performs a specific task for a user, and it is not part of the operating system or system software.") (emphasis added).) Apple argues Motorola's untimely proposed construction should be ignored.

As in its opening brief, Apple asserts nothing in the '333 patent or its file history supports the notion that there is a strict dichotomy between the "operating system" (or "system software") and "software applications," (*See* RIB at 77.) Apple argues Motorola trumpets Dr. Noble's alleged "admissions" from the hearing, yet fails to point to any evidence that Apple's proffered construction (or Dr. Noble's testimony) is inconsistent with how "software applications" is used in the context of the '333 patent. Apple contends it is undisputed that the subscriber units described in the '333 patent were pagers, similar to those sold by Motorola in the 1990s. Motorola asserts there is no evidence in the record that the alleged distinction between "software applications" and the "operating system" has any meaning in the context of pagers. Apple argues that instead, the only reference to "operating software" in the '333 patent relates to the controller in the fixed portion of the wireless communication system, not to the subscriber unit. (JX-2 at 4:27.)

c. Finding

As a preliminary matter, I find no attempt at a trial ambush as argued by Apple. (RRB at 28.) I find no material divergence in Motorola's arguments or expert testimony and instead find the parties have almost been consistently offering the same interpretations at one another from the beginning. In the case of Motorola I find that it has rather consistently argued that "software

application" be given its plain meaning, but that this construction does not include systems software. I also note a complete lack of prejudice even if Apple were correct, based upon the statements it has made in its reply briefs. (RIB at 77; RRB at 29.) Finally, I note it is Apple that proffered the Microsoft definitions it now finds improbable insofar as its proffered definitions differentiate between operating systems and application software.

I agree with Dr. Madisetti and Motorola and find that the term "software applications" does not require construction because it has a well understood and plain meaning to a person of ordinary skill in the art.

The intrinsic evidence provides no guidance as to the meaning of the term "software application." (CIB at 158; RIB at 75; JX-2.) Dr. Madisetti testified "[t]he phrase 'software application' has a well-understood plain meaning and does not require further construction." (CX-2701C, Madisetti RWS at Q/A 139.)

Apple and Dr. Noble, Apple's expert, contend that "software application" is properly construed as "a computer program designed to perform specific tasks." (RX-1285C, Noble DWS at Q/A 52.) During cross examination, Dr. Noble admitted all computer programs perform specific tasks. (Tr. at 1458:2-6.) Thus, Apple's proposed construction would cover all computer programs, because every computer program is designed to perform a specific task. However, Apple's proposed construction is inconsistent with the definitions cited by Apple and its expert, and Apple's own development documents.

In his Direct Witness Statement, Dr. Noble cited a definition of "software" in the Microsoft Press Computer Dictionary. (RX-196.003-4; RX-1285C, Noble RWS at Q/A 53.) However, this dictionary definition makes clear that software applications ("such as word processing programs, spreadsheets, and databases") are different from "system software

(operating systems), which control the workings of the computer ..." (RX-196.003-4) which is not reflected in Apple's proposed definition.

Similarly, Apple introduced excerpts from two IEEE dictionaries during Dr. Madisetti's cross examination, which also support Motorola's proposed construction. According to both of these dictionaries, "application software" is "software designed to fulfill specific needs of a user, for example, software for navigation, payroll, or process control." (CDX-12.2-12.3.) Additionally, both IEEE definitions distinguish "application software" from "support software" and "system software." (*Id.*) While these dictionary definitions were not introduced as evidence, Dr. Madisetti confirmed that these definitions support his proposed construction of plain and ordinary meaning. (*See* Tr. at 946:8-946:15, 950:1-950:16, 1010:18-1011:23, 1011:24-1012:16, 1013:4-1014:5.) Similarly, on cross examination, Dr. Noble admitted that he agrees with the distinction between "software applications" and "system software" set forth in the Microsoft dictionary "as far as it goes." (Tr. at 1460:2-1462:2.)

Apple's own development documents further support Dr. Madisetti's opinion that the plain meaning of "software applications" does not include the underlying operating system. For example, an Apple document titled "About iOS Development" notes that iOS, the operating system for the accused iPhones and iPads, "acts as an intermediary between the underlying hardware and the applications that appear on the screen." (CX-1390; *see also* Noble, Tr. 1465:25-1466:4.) Every dictionary used by Apple supports Dr. Madisetti's position that "software applications" perform tasks for a user and are not part of the operating system or system software. (Madisetti, Tr. at 1005:25-1006:4.)

In its brief, Apple argues that Dr. Madisetti "presented for the first time a new proposed construction for 'software application,' namely 'software program that performs specific tasks

for a user.'" (RIB at 77.) But Apple mischaracterizes Dr. Madisetti's testimony by citing only a portion of his answer. (*Id.* (citing Tr. at 1005:6-15).) In the remainder of the answer not cited by Apple, Dr. Madisetti explained that a skilled artisan would understand that a "software application" (i) performs a specific task for a user, and (ii) is not part of the operating system or system software. (Madisetti, Tr. at 1005:25-1006:4.)

I also reject Apple's logic in arguing that because "software applications" has no meaning with respect to pagers, the subject matter of the '333 patent, there can be no evidence in the record supporting any distinction between "software applications" and "operating systems" with respect to pagers (RRB at 29). First, in the background of the invention, the inventors note that:

> As subscriber units become increasingly user customizable with enhanced software application upgradability, it is impractical to expect that a class-of-service distinction or a subscriber unit class can define all the types of data that the applications accessible to a specific subscriber unit can support. Further, it is unlikely that all subscriber units of a specific type will have identical applications having identical application version numbers. Nonetheless, it remains desirable not to send data to a subscriber unit that the subscriber unit cannot utilize.

(JX-2 at 1:20-29.) Based upon this text, Apple is wrong, because software applications are specifically anticipated for subscriber units. In addition, it can reasonably be argued that this language does not apply to operating systems, because the language specifically mentions different applications for different subscriber units of a specific type, which makes much more sense within the context of the software application construction Motorola urges.

Secondly, the words "software applications" are not limited in or defined in Claim 12 or anywhere else in the patent to just pagers. Instead, what is true is that the words "software" and "application" had understood meanings in the world of software. This understood meaning, to a person of ordinary skill in the art as per Dr. Madisetti, supports Motorola. Moreover, the only

evidence before me except the testimony of the two experts, who differ, are Microsoft's definitions. Thus, since the only objective evidence, even though it is extrinsic, of the meaning of these words supports Motorola's construction I construe the term "software application" accordingly.

Consistent with Microsoft's definition and Dr. Madisetti's opinion, a software application does not include operating system software and that any such construction including operating system software would be overly broad. (CX-2689C Q/A 260-263.) Therefore, I specifically reject any attempt to argue otherwise by Apple. For Apple to argue, as it does, that there is nothing in the '333 patent or its history to compel such a distinction (RIB sat 77) is sophistry, for: (1) the text of the background of the invention discussed above establishes otherwise and (2) Apple admitted there was no intrinsic evidence of the meaning of this term and then proffered the Microsoft Dictionary and thus is in a difficult position to repudiate what it provided should have no bearing.

Based upon the foregoing, I construe the term "software application" to be its plain meaning with the understanding that this term does not and cannot refer to operating system software.

2. "a list of all software applications that are currently accessible to the subscriber unit"

a. Motorola's Allegations

Claim 12 requires an application registry that comprises "a list of all software applications that are currently accessible to the subscriber unit." Motorola states the parties dispute the meaning of "currently accessible" software applications. Motorola proposes that "currently accessible" applications are those which are "available for present use on the device by the subscriber." Motorola argues its proposed construction is supported by the plain meaning

of the claim term – "a list of all software applications that *are currently accessible* to the subscriber unit." Motorola asserts its proposed construction also is consistent with the '333 specification. (CX-2689C, Madisetti DWS at Q/A 254.) Motorola notes according to the '333 specification, a change in accessibility occurs when an application is installed on the device, or when the subscriber unit is physically coupled to an external device on which the application is installed. (JX-002 at 5:30-37 ("The processing system 206 then monitors the status of the subscriber unit 122 to determine 406 whether a change in the accessibility of an application has occurred, e.g., through the installation of a new application, or through coupling the subscriber unit 122 to a previously uncoupled external device 230, or through uncoupling the subscriber unit 122 from a previously coupled external device 230.").)

Motorola asserts that Apple proposes that "currently accessible" applications include "every software application that the subscriber unit can access," even though some of these applications may not be installed or currently accessible to the subscriber unit. Motorola argues this construction should be rejected because it is inconsistent with the '333 specification, which notes that applications become accessible when they are installed. (JX-002, 5:30-35.) Motorola argues Apple's proposed construction also should be rejected because it would include the hundreds of thousands of uninstalled applications available on Apple's App Store, as Apple argued in its pre-hearing brief (RPHB at Appendix E-29; CDX-21.10), and as Dr. Noble argued in his Rebuttal Expert Report (RX-195C at ¶¶ 213, 215, 217; CDX-21). Motorola contends that although Apple and its expert later recanted these statements (*see* Tr. at 379:1-16; Noble, Tr. at 1448:7-14, 1450:5-7, 1453:4-17, 1454:12-17), the fact that Apple's proposed construction could be interpreted to include all the applications on the App Store demonstrates that it should be

rejected.[28]

Motorola argues similarly, Apple's proposed construction is not supported by the prosecution history of the '333 patent. Motorola notes in his Rebuttal Witness Statement, Apple's expert testified that the prosecution history of the '333 patent also supports the view that "currently accessible" includes applications that are available for download. (RX-1289C, Noble RWS at Q/A 62.) Motorola argues as an initial matter, this argument was not in Apple's pre-hearing brief. Motorola asserts moreover, at his deposition, Dr. Noble admitted that he considered the prosecution history of the '333 patent, and in his opinion, the list of applications in the application registry does not have to include applications available on Apple's App Store. (CDX-21.7.[29]) Motorola argues in light of Dr. Noble's admission that he does not believe a disclaimer occurred during prosecution, Apple has not shown – and indeed it cannot show – that a clear and unambiguous disclaimer of claim scope occurred during prosecution of the '333 patent. (*See* CX-2701C, Madisetti RWS at Q/A 144.) Motorola argues thus its proposed construction of "currently accessible software applications" should be adopted.

In its reply brief, Motorola alleges Apple incorrectly contends the primary dispute regarding this term is whether software applications not installed on a device can be "currently accessible." (RIB at 78.) Motorola avers that both parties agree that software applications downloaded to a computer that is physically coupled to a subscriber unit are "currently accessible." (*See* CX-2701C, Madisetti RWS at Q/A 147.) Motorola argues instead, the issue is

---

[28] Motorola correctly notes there were serious questions regarding the veracity of Apple's representations to the undersigned concerning the element "a list of all software applications that are currently accessible to the subscriber unit," and that an Order requiring Apple to show cause why it should not be sanctioned pursuant to 19 C.F.R. § 210.4 was issued.

[29] This is a demonstrative exhibit that is not part of the record. In addition, this page of the demonstrative exhibit is not in the demonstrative book in the custody of the undersigned.

which party's proposed construction best reflects the ordinary meaning of "currently accessible" to one skilled in the art, based on the disclosure in the '333 patent. Motorola argues its construction requires that the application be "available for present use," which is consistent with the plain meaning of "currently accessible." Motorola argues its construction also requires that the application be available for present use "on the device," which is consistent with the '333 specification. (*See* JX-002, '333 patent at 5:30-37.)

Motorola asserts Apple's proposed construction is circular, as it defines one of the terms ("an application registry comprising a list of all software applications that are currently accessible to the subscriber unit") by referring to the other term Apple identified for construction ("a list of all software applications that are currently accessible to the subscriber unit"). Motorola argues that moreover, Apple's proposed construction of "currently accessible" includes "every application that the subscriber unit can access," which is not limited to applications available on the device, or on a computer that is physically coupled to the subscriber unit. Motorola notes, in its Pre-Hearing Brief, Apple conceded that its construction of "currently accessible" included applications available for download from the App Store. (RIB, App. E at E-26, E-27, E-29.) Motorola further notes in its Opening Post-Hearing Brief, Apple argues that applications available for download over the air are not "currently accessible" (RIB at 78), but it then argues in the same submission that "there are passages in the prosecution history of the '333 patent that would support this interpretation." (*Id.* at 82 n.16.) Motorola also notes in Dr. Noble's Rebuttal Witness Statement, Dr. Noble testified to this effect as well. (RX-1289C, Noble RWS at Q/A 62.) Motorola argues the inconsistent statements by Apple and its expert regarding the meaning of "currently accessible" show that Apple's construction should not be adopted. Motorola argues the inconsistent positions by Apple and its expert regarding the

meaning of "currently accessible" also demonstrate that no clear and unambiguous disclaimer occurred during prosecution. (*See* RIB at 160.)

b. Apple's Allegations

Apple argues the phrase "a list of all software applications that are currently accessible to the subscriber unit" should be construed to mean "a list of every software application that the subscriber unit can access." (CIB at 78.) Apple argues the phrase "an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" should be construed to mean "a list of all software applications that are currently accessible to the subscriber unit." (*Id.*)

Apple contends the primary dispute between the parties with respect to these phrases is whether a software application not installed on the device can be "currently accessible." Apple asserts both parties agree that software applications available for download over the air, such as applications hosted on the Apple App Store or the Android Market, are not "currently accessible" within the meaning of Claim 12. Apple argues, however, the '333 patent is clear that a "currently accessible" application need not be installed on the subscriber unit itself, giving an exemplary embodiment in which an application is stored on a computer to which the subscriber unit is coupled. (JX-2 at 4:2-4; RX-1285C, Noble DWS at Q/A 60.) Apple argues to the extent that Motorola's proposed constructions improperly exclude this preferred embodiment with the phrase "available for present use *on the device*," they should be rejected and Apple's proposed constructions should be adopted. Apple argues a construction that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct. *MBO Labs, Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007). Apple asserts that Motorola's expert, however, now appears to agree that an application downloaded to a computer to which the subscriber unit is physically connected is "currently accessible." (CX-2701C, Madisetti RWS at

Q.147.) Apple contends as such, the parties' proposed constructions may not be substantively different in scope.

Upon reply, Apple emphasizes that the primary dispute between the parties with respect to these terms is whether a software application must be "on the device" to be "currently accessible," as Motorola's proposed construction requires. In addition, Apple claims Motorola devotes the majority of its briefing on this term to attacking an argument that Apple no longer advances, *i.e.*, whether "currently accessible" includes applications that are available for download from Apple's App Store. (*See* CIB at 159-161.) Apple confirms it is not taking the position that such applications are "currently accessible." (*See* RIB at 78 and 82 n.16.)

Apple argues that the '333 patent is clear that a "currently accessible" application need not be installed on the subscriber unit itself, as it describes an exemplary embodiment in which an application is stored on a computer to which the subscriber unit is coupled. (JX-2 at 4:2-4; RX-1285C [Noble DWS] at Q.60.) Apple contends that Motorola agrees that a software application installed on an external device to which the subscriber unit is physically coupled (as opposed on the subscriber unit itself) is nonetheless "currently accessible" to the subscriber unit. (*See* CIB at 159.) Thus, Apple argues Motorola's proposed construction should be rejected.

c. Findings

The '333 patent specification describes the preferred or exemplary embodiment pertaining to the application registry as follows:

> The memory 212 [all references are to FIG. 2] further comprises an application registry 226 in accordance with the present invention. The application registry comprises a list of applications that are accessible to the subscriber unit 122. The applications can reside either internal to or external to the subscriber unit 122, *e.g.*, in a personal computer to which the subscriber unit 122 is connected.

(JX-2 at 3:65-4:4.) Apple tellingly argues that to the extent this excerpt means Motorola's constructions improperly exclude this preferred embodiment with the phrase "available for present use *on the device*," they should be rejected and Apple's proposed constructions should be adopted. (RIB at 78.) Apple correctly points out that a construction that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct. *MBO Labs, Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007). Moreover, correctly Apple contends Dr. Madisetti now appears to agree that an application downloaded to a computer to which the subscriber unit is physically connected is "currently accessible." (CX-2701C [Madisetti RWS] at Q.147.) As such, Apple argues the parties' proposed constructions may not be substantively different in scope. I disagree.

First, I note the parties really disagree about what the word "all" effectively means. Apple consistently argues that "all" means every, without any exception. Motorola consistently argues that "all" had some exceptions. Motorola is wrong. As long as an application is a software application and it is currently available, which will be discussed below, claim 12's use of the word "all" requires the software application to be on the application registry ("an application registry comprising a list of all software applications") without exception.

I am obligated to construe the '333 patent in a way that must be at least as broad as is the preferred or exemplary embodiment found in the specification at JX-2 3:65-4:4. Plainly, that text is very broad. By its own terms, the specification does not constrain the subscriber unit from accessing applications that are both external and internal to the subscriber unit. What is more, the use of the term "*e.g.*" after the term "either internal or external to the subscriber unit" provides the example of personal computer physically connected to the subscriber unit is merely an example, not a limitation. Based upon the use of the word "external," which can only be

interpreted to mean applications that do not reside in the subscriber unit, it is plain that the software applications can reside nearly anywhere, whether physically connected to the subscriber unit or not, such as on the cloud, on the web, or a base station, as long as the subscriber has the right to currently access the software application. Thus, there is clearly *no* requirement in the intrinsic evidence that a software application be installed on the subscriber unit itself.

The foregoing proves Dr. Madisetti is plainly mistaken in the opinion cited above (CX-2701 at Q/A 147). Specifically, the only reasonable interpretation of the intrinsic evidence of the '333 patent specification contradicts Dr. Madisetti's opinion that: "Until the software application is downloaded and installed on the subscriber unit (or on a computer that is physically coupled to the subscriber unit) the application is not currently accessible."

I also view it as important to point out that the use of the word "accessible" in claim 12 of the '333 patent means there must be nothing limiting the access of subscriber unit to the software application. This means the subscriber unit must have a right to access the software application and that its right must be unconstrained.

The use of the word "currently" before "accessible" is capable of only one reasonable interpretation. Specifically, the application registry must maintain a list of software applications the subscriber unit has the right to the access at the point in time the application registry is maintained (created and updated). Otherwise the use of the word "currently" would have no meaning in the context of the application registry.

In consideration of the foregoing, I construe the term in "a list of all software applications that are currently available accessible to the subscriber unit" as "*a list of all software applications that are currently accessible to the subscriber unit, whether located on the subscriber unit or externally.*" I have not further defined "all" because there is no need, for as

Apple correctly advocates in its construction, "all" has a plain meaning and it means every, without exclusion.

E. Infringement

Motorola accuses Apple's Phone 3G S, iPhone 4, iPad 3G, and iPad 2 3G (collectively, "the '333 Accused Products") of infringing claim 12 of the '333 patent. (CIB at 167; CX-2689C at Q/A 273, 275-276.)

1. Motorola's Allegations

a. "A subscriber unit in a wireless communication system for controlling a delivery of data from a fixed portion of the wireless communication system, the subscriber unit comprising"

Motorola argues:

> The parties do not dispute that the preamble is a substantive element of claim 12, and experts for both parties have treated it as such in forming their opinions in this case. *See* Madisetti DWS at Q/A 277; RX-1289C, Noble RWS at Q/A 28.[30] Moreover, the parties do not dispute that the '333 Accused Products are a "subscriber unit" under either party's construction of this term. *See* Madisetti DWS at Q/A 279-281.
>
> The sole dispute concerning the preamble of claim 12 is whether the '333 Accused Products provide functionality "for controlling a delivery of data from a fixed portion of the wireless communication system." As shown below, and by Dr. Madisetti's testimony, the '333 Accused Products provide functionality for controlling a delivery of data from the fixed portion, such as when applications are installed or deleted on these products. *Id.* at Q/A 286-295.
>
> *I*
>
>]

[30] Indeed, the preamble provides antecedent basis to several claim terms, such as "subscriber unit" and "data." Moreover, during prosecution, the inventor argued that the DeLuca '737 patent (relied on by Apple) did not disclose the step of controlling a delivery of data. *See* JX-007.081-82. Consequently, the preamble of claim 12 is a limitation of the claim. *See Hearing Components, Inc. v. Shure Inc.*, 600 F.3d 1357, 1366 (Fed. Cir. 2010) (finding term in preamble is limiting because patentee relied on it during prosecution to distinguish prior art).

[

]

[

]

(CIB at 169-174.)

b. "a receiver for receiving data"

Motorola asserts the parties do not dispute that the '333 Accused Products contain a "receiver for receiving data," both literally and under the doctrine of equivalents. (CIB at 174 (citing CX-2689C (Madisetti DWS) at Q/A 301-303).)

---

[31] In any event, Dr. Madisetti testified that [ ] Madisetti, Tr. at 985:18-23.

c. "a processing system coupled to the receiver for processing the data"

Motorola argues:

> The parties do not dispute that the '333 Accused Products satisfy this element under Motorola's proposed construction. *See* CX-2689C, Madisetti DWS at Q/A 306-307; RX-1289C, Noble RWS at Q/A 45. The sole dispute is whether the accused products satisfy this element under Apple's proposed construction. As an initial matter, Apple's non-infringement position should be rejected because it is based on an improper claim construction, as discussed above.
>
> Moreover, as shown by Dr. Madisetti's testimony, the '333 Accused Products satisfy the "processing system" element under Apple's proposed construction. *See* CX-2689C, Madisetti DWS at Q/A 308. None of Apple's arguments change this result. For example, Apple contends that it does not use a "conventional processor" or a "conventional memory" (RX-1289C, Noble RWS at Q/A 46-47), but such an interpretation would improperly limit the '333 patent to just the disclosed processor and memory in the '333 specification. Moreover, Apple criticizes Dr. Madisetti for failing to identify the "corresponding structure" for several software functions provided by the processing system – such as the message processing element, application registry, and updater element. *Id.* at Q/A 48. As an initial matter, these software functions are not "corresponding structure," and therefore they should not have been identified by Apple as "corresponding structure" in the first place. In any event, Dr. Madisetti has identified how these software functions are provided by the accused products. CX-2689C, Madisetti DWS at Q/A 308.

(CIB at 174-175.)

d. "a transmitter coupled to the processing system for communicating with the fixed portion of the wireless communication system"

Motorola asserts the parties do not dispute that the '333 Accused Products contain a "transmitter coupled to the processing system for communicating with the fixed portion of the wireless communication system," both literally and under the doctrine of equivalents. (CIB at 175 (citing CX-2689C (Madisetti DWS) at Q/A 310-312).)

e. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Motorola argues:

The '333 Accused Products satisfy this element of claim 12, under either party's constructions. CX-2689C, Madisetti DWS at Q/A 313, 333, 334. [

]

[ ]

[

]

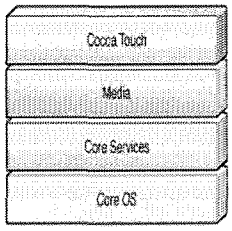
(i) [ ] is Not a "Software Application"

As Dr. Madisetti testified, [

] According to an Apple document titled "iOS Technology Overview," core services is one of the layers of iOS, as shown below:

The implementation of iOS technologies can be viewed as a set of layers, which are shown in Figure 1-2. At the lower layers of the system are the fundamental services and technologies on which all applications rely; higher-level layers contain more sophisticated services and technologies.

Figure 1-2 Layers of iOS



CX-104 at p. 14; *see also* CX-2689C, Madisetti DWS at Q/A 324; Madisetti, Tr. at 1021:4-1022:3; Noble, Tr. at 1471:22-1472:2. Moreover, the iOS Technology Overview states that the "Core Services layer contains the fundamental system services that all applications use." *Id.* at p. 35; Noble, Tr. at 1472:3-17; CX-2689C, Madisetti DWS at Q/A 324. Thus, according to Apple's documents, core services such as [ ] are different from applications.[32]

The testimony of Apple's other expert in this case, Mr. Lanning, confirms that [ ] In his Rebuttal Witness Statement, Mr. Lanning testified that [

] RDX-19-16; Noble, Tr. at 1474:9-17.

[32] Apple's expert reviewed the source code cited by Dr. Madisetti, and did not find anything that was inaccurate. Noble, Tr. at 1468:17-1469:4.

A patent application prepared by Apple engineers, including Dallas DeAtley, further confirms [ ] In paragraph 34 of U.S. Patent Application Publication No. 2011/0179483, Mr. DeAtley and the other Apple inventors state that the [

] [

]

Moreover, unlike third-party applications available on the App Store, [

]and according to an Apple document titled "iOS Human Interface Guidelines," "[e]very application needs an application icon and a launch image." CX-1389 at p. 141.

Thus, there is substantial evidence that [ ] is a system service provided by the operating system, and not a software application. As a result, this Court asked Apple to give this matter its deepest consideration going forward. Tr. at 1477:5-11. Notwithstanding the substantial evidence introduced by Motorola, Apple's expert contends that [

] RX-1289C, Noble RWS at Q/A 58; RX-1075 at p. 13; Noble, Tr. at 1487:25-1488:6.

The document cited by Dr. Noble states that "[n]ative applications are built using the iOS system frameworks and Objective-C language and run directly on iOS." RX-1075 at p. 13. However, as Dr. Noble admitted during cross examination, the description in this document does not provide a definition for a native application; it just provides a description. Noble, Tr. at 1490:4-8, 20-25. Thus, it is improper for Dr. Noble to use the description in RX-1075 as an all-inclusive definition of "native applications."

[

]

[

]

(ii) Spotlight is Not a "Software Application"

For similar reasons, Motorola has shown that the second program identified by Apple – [ ] is a utility provided by iOS; it is not a software application. As Dr. Madisetti testified, [

] Madisetti, Tr. at 951:20-25, 956:7-13, 1014:6-14, 1027:5-1028:8, 1028:10-1029:10. [

]

[

]

[

] other third-party applications that are required to have an icon on the home screen. CX-1389 at p. 141 ("[e]very application needs an application icon and a launch image."); CX-2689C, Madisetti DWS at Q/A 324. Similarly, it is not possible to delete Spotlight, or have a change in the accessibility of Spotlight. Noble, Tr. 1486:13-21; CX-2689C, Madisetti DWS at Q/A 324.

As with [ ] contradicted by Apple's own documents. For example, [

]

[

]

g. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Motorola argues:

The '333 Accused Products [

]

None of the arguments raised by Apple change the conclusion that the '333 Accused Products practice this element. For example, Apple argues that not all applications support push notifications. This argument does not defeat infringement under the applicable law, because the accused products are programmed to practice claim 12 for push-enabled applications. *Finjan*, 626 F.3d at 1204 ("'an accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even though it may also be capable of noninfringing modes of operation.'" (citation omitted)). Moreover, in claim 12, the communication of the change occurs in response to "a" change in accessibility of an application, which generally means "one or more" – not "all." *KCJ Corp.*, 223 F.3d at 1355 ("This court has repeatedly emphasized that an indefinite article 'a' or 'an' in patent parlance carries the meaning of 'one or more' in open-ended claims containing the transitional phrase 'comprising.'"). Thus, it is irrelevant that not all applications support push notifications.

Next, Apple contends there is no infringement because [ ] This argument fails for several reasons. [

]

[ ] This argument also fails because people typically register for push notifications right after the application is installed, as noted by Apple's own documents. CX-235 at p. 4 ("An iOS-based application must register to receive push notifications; it typically does this right after it is installed on a device"); CX-2689C, Madisetti DWS at Q/A 290. Indeed, it is common sense that many people will use an application after they download it from the App Store, especially if they have paid money for it. Thus, the communication of the change in accessibility is responsive to the installation of the application.[33]

[

]

[34]

---

[33] Apple argues that in some cases, a filter command could never be sent, because a user may never open the application that was downloaded from the App Store. This argument defies reality, and contradicts Apple's own documents that explain users typically register for push notifications right after the application is installed. CX-235 at p. 4. Moreover, the fact that a filter command may never be sent in rare situations does not change the result that the '333 Accused Products [

] *Finjan*, 626 F.3d at 1204.

[34] To the extent the Court determines that any element of claim 12 is not literally met by the '333 Accused Products, as shown by the testimony of Dr. Madisetti, each element of claim 12 is present in the accused products under the doctrine of equivalents. CX-2689C, Madisetti DWS at Q/A 300, 303, 309, 312, 338, 347.

(CIB at 184-187.)

2. Apple's Allegations

Apple argues:

> At the hearing, Motorola declined to cross-examine either of Apple's fact witnesses who submitted testimony relating to the 333 Patent and limited its cross-examination of Dr. Noble to questions concerning one of several non-infringement theories. [
>
>]
>
> Unlike the wireless communication system described in the 333 Patent, *i.e.*, pager technology of the mid-1990s, modern day mobile devices do not suffer from the same limitations in network bandwidth or memory capacity. **Tr.** [Noble] at 60:25-61:5. Put simply, there is no need for smartphones and tablets like the accused Apple devices to utilize the "application registry" taught by the 333 Patent because it is an outdated solution to an outdated problem. As explained in further detail below, none of the lists accused by Motorola include all of the software applications that are currently accessible to the device. Moreover, there is no Apple server that maintains a copy of the alleged "application registry" under any of Motorola's infringement theories. The fact that there is no server copy of the "application registry" explains why the accused Apple products do not "in response to a change in accessibility of an application … communicate the change to the fixed portion of the wireless communication system." There is no reason for such a communication because there is nothing for the Apple servers to update. Given this fundamental difference, it should be no surprise that Motorola's hodgepodge infringement theory does not withstand scrutiny.
>
> [

]

[

]

(RIB at 79-80.)

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Apple argues:

None of the accused Apple products "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" under any of these constructions.

a. Under Apple's proposed construction

As a preliminary matter, the parties agree that this limitation of Claim 12 requires that the claimed application registry contain *all* the currently accessible software applications.[35] At the hearing, Dr. Madisetti conceded that "all" means "all," or "every single one," not just some of the software applications that are currently accessible. **Tr.** [Madisetti] at 943:21-944:3.[

]

[36]

---

[35] As described above, the claim language was amended during prosecution to require that the application registry must maintain a list of "all" accessible software applications in order to overcome a prior art rejection. **JX-7.078-079** [333 FH] at MT_ITC00000078-79.

[36] Apple is no longer pursuing the argument that applications available for download from the App Store are "currently accessible" and must therefore be included on the accused "application

(1) Icons displayed on the Home screen

First, as Dr. Noble testified, the Home screen only displays a subset of the software applications that are installed on the device. **RX-1289C.23-28** [Noble RWS] at Q.53-58, 61.

(a) Restricted applications are not displayed as icons on the Home screen

It is undisputed that certain applications (Safari, YouTube, Camera, FaceTime, and iTunes) can be removed from the home screen by enabling "Restrictions," entering a four-digit passcode, and choosing which applications to disable. *See* **CX-132**; **RX-1077C**. During cross-examination, Dr. Madisetti agreed that set of icons displayed on the Home screen would not include hidden applications. **Tr.** [Madisetti] at 953:10-955:2. Dr. Madisetti does not appear to dispute that hidden applications are "software applications;" instead, he argues that they are not "currently accessible" while hidden. **CX-2689C.110-11** [Madisetti DWS] at Q.331.[37] On the contrary, as Dr. Noble explained, hidden applications remain "currently accessible" because the user can easily remove the restriction by reentering the four-digit passcode and disabling Restrictions (either globally or on an application-by-application basis). **RX-1289C.23-24** [Noble RWS] at Q.53. [

]

(b) Web applications are not displayed as icons on the Home screen

Web applications are another example of applications that are not displayed as icons on the home screen. *See* **RX-1075C** [

] *see also* **RX-1293C.13** [De Atley RWS] at Q.72. Notwithstanding the absence of an icon on the Home screen, web applications are still available for present use on the device by the subscriber because they can be stored as bookmarks in Safari and executed by a user by selecting the appropriate bookmark. **RX-1289C.25** [Noble RWS] at Q.55.

---

registry." As Dr. Noble explained, however, there are passages in the prosecution history of the 333 Patent that would support this interpretation and, to the extent that "currently accessible" is so construed, it would be an additional reason that the accused Apple products do not infringe. **RX-1289C.28-29** [Noble RWS] at Q.62.

[37] Although Dr. Madisetti argues that a hidden application is no longer "currently accessible," neither he nor Motorola allege that there is any communication of a change in accessibility to any server when Restrictions are enabled or disabled.

Dr. Madisetti does not dispute that web applications are "software applications," **Tr.** [Madisetti] at 959:21-960:3, but he argues that web applications are not "currently accessible" because they require a network connection. **CX-2689C.108** [Madisetti DWS] at Q.321. As Dr. Noble explained, however, there is no intrinsic support for a construction of "currently accessible" that excludes applications requiring a network connection. **RX-1289C.24-25** [Noble RWS] at Q.54. Indeed, there are several examples of applications openly acknowledged by Dr. Madisetti to be currently accessible, such as Weather, Stocks, and Apple App Store, which require a network connection to operate as intended. **Tr.** [Madisetti] at 964:5-965:11. Even assuming that a network connection is required for a web application to operate, Dr. Madisetti agreed that web applications are "currently accessible" whenever a network connection is available. **Tr.** [Madisetti] at 960:8-12. In addition, there are examples of web applications that do not require a network connection to run, such as Pie Guy, the Financial Times web app, and Flip Clock. **RX-1289C.25** [Noble RWS] at Q.55; **Tr.** [Madisetti] at 960:18-961:2.

Dr. Madisetti further argues that web applications are "represented by" the Safari icon. **CX-2689C.108** [Madisetti DWS] at Q.321. In other words, in Dr. Madisetti's view, regardless of whether user had zero, one or ten web applications installed, the inclusion of the Safari icon is sufficient. Yet, the claim language explicitly requires that the application registry include a list of *all* currently accessible software applications precisely because the fixed portion of the wireless communication system described in the 333 Patent must be able to distinguish how many web applications are installed on a particular subscriber unit.

(c) [ ] applications are not displayed as icons on the Home screen

There are certain built-in applications that do not appear as icons on the Home screen; these include [

] **RX-1289C.26-27** [Noble RWS] at Q.58 (citing **RX-1075** [iOS Technology Overview] at MOTO-APPLE-0005128084_06267 ("Native applications are built using the iOS system frameworks and Objective-C language and run directly on iOS."). [

]

[

] Each of these applications is "a computer program designed to perform specific tasks" and even a cursory review of the accused Apple products confirms that these applications likewise do not appear as icons on the Home screen.

Motorola proffers *no* evidence regarding [

] For that reason alone, the list of icons displayed on the Home screen does not include *all* software applications currently accessible to the user. [

]

Regardless, the distinction between "core services" and "software applications" only matters under the new construction of "software applications" proffered

---

[38] Although Dr. Madisetti characterized [

]

during the hearing. Dr. Madisetti does not appear to dispute that [

]39 Thus, this infringement theory fails, at least under Apple's proposed construction.

(2) List of applications maintained by [ ]

[

39 Motorola's basic point here appears to be that, because [

] Putting aside whether, as a matter of claim construction, such an exception is consistent with the claims, there are many reasons why one would want the fixed portion to know the identity of *all* applications installed. Suppose, for example, different versions of "core services" software have different functionality. In a limited bandwidth environment like that which existed at the time Motorola filed this patent, one might therefore want to know even what "core services" software were installed.

]

[

]

(3) List of applications maintained by [ ]

[

]

b. Under Motorola's proposed constructions

The accused Apple products do not satisfy the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation of Claim 12 under Motorola's plain and ordinary meaning construction for the same reasons as under Apple's constructions. *See, e.g.*, **RX-1289C.23-28** [Noble RWS] at Q.52-61. As noted above, *see supra* **Section VII.C.1**, neither Motorola nor Dr. Madisetti proffered a construction for "software applications" until the hearing. **Tr.** [Madisetti] at 944:11-945:15. Even under Dr. Madisetti's new definition of "software application," all of the aforementioned applications are "software programs that performs specific tasks for a user." For example, [

]

Dr. Madisetti argued that his newly proffered definition was necessary to distinguish software applications from operating systems software. **Tr.** [Madisetti] at 1013:11-1014:5. He argued that, although it provided functionality similar to the Google search application, [

][

] Again, Dr. Madisetti's logic is flawed. The mere fact that software can be categorized as system software or an application does not compel the conclusion that these two categories must be completely isolated from each other. On the contrary, a system software folder can include applications. Where a file is stored does not necessarily dictate what its function is.[40] As Dr. Noble explained at the hearing, the particular location (*e.g.*, install path) of software in the file system does not impact whether it is an application.[41] **Tr.** [Madisetti]. at 1513:20-1514:6.

---

[40] For example, moving a .jpg photo from the Desktop into the Documents folder would not turn it into a Word document.

[41] For example, Microsoft Windows is a well-known operating system for personal computers, which includes applications such as Internet Explorer, Windows Explorer, Windows Help, or Notepad. These executable programs (identified by the file extension .exe) are all located within the "Windows" directory rather than the "Program Files" directory, yet they would still be considered "software applications."

> Under the parties' proposed constructions, all of the examples discussed above qualify as "software applications."[42] As such, none of the three lists Motorola accuses meet the "application registry" limitation of Claim 12 because none include *all* of the currently accessible software applications.

(RIB at 81-91.)

> Additionally, with respect to the doctrine of equivalents, Apple argues:
>
> Motorola is barred by prosecution history estoppel from seeking equivalents on this limitation of Claim 12. *See Festo*, 535 U.S. at 737. As summarized above, *see supra* **Section VII.A.3**, Motorola added the "all" language to Claim 12 during prosecution in order to overcome the Examiner's rejections. As filed, Claim 12 recited "maintain an application registry for registering applications accessible to the subscriber unit." **JX-7.20** [333 FH] at MT_ITC00000020. The examiner rejected this language, so Motorola amended the claim to require "maintain an application registry for registering comprising a list of software applications that are accessible to the subscriber unit." **JX-7.57-60** [333 FH] at MT_ITC00000057-60. This phrasing was again rejected in light of prior art. **JX-7.66-69** [333 FH] at MT_ITC00000066-69. Motorola then amended the claim language to its current form. **JX-7.79-85** [333 FH] at MT_ITC00000079-85. By proffering these two amendments, Motorola cannot now assert that Claim 12 covers: maintaining a list of *some* applications that are accessible to the subscriber unit. Having surrendered that claim scope during prosecution to preserve the validity of the 333 Patent, Motorola cannot now seek to recapture that coverage by invoking the Doctrine of Equivalents. Regardless, Motorola has proffered no evidence that this limitation is met under the Doctrine of Equivalents. *See* **RX-1289C.29** [Noble RWS] at Q.63.

(RIB at 91-92.)

---

[42] [

]

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Apple argues:

Notably, Motorola declined to cross-examine Dr. Noble about any of his opinions with respect to this limitation. Combined with the testimony presented by Mr. [ ] the evidence of record conclusively establishes that accused Apple products do not satisfy the "in response to a change in accessibility of an application ... communicate the change to the fixed portion of the wireless communication system" limitation of Claim 12.[43]

It bears repeating that in the context of the 333 Patent, the purpose of communicating the change in accessibility to the fixed portion of the wireless communication system was for the fixed portion to update its own copy of the application registry with the same change(s) made by subscriber unit, thereby keeping the two copies consistent. **JX-2.9** [333 Patent] at 5:24-48. [

] [

]

[

]

[43] As noted above, *see supra* fn. 14, Apple is no longer seeking a construction of the phrase "change in accessibility of an application." Motorola proposed the plain and ordinary meaning, or in the alternative, "a change in the availability of an application."

Apparently struggling to formulate a coherent infringement theory, Motorola's allegations have morphed multiple times during this Investigation.[44] For the reasons discussed below, its current infringement theories with respect to communications with the APNS server after the installation and deletion of applications should be rejected.

a. [ ] are not "in response to a change in accessibility of an application"

As Dr. Noble explained, Dr. Madisetti improperly conflates the installation or deletion of an application with a user's decision whether to register push notifications. *See* **RX-1289C.30-31** [Noble RWS] at Q.65. First, [

] At the hearing, Dr. Madisetti conceded that not all applications utilize push notifications. **Tr.** [Madisetti] at 986:21-987:4. [

] Thus, for at least this reason, the accused Apple products do not infringe.

Second, [

]

---

[44] [

]

[45] For this reason, Dr. Madisetti's description that [

] is misleading. **CX-2689C** [Madisetti DWS] at Q.290; **CDX-3.124**.

[

] [

]

Thus, Motorola's infringement theory with respect to installation of push-enabled applications must fail.

b. The accused Apple products do not [

]

[

]

[

[

]

[

PUBLIC VERSION

]

[

]

c. The accused Apple products do not "communicate the change in accessibility" due to the expiration of credentials

Finally, the accused Apple products do not meet this limitation because there are no communications with any server (or updates to any of the accused application registries for that matter) "in response to a change in accessibility of an application" due to the expiration of a subscription or login credentials. **RX-1289C.32** [Noble DWS] at Q.67. Dr. Madisetti agreed that certain applications, such as the New York Times app or the Wall Street Journal app, require a subscription for access to content or enhanced content. **Tr.** [Madisetti] at 992:15-24. Yet, when pressed on the question of whether changing from an unregistered status to a registered status would constitute a "change in accessibility" that would require a communication to the APNS servers (or other servers), Dr. Madisetti gave the nonsensical answer: "It is not a change in accessibility. It is a change from whether it is accessible to currently accessible." **Tr.** [Madisetti] at 994:21-23. Motorola presented no evidence of this limitation of Claim 12 being met for applications with subscription or login credentials, there can be no infringement.

(RIB at 92-100.)

With respect to the doctrine of equivalents, Apple argues:

As Dr. Noble testified, Dr. Madisetti's opinion that the accused Apple products met this limitation under the Doctrine of Equivalents was wholly conclusory. **RX-1289C.33** [Noble DWS] at Q.70. As Dr. Madisetti merely parrots the claim language without analyzing how the accused Products control the delivery of data using an application registry, his arguments should be rejected for the same reasons described above with respect to literal infringement.

(RIB at 100.)

3. Motorola's Reply Allegations

In its reply brief, Motorola argues:

In its Opening Post-Hearing Brief, Apple does not address much of the evidence regarding infringement. For example, Apple does not explain how [

]

[

] Apparently recognizing the deficiencies of its non-infringement positions, Apple now asserts new non-infringement theories based on the testimony of an Apple engineer (Mr. [ ] But these new positions were not disclosed in Apple's Pre-Hearing Brief, or in Apple's expert reports or discovery responses, and therefore they are waived under Ground Rule 9(vi). As shown below, the three elements of claim 12 that are disputed for purposes of infringement are met by the accused iPhones and iPads.[46]

(CRB at 86-87.)

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Motorola argues:

Under Motorola's proposed construction of "software applications," the accused products maintain at least three application registries comprising a list of all currently accessible software applications. MPostHB at p. 176. [

]

/

] [

] In its Opening Post-Hearing Brief, Apple does not address much of the evidence

---

[46] In its Opening Post-Hearing Brief, Apple did not address several elements in claim 12 that it had previously disputed for purposes of infringement, such as (i) "controlling a delivery of data from a fixed portion of the wireless communication system," (ii) "a processing system … for processing the data," and (iii) "wherein the processing system is programmed to … in response to a change in accessibility of an application … update the application registry." *See* RX-1289C, Noble RWS at Q/A 28, 45, 64. As explained in Motorola's Opening Post-Trial Brief, these elements are met by the accused products (MPostHB at p. 169-175, 183-184), and Apple cannot raise these positions for the first time in its Post-Hearing Reply Brief. *Certain Optical Disk Controller Chips*, 2007 WL 4713920 at 51 (refusing to consider issues raised for the first time in a post-hearing reply brief).

introduced by Motorola on this point, including (i) the testimony of Mr. Lanning that [

]

[

]47 [

]

Similarly, [

]

[

] But as shown in Motorola's Opening Post-Hearing Brief, Dr. Noble admitted at trial that the Apple document he cited does not provide a definition of "native applications." MPostHB at p. 179-181. [

]

[

---

47 The examples identified by Apple in support of its position were not introduced as evidence in this case, and therefore they should not be considered. *See* APostHB at p. 90 n. 20, 91 n. 21.

] APostHB at p. 84. But there is no support for this requirement in claim 12 of the '333 patent (*see* MPostHB at p. 174), and Apple did not cite any supporting evidence for its position. Moreover, as applied to web applications, Apple's position does not make sense, because [

]48

Apple's new non-infringement theories: In its Opening Post-Hearing Brief, Apple argued for the first time that it does not infringe because [

]

Apple's new non-infringement theories also fail because they are not supported by any competent testimony. [

] As a result, his testimony is not enough by itself to establish non-infringement. *AquaTex Industries, Inc. v. Techniche Solutions*, 479 F.3d 1320, 1329 (Fed. Cir. 2007) ("Even where literal infringement is involved, expert infringement testimony is generally required in cases involving complex technology.").

---

48 [

]

Similarly, Dr. Noble did not explain these new non-infringement positions in any of his witness statements or expert reports, and neither did Dr. Madisetti, because Apple did not raise these arguments during the discovery period, as it should have. Apple's attempt to circumvent the discovery process and introduce new non-infringement theories based on the testimony of a fact witness should be rejected. *See Hypertherm, Inc. v. American Torch Tip Co.*, No. 05-cv-373, 2009 WL 435324, at *3-*4 (D.N.H. Feb. 19, 2009) ("A lay witness is precluded from providing opinions that are 'based on scientific, technical, or other specialized knowledge within the scope of Rule 702.' Fed. R. Evid. 701(c). Given the legal landscape, no lay opinion testimony will be permitted on the issues of infringement and patent invalidity.").[49]

Home screen: As noted by the iPhone User Guide, the home screen "contains your iPhone apps" (CX-132 at p. 12), and therefore it also maintains an application registry of all currently accessible software applications. MPostHB at p. 182-183. In addition to the arguments regarding [ ] Apple argues that the home screen does not display restricted applications. APostHB at pp. 82-83. But as noted in Motorola's Opening Post-Hearing Brief, the ability to restrict certain applications and remove them from the home screen does not defeat infringement. MPostHB at p. 183. When restricted, the application is not currently accessible to someone who does not know the secret code. *Id.* [ ][51]

49 [ ]

50 Apple argues that [ ] APostHB at p. 83 n. 17. But as explained in Motorola's brief, enabling or disabling an application is not a change in accessibility; it is a change in whether the application is currently accessible. MPostHB at p. 184.

51 For the home screen, Apple also cited [ ] APostHB at p. 85. However, these non-infringement theories were not disclosed in Apple's Pre-Hearing Brief, and therefore they have been waived pursuant to Ground Rule 9(vi).

For the above reasons, the accused iPhones and iPads infringe the application registry element of claim 12 under Motorola's proposed constructions of "software applications."[52]

(CRB at 87-92.)

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Motorola argues:

As explained in Motorola's Opening Post-Hearing Brief, the accused Apple products satisfy this element of claim 12 under either party's proposed constructions. MPostHB at p. 184-187; *see* CX-2689C, Madisetti DWS at Q/A 339-347. [

] None of the arguments raised by Apple defeat Motorola's proof of infringement.[53]

Apple argues that a server on the fixed portion must maintain a copy of the application registries present on the accused products, and it claims Dr. Madisetti conceded this point at the hearing. APostHB at pp. 92-93 (citing Tr., 983:20-24). However, in the cited testimony, Dr. Madisetti made no such admission. In fact, he testified that claim 12 "does not include any requirement that the fixed portion of the wireless communication network use an application registry to control the delivery of data." CX-2689C, Madisetti DWS at Q/A 298. And other independent claims in the '333 patent specifically include such a requirement, which further shows that it is absent from claim 12. MPostHB at p. 174.

---

[52] As discussed above, Apple's proposed construction of "software application" is inconsistent with the ordinary meaning of the term, and therefore it should not be adopted.

[53] Apple argues that "[a]pparently struggling to formulate a coherent infringement theory, Motorola's allegations have morphed several times during this Investigation." APostHB at p. 93. But the fact that Motorola decided to drop certain arguments in order to simplify the case is irrelevant. And in its Response to the Order to Show Cause, Apple argued "[i]t is a consequence of the fast-paced nature of ITC investigations that parties frequently change positions as discovery develops and arguments are refined." Response to Order to Show Cause at p. 6.

[

] Thus, it is untenable for Apple to label Dr. Madisetti's testimony on this issue as "misleading" (APostHB at p. 94 n. 25), because he is citing on Apple's own documents. CX-235 at p. 4. And while it is true not all applications support push notifications, as Apple notes (*id.* at 94), the accused products still infringe because they are programmed to practice claim 12 for push-enabled applications. *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010) ("'an accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even though it may also be capable of noninfringing modes of operation.'" (citation omitted)).

[

]
But as noted above, claim 12 does not require the fixed portion to maintain a copy of the application registry, and other independent claims include this requirement, which means it is not an element of claim 12. *See* MPostHB at p. 174.[54]

[

] Thus, the accused products infringe because they will practice claim 12. *See Finjan*, 626 F.3d at 1204; *Shamrock Technologies, Inc. v. Medical Sterilization, Inc.*, 903 F.2d 789,

---

[54] Apple then argues that [

] APostHB at p. 95. But as explained in Motorola's brief, this argument does not defeat infringement. *See* MPostHB at pp. 173-174.

792 (Fed. Cir. 1990) (holding that defendant infringed claim element requiring "uniform irradiat[ion]" even though the accused process did not achieve perfect uniformity of radiation).[55]

[

]

Finally, Apple argues that [

] As noted in the '333 patent, an application becomes accessible when it is installed. JX-002, '333 patent at 5:30-33 ("The processing system 206 then monitors the status of the subscriber unit 122 to determine 406 whether a change in the accessibility of an application has occurred, e.g., through the installation of a new application ..."). If the user is registered to use the application, then the application is currently accessible, as Dr. Madisetti explained. Madisetti, Tr. at 994:16-23. Claim 12 requires a communication to be sent "in response to a change in accessibility," not when the status of an application changes from accessible to currently accessible. Thus, this argument by Apple is simply irrelevant.[56]

---

[55] [

]

[56] Apple also argues that the solution disclosed in the '333 patent is inapplicable to the accused products because limited bandwidth is no longer a problem for modern mobile devices. APostHB at p. 71 n.12, 79. But claim 12 is not limited to subscriber units that operate in a limited bandwidth environment, and none of the constructions proposed by the parties impose such a requirement.

(CRB at 92-96.)

4. Apple's Reply Allegations

In its reply brief, Apple argues:

[

]

(RRB at 30.)

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Apple argues:

As discussed in Apple's opening brief, none of the accused Apple products "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" under Apple's proposed construction, Motorola's plain meaning construction, or Dr. Madisetti's newly proposed construction because there are numerous examples of "software applications" that are not included on the alleged "application registries" in the accused products. RPostHB at 81-92. Apple's arguments regarding restricted

applications, web applications, [

]

It is worth noting, however, that Motorola's arguments are almost solely directed at [ ] Dr. Noble agreed, when questioned by the Court, that "[t]here are certainly situations in which it is not clear whether something is an application or isn't part of the operating system,"[

]

As for web applications, Motorola argues [

] CPostHB at 182. As Apple pointed out in its opening brief, *see* RPostHB at 84, this argument is nonsensical and at odds with the invention disclosed in the 333 Patent.[57] Motorola has cited no evidence, intrinsic or extrinsic, supporting its claim that "all software applications" in the 333 Patent actually means "all mother applications," nor does Motorola attempt to define what a "mother application" is. The express language of claim 12 requires that the application registry include a list of ***all*** currently accessible software applications precisely because the fixed portion of the communication system cannot control the delivery of data without knowing

[57] To use an analogy, under Motorola's theory one could provide a list of "all attorneys employed at a law firm" by writing out a list of only the practice group chairs and asserting that the practice group chairs "represent" the other attorneys in the list.

whether zero, one, ten, or thousands of web applications are installed on the subscriber unit; otherwise, data relating to all possible web applications would need to be transmitted to each subscriber unit that included "the mother application," contrary to the stated goals of the 333 Patent. Motorola's unsupported attempt to contort the claim language should be rejected.

Finally, with respect to restricted applications that are absent from the Home screen, Motorola argues that such applications are "not currently accessible to the child, who does not know the parent's secret code." *See* CPostHB at 183. Claim 12, however, requires that the application registry comprise "a list of all software applications that are currently accessible ***to the subscriber unit***," not to every possible ***user*** of the subscriber unit. It remains undisputed that restricted applications remain currently accessible to the subscriber unit because any user who knows the passcode can access those applications. Thus, the icons displayed on Home screen cannot be the claimed "application registry" for this additional reason.

(RRB at 31-33.)

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Apple argues:

As discussed in Apple's opening brief, this limitation is not met because [

]

Recognizing the weaknesses of its hodgepodge infringement theories, Motorola argues that Dr. Noble's interpretation of claim 12 "improperly requires that the same step of communicating a change in accessibility of an application (which is met by the filter commands sent after installation or deletion) must also satisfy the

step of updating the application registry (which is met by updating the identified application registries after installation or deletion)." CPostHB at 173-174. Yet, the phrasing of the claim 12 expressly links these two limitations. Claim 12 recites in relevant part:

> *in response to a change in accessibility of an application,*
> *update the application registry; and*
> *control the transmitter to communicate the change to the fixed portion of the wireless communication system.*

The most natural and grammatically correct reading of claim 12—which comports with the wireless communication system disclosed in the 333 Patent—requires that whenever there is a change in accessibility of an application, that change causes both an update of the application registry on the subscriber unit and a communication to the fixed portion describing the change, so the fixed portion can update its own copy of the application registry. Even though claim 12 is directed to a subscriber unit, it assumes that the fixed portion has its own copy of the application registry. As the Court itself observed during the hearing, Motorola's interpretation that claim 12 does not require the fixed portion to have a copy of the registry is disfavored because it renders meaningless this last limitation. **Tr.** [Judge Pender] at 985:3-8.

Motorola further argues (without citing any evidence) that "installation of an application is the 'but-for' cause of the creation and transmission of a filter command identifying that application." *See* CPostHB at 186. Motorola bases this argument on another assertion (again, without evidence) that people typically launch applications shortly after they are installed. Yet, temporal proximity between installation of an application and registration for push notifications does not mean that there is a *causal* relationship between installation of applications and any communications with the APNS server, as Dr. Madisetti concedes Claim 12 requires. **Tr.** [Madisetti] at 1080:23-1081:7, 1084:15-20. On the contrary, Motorola's description acknowledges that [

] In other words, the communication is "in response to" the registration, not the installation of the application itself. Moreover, the undisputed fact that [

]

[

]

[

]

Finally, Motorola's reliance on the *Finjan* case is misplaced. The issue addressed by the Federal Circuit was whether non-method claims describing capabilities nonetheless require that the claimed software components be "active" or "enabled;" such claims were found to be infringed by the accused products even though the relevant software was "locked" until customers purchased a key. *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204-05 (Fed. Cir. 2010). The accused infringer in Finjan did not dispute that the software met the claim limitations when enabled. *Id.* at 1203. The accused Apple products, however, are ***never*** even capable of practicing Claim 12 for at least the two reasons discussed in this section: [

] This means the accused Apple products do not infringe the 333 Patent independent of whether the accused products are capable of "controlling a delivery of data" or "maintaining an application registry comprising a list of all software applications accessible to the subscriber unit."

(RRB at 33-36.)

With respect to the doctrine of equivalents, Apple argues:

As discussed in Apple's opening brief, Motorola is barred by prosecution history estoppel from arguing that the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation is met under the Doctrine of Equivalents. RPostHB at 91-92. As for the remaining limitations of Claim 12, Motorola fails to provide any substantive analysis regarding Apple's alleged infringement of the 333 Patent under the Doctrine of Equivalents. Indeed, the entirety of Motorola's Doctrine of Equivalents argument is embedded in a footnote. *See* CPostHB at 187, n.35.

Interestingly, Motorola argues that the preamble limitation "controlling a delivery of data from the fixed portion" is met because the accused Apple products are capable of performing that claimed function, at least for applications that are push-enabled. CPostHB at 171-172. [

]

> [ ] Unlike the disclosed system of the 333 patent, which maintains two copies of an application registry that comprises a list of all the applications (*i.e.*, one copy on the subscriber unit and an identical copy at the fixed portion),[
>
>] Put simply, the accused Apple products cannot infringe Claim 12 under the Doctrine of Equivalents because [
>
>] *Warner-Jenkinson*, 520 U.S. at 21. Similarly, Motorola's argument that there are other ways of communicating a "change in accessibility of an application" other than identifying the change, *see* CPostHB at 186-187, is an implicit concession that the accused Apple devices cannot meet the "communicate the change" limitation under the Doctrine of Equivalents.

(RRB at 36-37.)

5. Findings

I find that Motorola has not proven by a preponderance of the evidence that the Apple Accused Products infringe the '333 patent either literally or under the doctrine of equivalents.

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

The first part of claim 12 of the '333 patent that Motorola has not established the accused devices infringe is the term "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit;" because the accused devices do not maintain an application registry comprising a list of ***all*** software applications that are currently accessible to the subscriber unit. In making this finding, I note that I am relying upon my construction of claim 12.

Motorola seems to think it matters how many applications are available through, for example, Safari and contends Apple must prove these applications must be registered under claim 12. (CRB at 89.) Motorola is wrong. Based upon the '333 patent specification (JX-2 at

3:67-4:4) and the clear requirements of claim 12 of the '333 patent *all* currently accessible software applications, including applications accessible externally, must be maintained in the application registry (which is discussed at length above). Hence, it is irrelevant whether there are 5,000 or 50,000 applications available, for if the subscriber unit can access them they must **all** be on the registry (wherever they may be maintained).

I disagree strongly with Motorola's position that Safari can be used as a single stop/point application substitute or be the representative application (*see* CX-2689C at Q/A 321) for the myriad of applications (even from external sources) that are currently accessible through the "Safari browser" (Dr. Madisetti's term) by the subscriber unit over the web. Although Dr. Madisetti agrees that web applications are software applications (Tr.at 959-960), it is also his opinion that web applications can be "represented" (*id*) on the registry by Safari. This unsupported argument by Dr. Madisetti is implausible, has no factual support, and defies logic. As an internet browser, Safari is an application that a user or a subscriber can employ to access or bridge their device (subscriber unit) to the web; the applications then run inside the Safari web browser. (*See* CX-104, at 16, which Dr. Madisetti references within CX-2689 at Q/A 321.) Hence, Safari is not a substitute for applications, for it is merely a tool to access or bridge to the application.

Although I can willingly accept Dr. Madisetti's explanation concerning matters within his field of expertise as a scientist or what knowledge a person of ordinary skill in the art may have, I do not accept his explanations when they stray into straight out claim construction within my sole purview, especially when his interpretation is not supported by the intrinsic evidence or even logic. Hence, I also cannot and do not accept Dr. Madisetti's unexplained construct that "currently accessible" does not include web applications because a network connection is

required. (CX-2689 at Q/A 321.) Instead, I find that if the network is available or accessible (not including an Apps Store as explained), so is an application.

Beyond not being supported by any intrinsic evidence, Dr. Madisetti's reasoning concerning Safari also ignores the '333 patent specification's use of the word "external." (*See* JX-2 at 3:67-4:4.) Because I find the use of the word "external" must include software applications a subscriber unit can access through a network or the web, I find Dr. Madisetti's interpretation and thus Motorola's to be even less plausible and reject it.

As discussed, Motorola's insistence that currently accessible applications do not include those available on the web is inconsistent with the specification of the '333 patent. Therefore, consistent with Apple's argument, I find Motorola is trying to apply or cram outdated technological concept under the ambit of claim 12 to Apple's modern web capable communications devices. It was, after all, Motorola that chose to use the words "external", "all" (even adding "all" during prosecution), and "currently available"—and must bear the consequences.

Motorola also alleges the '333 patent specification (JX-002 at 5:30-33) equates a software application becoming accessible with installation of the application. (CRB at 95-96.) Motorola goes too far. The language cited by Motorola from the specification is exemplary, not exclusive, because it includes the term "e.g." before through installation of a new application. (JX-002 at 5:30-33)

Motorola does advance some positions that are supported by the evidence, law, and logic. For example, I hold that Motorola's position that [

]

[

] [

]

I also concur with Motorola's contention that Apple argued, for the first time in its post-hearing brief (RIB at 88) that it does not infringe because [

]

(CRB at 89.) Although it is true that Apple's witness, [ ] did testify these three items were software applications (RX-1293C at Q/A 25-26, 28-29, 73-74; *see also* JX-101C, [ ] Dep.at 32:22-35:9), Apple did not timely make the argument as alleged by Motorola. Under Ground Rule 9(vi) these matters cannot be considered, so I will not consider them. Similarly, Apple also cited [ ]

(RIB at 85.) However, these non-infringement theories were also not disclosed in Apple's Pre-Hearing Brief, and therefore I find Apple waived them pursuant to Ground Rule 9(vi). In determining not to consider these arguments by Apple, I do note that ultimately, Apple's arguments are cumulative, for I have already determined that the processing section in the accused Apple products are ***not*** programmed to maintain an application registry comprising a list

of ***all*** software applications that are currently accessible to the subscriber unit for the reasons described above.

I find Motorola's distinction of "currently accessible" from "accessibility" in the next sentence of claim 12 is wrong. The later use of the word accessible must be interpreted with respect to the term "currently accessible" in the preceding sentence to which "accessibility" plainly refers. Otherwise, there is no reason for the following line to address a change in accessibility, which necessarily relates back to the term "currently accessible" and is the whole point in maintaining an application registry. Therefore, Motorola's distinction is false and any argument of infringement based upon this distinction is rejected.

Motorola's argument that hidden applications are not currently accessible is also unpersuasive. As Dr. Noble explained and Dr. Madisetti agreed, the operator of the subscriber unit need only enter a password to utilize these applications and another command to make them appear. Thus, it is a user/subscriber choice to make the application hidden and the application remains currently accessible to a user with little effort (CX-132, RX-1077C, RX-1289C at Q/A 53) despite Dr. Madisetti's unsupported opinion to the contrary. (*See* CX-2689C at Q/A 331.) This means if these applications are not on the registry, the requirement for "all" is not met.

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Another part of the language from claim 12 at issue the accused products do not meet is the language "in response to a change in accessibility of an application ... communicate the change to the fixed portion of the wireless communication system." I find this part of claim 12 is not met because [

]

[

] (RIB at 94.) For this reason, I find Dr. Madisetti has erroneously conflated the installation or deletion of an application with a user's decision whether to register or receive a push notification and thus conclude the accused Apple products do not infringe accordingly. (*See* RX 1289C, Noble RWS at Q/A 21.)

[

]

[

]

Motorola also misinterprets the language of claim 12 insofar as it alleges there is no requirement for the fixed portion of the invention to have a copy of the registry. As I observed during the hearing, such an interpretation is disfavored because it renders meaningless the last limitation in this language to communicate any change to the fixed portion (servers). In other words, if the fixed portion does not maintain a registry, why bother to communicate it? Hence, since I find the accused Apple Products do not operate in this fashion as Apple convincingly establishes (as described immediately above), they cannot infringe.

To the extent I have not responded to a party allegation concerning infringement, I note I have considered every allegation of the parties in making my findings.

c. The Doctrine of Equivalents

The last matter I will address under infringement of the '333 patent is the Doctrine of Equivalents. As Apple accurately asserts, Motorola has not made any meaningful or substantive arguments concerning why the accused products meet the doctrine of equivalents. Instead, in a solitary footnote, Motorola argues:

> To the extent the Court determines that any element of claim 12 is not literally met by the '333 Accused Products, as shown by the testimony of Dr. Madisetti, each element of clam 12 is present in the accused products under the doctrine of equivalents. CS-2689C, Madisetti DWS at Q/A 300, 303, 309, 312, 338, 347.

(CIB at 187 (FN 35).)

Motorola's argument is both improper and ineffective. First, it is not proper to make substantive points in footnotes. Parties who do so deserve to be ignored. Secondly, I have already agreed with Apple that the '333 Accused Products do not literally infringe claim 12 of the '333 patent because the accused Apple Products do not meet at least two critical limitations

in claim 12, as discussed above. Thus, I have already effectively rejected Dr. Madisetti's reasoning and logic as it pertains to infringement.

The law governing the doctrine of equivalents is strict. In applying this doctrine, I must follow the Supreme Court's instruction to vigilantly apply the all-elements rule and apply the doctrine of equivalents on a claim limitation-by-limitation basis rather than an "invention as a whole" which I find Motorola is really arguing. *See Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997) and *Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushhiki Co.*, LTD. 535 U.S. 722 (2002).

For example, Dr. Madisetti alleges there is infringement under the doctrine of equivalents because the preamble of claim 12 is infringed by the accused Apple products. (CX-2689C, DWS at Q/A 300.) He calls the accused products "insubstantially different" from the claimed invention

> . . .because they perform the same function, in the same way, to achieve the same result as the claimed invention. They perform the same function as the claimed invention because they help control and manage the delivery of data between each device and the fixed portion of the wireless communication system, as discussed above.

(*Id.*) Dr. Madisetti's conclusory opinion, which really seems more directed at intent, is unpersuasive and irrelevant. It is only relevant if each and every limitation in claim 12 is met and it is clear they are not.

First, one limitation the Accused Apple Products definitely do not meet involves maintaining a registry of **all** applications, even though Dr. Madisetti's erroneously said they did so when he was summarizing why the doctrine of equivalents was met. (*Id.* at Q/A 313.) As I specifically ruled, at length, above, the Accused Apple Products do no not practice this

limitation. Moreover, any such argument concerning the doctrine of equivalents ignores there is no equivalent for the word "all" without vitiating its meaning.

I also find the doctrine of equivalents is also barred by prosecution history estoppel, a doctrine endorsed and discussed in *Warner-Jenkinson and Festo Corp.* In the present case, the evidence establishes Motorola added the "all" language to claim 12 during prosecution to overcome examiner rejections. As filed, Claim 12 recited "maintain an application registry for registering applications accessible to the subscriber unit." (JX-7 at 20.) The examiner rejected this language, so Motorola amended the claim to require "maintain an application registry for registering comprising a list of software applications that are accessible to the subscriber unit." (*Id.* at 57-60.) The patent office rejected this phrasing in light of prior art. (*Id.* at 66-69.) Motorola then amended the claim language to its current form and appears to have underlined and emphasized the word "all." (*Id.* at 79-85.) In proffering these two amendments, Motorola cannot now assert that claim 12 covers less than all of the software applications accessible to the subscriber unit. Having surrendered that claim scope during prosecution to preserve the validity of the '333 patent, Motorola cannot now seek to recapture that coverage by invoking the Doctrine of Equivalents. Regardless, Motorola has proffered no evidence that this limitation is met under the Doctrine of Equivalents. (*See* RX-1289C, Noble RWS at Q/A63.) Nor has Motorola established that it changed the wording to "all" in its amendment for a reason unrelated to patentability as it must. *Warner-Jenkinson*, 520 U.S. at 40-41. Hence, estoppel should attach.

Based upon the foregoing, I find the facts discussed above track precisely the kind of facts the Supreme Court was searching for in *Warner-Jenkinson* for when to apply the doctrine of prosecution history estoppel. More specifically, it is correct to apply the rule because we

know why Motorola used the word "all" in prosecuting the '333 patent and that was related to patentability.

Apart from the word "all," I have already ruled that Dr. Madisetti erroneously conflated the installation or deletion of an application with a user's decision whether to register or receive a push notification. Hence, the accused devices do not control or manage data in the same way as provided or anticipated in claim 12 the doctrine of equivalents cannot apply for that reason. Accordingly, since the condition predicate for his opinion concerning how the accused devices operate or literally infringe claim 12 of the '333 patent are incorrect, it necessarily follows that Dr.Madisetti's opinion comparing the functionality of the accused Apple devices as compared to claim 12 is also incorrect.

F. Technical Prong of Domestic Industry

Motorola argues the Motorola Droid 2 permits notifications to be sent to applications and thus practices claim 12 of the '333 patent. (CIB at 193 (citing CX-2689C, Madisetti DWS at Q/A 350-352).)

1. Motorola's Allegations

a. "A subscriber unit in a wireless communication system for controlling a delivery of data from a fixed portion of the wireless communication system, the subscriber unit comprising"

Motorola argues:

> The Droid 2 satisfies the preamble of claim 12, both literally and under the doctrine of equivalents, under either party's proposed constructions. *See* CX-2689C, Madisetti DWS at Q/A 353-361; RX-1289C. Apple and its expert do not dispute that the Droid 2 satisfies the preamble of claim 12. *See* Noble RWS at Q/A 73; CX-0052C (Apple's Supplemental Response to Interrogatory No. 36); CX-0053C (Apple's Second Supplemental Response to Interrogatory No. 36).

(CIB at 194.)

b. "a receiver for receiving data"

Motorola argues:

> The Droid 2 contains a "receiver for receiving data," both literally and under the doctrine of equivalents. *See* CX-2689C, Madisetti DWS at Q/A 362-365. Apple and its expert do not dispute that the Droid 2 contains a receiver for receiving data. *See* RX-1289C, Noble RWS at Q/A 73; CX-0052C (Apple's Supplemental Response to Interrogatory No. 36); CX-0053C (Apple's Second Supplemental Response to Interrogatory No. 36).

(CIB at 194.)

c. "a processing system coupled to the receiver for processing the data"

Motorola argues:

> The Droid 2 contains a "a processing system coupled to the receiver for processing the data," both literally and under the doctrine of equivalents. *See* CX-2689C, Madisetti DWS at Q/A 366-370. Apple and its expert do not dispute that the Droid 2 satisfies this element of claim 12. *See* RX-1289C, Noble RWS at Q/A 73; CX-0052C (Apple's Supplemental Response to Interrogatory No. 36); CX-0053C (Apple's Second Supplemental Response to Interrogatory No. 36).

(CIB at 194.)

d. "a transmitter coupled to the processing system for communicating with the fixed portion of the wireless communication system"

Motorola argues:

> The Droid 2 contains a "a transmitter coupled to the processing system for communicating with the fixed portion of the wireless communication system," both literally and under the doctrine of equivalents. *See* CX-2689C, Madisetti DWS at Q/A 371-373. Apple and its expert do not dispute that the Droid 2 satisfies this element of claim 12. *See* RX-1289C, Noble RWS at Q/A 73; CX-0052C (Apple's Supplemental Response to Interrogatory No. 36); CX-0053C (Apple's Second Supplemental Response to Interrogatory No. 36).

(CIB at 194-195.)

e. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Motorola argues:

The processing system in the Droid 2 is programmed to maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit, under either party's construction of this element. *See* CX-2689C, Madisetti DWS at Q/A 374-375. In the Droid 2, [

] As noted by the User Guide for the Droid 2, "[t]he App tray shows you all of your applications." CX-1386 at p. 9. The Droid 2 User Guide also notes that a user can "flick up and down [in the App tray] to see all of your apps." *Id.* Moreover, the User Guide states that "any new apps that you download … are added to the app tray" (*id.*), [

]

While Dr. Noble and Apple dispute that [

] they rely on the same failed arguments that they made regarding the Apple products. For example, they argue that system software must be included in the registry, such as the home screen itself. Similarly, they argue that child applications must be included in the registry (such as web applications), even though the parent application (the web browser) is already present in the registry. As shown below, these arguments should be rejected for the same reasons discussed above regarding the Apple products.

Home screen: Apple and Dr. Noble argue that the home screen on the Droid 2 [

] This argument fails for several reasons. First, the home screen [

] The Droid 2 User Guide distinguishes the home screen itself from the App tray, which contains "all of your apps." CX-1386 at p. 9. Similarly, the home screen contains a "Launcher icon" for opening the app menu, which further distinguishes the home screen from software applications. *Id.* at p. 8. Moreover, on the Droid 2, the home screen itself renders the App tray. Madisetti, Tr. at 996:2-7. As a result, Apple's position that the registry must include itself within the list of software applications contradicts claim 12, which distinguishes the "application registry" from the "software applications." JX-002, '333 patent, claim 12. Finally, according to the Droid 2 User Guide, the App tray can be opened from the home screen by touching the Launcher icon, and a user can return to the home screen from the App tray by touching the icon for the

home screen. CX-1386 at p. 9. Thus, even if the home screen was a software application, which it is not, it is displayed in the App tray. *Id.*

None of the citations identified by Dr. Noble change this result. While the Android developer website and the deposition testimony of David Boldt describe the home screen as an application, they do not describe it as a software application. *See* RX-192 at p. 1; RX-0094C at 49:3-9. Rather, as discussed above, the home screen is a system service, like SpringBoard. For the same reasons, the fact that additional home screens can be downloaded to a device is irrelevant, because these home screens are system services as well.

Web applications: Dr. Noble next argues that the [

] *See* CX-2689C, Madisetti DWS at Q/A 380. Thus, the web applications are already represented in the registry by the mother application (the web browser) that operates the web applications. *Id.*

Ringtone picker: For the same reasons, Dr. Noble's argument regarding the ringtone picker also fails. As noted by Dr. Noble, the "ringtone picker can be selected from the sound settings of [

] Madisetti, Tr. at 1040:1-1041:19.

Live wallpaper picker / live wallpapers: Dr. Noble next argues that live wallpapers and the live wallpaper picker are software applications that are not represented in the App tray. RX-1289C, Noble RWS at Q/A 82, 87. However, a live wallpaper is not a software application. Instead, it is an animated background that plays in the background of the home screen – just like a video. RX-1288 at p. 1. A live wallpaper does not perform a specific task for a user, just like a video does not perform a specific task for a user. As a result, a live wallpaper is not a software application. Indeed, live wallpapers may be provided as a service by an existing application, which would be represented in the App tray. RX-1288 at p. 1-2 (instructing developers to include a statement in the application's manifest that "tells Android Market that your application includes a live wallpaper ..."). For this reason, the Android developer website cited by Dr. Noble notes that live wallpapers are very similar to normal applications, but it does not equate live wallpapers with normal applications. *Id.* Thus, live wallpapers, and the program used to select live wallpapers (the live wallpaper picker), are not software applications. Indeed, Dr. Noble has not cited any document in support of his position that the live wallpaper picker is a software application.

Widgets: Apple and Dr. Noble also argue that widgets are currently accessible software applications that are absent from the App tray. RX-1289C, Noble RWS at Q/A 89. However, as Dr. Madisetti explained during the hearing, a widget is a mini-application view into an existing application. Madisetti, Tr. at 1001:21-1002:2, 1006:23-1008:8, 1009:2-24. It is not a separate application – it is an interface into an existing application. *Id.*; *see also* RX-1287 ("[a] widget can display an application's most timely information at a glance, on a user's Home screen."). Moreover, the mother application for the widget (such as the Gmail application) is present in the App tray, and therefore represents the widget. Madisetti, Tr. at 1010:12-17.

(CIB at 195-198.)

f. "wherein the processing system is programmed to: in response to a change in accessibility of an application, update the application registry"

Motorola argues:

The processing system of the Droid 2 [

] *Id.* at Q/A 384. Apple and its expert do not dispute that the Droid 2 satisfies this element of claim 12. *See* RX-1289C, Noble RWS at Q/A 93-95; CX-0052C (Apple's Supplemental Response to Interrogatory No. 36); CX-0053C (Apple's Second Supplemental Response to Interrogatory No. 36).

(CIB at 198.)

g. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Motorola argues:

The processing system of the Droid 2 is [

] Like the '333 Accused Products, the Droid 2 supports a notification system, known as the Android Cloud to Device Messaging ("C2DM"). *Id.* at Q/A 358. As noted by a Google document describing this service, C2DM is "a service that helps developers send data from servers to their applications on Android devices," and it "provides a simple, lightweight mechanism that servers can use to tell mobile applications to contact the server

directly, to fetch updated application or user data." CX-835 at p. 1; CX-2689C, Madisetti DWS at Q/A 358. Shortly after installation of an application that is configured for C2DM, a user is prompted to permit notifications. CX-835 at p. 1; CX-2689C, Madisetti DWS at Q/A 358. When a user permits notifications for an application, the application fires off a registration intent to a C2DM server, which includes the sender ID and the application ID. CX-835 at p. 3. [

]

Dr. Noble disputes that this element is met by the Droid 2, and cites the deposition testimony of Motorola engineer Ling Li. RX-1289C, Noble RWS at Q/A 94[

] However, the testimony cited by Dr. Noble is irrelevant, because Ms. Li testified about communications with the Android Market, not the C2DM service. As a result, the evidence cited by Dr. Noble does not defeat Motorola's showing that the Droid 2 communicates changes in accessibility to the C2DM service.

(CIB at 198-199.)

2. Apple's Allegations

Apple argues:

Motorola has failed to demonstrate that the Motorola Droid 2 practices asserted Claim 12 of the 333 Patent. In particular, Motorola has failed to prove that the Droid 2 practices at least two crucial limitations of Claim 12. First, the Droid 2 does not "maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit" because the Application Tray does not list all currently accessible software applications. Second, the Droid 2 does not, in response to a change in accessibility of a software application, communicate the change to the fixed portion of the wireless communication system.

(RIB at 100.)

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Apple argues:

As Dr. Noble testified, and as Dr. Madisetti admitted on cross examination at the hearing, Google's documents and Motorola's engineers confirm that the Android platform, which Motorola deploys on the Droid 2, does not require all

applications to appear in the Application Tray. [

]

Apple has identified several examples of software applications that are currently accessible to the Droid 2 as sold by Motorola but that do not appear in the Application Tray: (1) the Home application; (2) the Live Wallpaper Picker application; (3) web applications; (4) widgets; and (5) live wallpapers.

(a) Home is a Currently Accessible Software Application That Does Not Appear in the Application Tray.

Under either party's proposed construction for the term "software application," the Home application on the Droid 2 is a software application. Under Dr. Madisetti's original construction of software application, which was simply "plain and ordinary meaning," it is clear that the Home screen is a software application as the plain and ordinary meaning of that term is understood by Google and Motorola. [

]

Under Dr. Madisetti's newly-proffered construction, "a software program that performs a specific task for a user," the Home application is also a software application. There is no dispute that the Home application is software, and that it is a program. The Home application also clearly "performs a specific task": it provides users with a centralized location from which to launch certain

applications. **RX-192.1** [Android Developer Guide - Home]; **RX-1266C.7** [Android Developer Guide - Activity and Task Design Guidelines] at MOTO-APPLE-0000369217; **RX-1289C.38** [Noble RWS] at Q.80. This task is clearly performed "for a user," as it is the user who benefits from having the launching point provided by the Home application. Without a user, there would be no need for such an interface at all. For the same reasons, the Home application is a software application under Apple's proposed construction of the term, "a computer program designed to perform specific tasks."

Dr. Madisetti argued that the Home application does not need to appear in the Application Tray because it is not a software application, and it is not a software application because all software applications appear in the Application Tray. **CX-2689C** [Madisetti DWS] at Q.378. As Dr. Noble pointed out, this argument is circular. **RX-1289C.36** [Noble RWS] at Q.78. Furthermore, Dr. Madisetti's analysis does not purport to apply any of the parties' proposed constructions for "software application."

The evidence of record also demonstrates that the Home application is not listed in the Application Tray. Dr. Madisetti argues to the contrary, but does not point to any evidence from an actual Droid 2 device. Instead, he relies on a simulated screen image from the Motorola Droid 2 User Guide. **CX-2689C** [Madisetti DWS] at Q.378. As Dr. Noble explained, the home icon purportedly shown in the Droid 2 User Guide does not appear in actual operation of the Motorola Droid 2 as sold by Motorola. **RX-1289C.36** [Noble RWS] at Q.79. Furthermore, the Droid 2 User Guide includes a clear disclaimer that all screen images used in the guide are simulated and do not reflect the Droid 2 software as actually deployed. **CX-1386** [Droid 2 User Guide] at MOTO-APPLE-0003987694 ("All screen shots in this guide are simulated"; "Instructions to perform tasks in this guide may change depending on the software version on your phone"). Even if the home icon shown in the Droid 2 User Guide were present on actual Droid 2 units, it does not correspond to the Home application, as explained by testimony from Dr. Noble and Mr. Boldt. [

]

For the reasons described above, the Home application is a software application that is currently accessible on the Droid 2 and not listed in the Application Tray. Therefore, the Droid 2 fails to maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit.

(b) The Live Wallpaper Picker Application is a Currently Accessible Software Application That Does Not Appear in the Application Tray.

Under either party's proposed constructions for "software application," the Live Wallpaper Picker application included on the Droid 2 is a software application. Under Motorola's originally proposed construction, "plain and ordinary meaning," the Live Wallpaper Picker is a software application within the plain and ordinary meaning of the term as understood by Google.

Under Dr. Madisetti's new construction, "software program that performs a specific task for a user," the Live Wallpaper Picker is also a software application. There is no dispute that the Live Wallpaper Picker is software or that it is a program. It also clearly "performs a specific task for a user"; as Dr. Noble explained, the Live Wallpaper Picker allows a user to select live wallpapers to display on the Droid 2. **RX-1289C.42** [Noble RWS] at Q.82. This task is clearly for the user's benefit. As with the Home application, without a user, there would be no need to allow selection of live wallpapers at all. For the same reasons, the Live Wallpaper Picker is a "computer program designed to perform specific tasks" under Apple's proposed construction.

The Live Wallpaper Picker is not listed in, and cannot be launched from, the Application Tray. As Dr. Noble explained in his testimony, a user accesses the Live Wallpaper Picker application by pressing the Menu key from the Home screen, selecting the Wallpaper option, and then selecting Live Wallpapers in the resulting chooser window. **RX-1289C.42-43** [Noble RWS] at Q.82.

Motorola presented no evidence concerning the Live Wallpaper Picker application, thus the only evidence of record demonstrates that it is a software application, that it is currently accessible to the Droid 2, and that it does not appear in the Application Tray. For this reason, the Droid 2 fails to maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit.

(c) Web Applications are Currently Accessible Software Applications That Do Not Appear in the Application Tray.

Under either party's proposed constructions for "software application," web applications are also software applications. Web applications on the Android platform are software applications within the plain and ordinary meaning of the term as understood by Google, which explained in the Android Developer Guide that web applications are one of two ways "to deliver an application on Android." **RX-184.1** [Android Developer Guide - Web Apps Overview]. Furthermore, Dr. Madisetti conceded at the hearing that web applications are software applications. **Tr.** [Madisetti] at 960:2-3 ("Web applications are software applications."); 1029:22-1030:14.

Under Dr. Madisetti's new construction, "software program that performs a specific task for a user," web applications are also software applications. There is no dispute that web applications are software and programs, and Apple has provided at least two examples of web applications that "perform specific tasks for users": Pie Guy, which provides a video game, and Financial Times, which allows users to access daily news. As stated above, Dr. Madisetti has conceded that web applications are software applications under Motorola's proposed constructions. For similar reasons, web applications are also software applications under Apple's proposed construction.

As Dr. Madisetti admitted at the hearing, web applications are accessible to the Droid 2 any time that the phone has a network connection. **Tr.** [Madisetti] at 960:8-12, 963:1-3. There is no dispute that individual icons representing individual web applications do not appear in the Application Tray at any time, regardless of whether the Droid 2 currently has a network connection. Refusing to concede that this defeats Motorola's domestic industry case, Dr. Madisetti instead argues that the Browser icon "represents" web applications in the Application Tray because the web browser is the "mother application" that runs web applications. *See, e.g.*, **Tr.** [Madisetti] at 1032:1-21. In so doing, Dr. Madisetti attempts to introduce the concept of a "mother application" that drastically diminishes the number of software applications that must be included in the claimed application registry. This new limitation finds no support in the claim language, which clearly states that the application registry must list all software applications currently accessible to the subscriber unit. **JX-2** [333 Patent] at 10:1-2 (Claim 12); *see also* **RX-1289C.44** [Noble RWS] at Q.85.

This concept of a "mother application" is notably absent from Motorola's original proposed construction and Dr. Madisetti's newly proposed claim construction, likely because it does not conform with any known meaning of the term "software application." Moreover, Motorola's new claim limitation would completely eviscerate the claim requirement of an application registry listing all software applications by allowing Motorola to arbitrarily link any number of unlisted software applications to listed applications, under the guise of a "mother application" relationship. Regardless of whether the user had zero, one, or ten web applications installed, under Dr. Madisetti's interpretation, the Browser icon sufficiently "represents" any and all web applications; thus a server would be unable to distinguish how many web applications were installed on a particular subscriber unit. Having conceded that web applications are software applications under its proposed constructions and Apple's, and that web applications are currently accessible whenever the Droid 2 has a network connection, Motorola cannot circumvent the limitations of Claim 12 by creating out of whole cloth a new and unsupported exception to the requirement that the application registry include all software applications.

For the reasons described above, web applications are software applications that are currently accessible on the Droid 2 and not listed in the Application Tray.

Therefore, the Droid 2 fails to maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit.

(d) Widgets are Currently Accessible Software Applications That Do Not Appear in the Application Tray.

Under Motorola's original construction, widgets are undisputably software applications within the plain and ordinary meaning of that term, as understood by Motorola. In the Droid 2 User Guide, Motorola explains that widgets are applications. **CX-1386** [Droid 2 User Guide] at MOTO-APPLE-0003987701 ("A widget is small app on the home screen"). Under Dr. Madisetti's new construction, "software program that performs a specific task for a user," widgets are also software applications. There is no dispute that widgets are software or that they are programs, and as Motorola explains in the Droid 2 User Guide, a widget "typically displays information such as weather, news, and social networking updates." Providing weather, news, or social networking information is plainly a specific task for a user. For the same reasons, widgets are software applications under Apple's proposed construction, "computer programs designed to perform specific tasks."

Unable to refute evidence that widgets are currently accessible software applications and that they are not listed in the Application Tray, Motorola and Dr. Madisetti instead present new arguments as to why widgets do not need to appear in the application registry. First, Dr. Madisetti argued that widgets are not provided with the Droid 2 and are strictly something that users install after acquiring the device. **Tr.** [Madisetti] at 1009:16-19. This is demonstrably untrue; although additional widgets are available for download in the Android Market, Motorola also includes several widgets on the Droid 2 as sold, and instructs users how to access these pre-loaded widgets. *See* **CX-1386** [Droid 2 User Guide] at MOTO-APPLE-0003987730. Google also explains in the Android Developer Guide that "[t]he standard Android system image includes several widgets." **RX-1287.1** [Android Developer Guide - App Widget Design Guidelines].

Next, Dr. Madisetti suggests that widgets are created by existing applications as mere extensions of those applications. **Tr.** [Madisetti] at 1009:10-15 ("So compass will then *create* a widget using something called an on draw function.") (emphasis added). This is also factually incorrect. As Google explained in the Android Developer Guide, widgets have their own design parameters, size limitations, anatomy, layouts, and graphics, all of which are determined and implemented by Android developers, not existing applications. **RX-1287.2-6** [Android Developer Guide - App Widget Design Guidelines]; *see also* **RX-1289C.47** [Noble RWS] at Q.90. This assertion is also undermined by Dr. Madisetti's testimony, discussed above, that widgets can be separately downloaded and installed by users. **Tr.** [Madisetti] at 1009:16-19. This would not be possible if widgets were merely created on-the-fly by existing applications.

Finally, invoking the "mother application" concept again, Dr. Madisetti argues that widgets are not separate software applications because applications that use or display data generated by "mother" applications are not themselves software applications, and applications that have an entry point from within "mother" applications are not software applications. **Tr.** [Madisetti] at 1007:20-1008:8, 1009:2-9, 1040:1-1041:12. As discussed above, this new "mother application" theory attempts to create exceptions to the limitations of Claim 12, and should be rejected.

For the reasons discussed above, widgets are software applications that are currently accessible to the Droid 2 and not listed in the Application Tray. Therefore, the Droid 2 fails to maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit.

(e) Live Wallpapers are Currently Accessible Software Applications That Do Not Appear in the Application Tray.

Under Motorola's original construction, "plain and ordinary meaning," live wallpapers are software applications within the plain and ordinary meaning of the term, as understood by Google. In the Android Developer Guide, Google explains that live wallpapers, like "a normal Android application," have "access to all the facilities of the [Android] platform." **RX-1288.1** [Android Developer Guide - Live Wallpapers]. Further, live wallpapers are distributed on the Android Market as applications. *See id.* at 1-2; **RX-1289C.45** [Noble RWS] at Q.88. Under Dr. Madisetti's new construction, "software program that performs a specific task for a user," live wallpapers are also software applications. Dr. Madisetti does not dispute that a live wallpaper is software, and that it is a program. Live wallpapers also "perform a specific task for a user": providing richer, animated, interactive backgrounds. **RX-1288.1** [Android Developer Guide - Live Wallpapers]; **RX-1289C.45** [Noble RWS] at Q.87. This task is performed for a *user's* enjoyment. **RX-1288.1** [Android Developer Guide - Live Wallpapers] ("Starting with Android 2.1 (API Level 7), users can now enjoy *live wallpapers*") (italics in original). Indeed, there is no evidence that the functionality provided by a live wallpaper is related to controlling the workings of the Droid 2, which Dr. Madisetti cited in his testimony as the distinction between software applications and system software. *See, e.g.*, **Tr.** [Madisetti] at 1011:8-23, 1013:4-24. For the same reasons, live wallpapers are software applications under Apple's proposed construction, "computer program designed to perform specific tasks."

Dr. Madisetti addresses live wallpapers only briefly in his testimony, contending that live wallpapers are not software applications because they utilize data from existing software applications. **CX-2689C.124-25** [Madisetti DWS] at Q.379. As Dr. Noble testified, however, this representation is not accurate, as it fails to take into account examples of live wallpapers that are not associated with and do not utilize data from other software applications, such as the Galaxy or Water live wallpapers. **RX-1289C.46** [Noble RWS] at Q.88.

For the reasons discussed above, live wallpapers are software applications that are currently accessible to the Droid 2 and not listed in the Application Tray. Therefore, the Droid 2 fails to maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit.

(RIB at 101-110.)

With respect to the doctrine of equivalents, Apple argues:

The Droid 2 does not meet the "application registry" limitation under the Doctrine of Equivalents. For the reasons discussed in **Section VII.D.**1, *supra*, Motorola is barred by prosecution history estoppel from seeking equivalents to this limitation of Claim 12. Even if Motorola were entitled to seek equivalents, the Droid 2 does not meet this limitation under the Doctrine of Equivalents. As Dr. Noble testified, the Application Tray on the Droid 2 performs a substantially different function than the application registry disclosed by the 333 Patent. **RX-1289C.48** [Noble RWS] at Q.92. Whereas the application registry of the 333 Patent must list each and every application on a subscriber unit in order to ensure effective control over delivery of data, the [

]

(RIB at 110-111.)

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application, update the application registry; and control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Apple argues:

Motorola has failed to demonstrate that the Droid 2 in response to a change in accessibility of an application, updates the application registry and controls the transmitter to communicate the change to the fixed portion of the wireless communication system, as required by Claim 12. First, as discussed above, the Droid 2 does not maintain an application registry comprising a list of all software applications, and therefore lacks an application registry to update in response to a change in accessibility. Additionally, Motorola has failed to demonstrate that the Droid 2 communicates any change to the fixed portion of the wireless communication system in response to a change in accessibility of an application.

(a) The Droid 2 Does Not Communicate with the Fixed Portion in Response to a Change in Accessibility of an Application.

As Dr. Madisetti stated at the hearing, Claim 12 requires a cause/effect relationship between the change in accessibility of an application and the communication with the fixed portion of the wireless communication system. **Tr.** [Madisetti] at 1080:23-1081:7, 1084:15-20. Motorola relies only on Dr. Madisetti's witness statement testimony and a single document, **CX-835** [Android Cloud to Device Messaging Framework], to support its argument that the Google Cloud to Device Messaging (C2DM) service meets this limitation.

As Dr. Madisetti concedes, however, [

] Thus, Dr. Madisetti's own testimony confirms that the causative event that triggers the communication with the fixed portion of the communication system is *not* the change in accessibility of an application.

(b) The Droid 2 Does Not Communicate a Change in Accessibility to the Fixed Portion of the Wireless Communication System.

Additionally, the Droid 2 does not actually *communicate a change in accessibility* to the C2DM servers. As explained by Google, an Android application registers with C2DM by sending an intent containing the ID of the application wishing to receive notifications. **CX-835** [Android Cloud to Device Messaging Framework] at MOTO-APPLE-0005383110_36079. Motorola has offered no evidence showing that the C2DM server can distinguish between a user registering an installed, but previously unregistered application (*i.e.*, no change in accessibility) versus a newly installed application being registered. Similarly, Google's documentation describes that an unregistration intent is sent when an application unregisters for C2DM. *Id.* Motorola has presented no evidence that the unregistration intent sent when an application is uninstalled differs in any way from the unregistration intent sent when a user unregisters an application without uninstalling it (*i.e.*, no change in accessibility). Because the intent that is sent is independent of (and does not reflect) whether a change in accessibility has occurred, the Droid 2 fails to meet this limitation of Claim 12, which requires that it "communicate the change in accessibility."

(RIB at 111-113.)

With respect to the doctrine of equivalents, Apple argues:

As Dr. Noble testified, the Motorola Droid 2 does not meet the "communicate the change" limitation under the Doctrine of Equivalents because any communications sent from the Droid 2 to the C2DM server are substantially

different from the communications disclosed in the 333 Patent. **RX-1289C.52** [Noble RWS] at Q.95. The function of the communications disclosed in the 333 Patent is to permit the fixed portion of the wireless communication system to maintain an up-to-date copy of the subscriber unit's application registry, which could then be used to control data delivery. *Id.* By contrast, there is no evidence that the communications sent by the Droid 2 perform this function. First, [

]

(RIB at 113.)

3. Motorola's Reply Allegations

In its reply brief, Motorola argues:

As explained in Motorola's Opening Post-Hearing Brief, the accused Apple products satisfy this element of claim 12 under either party's proposed constructions. MPostHB at p. 184-187; *see* CX-2689C, Madisetti DWS at Q/A 339-347. [

] None of the arguments raised by Apple defeat Motorola's proof of infringement.[58]

Apple argues that a server on the fixed portion must maintain a copy of the application registries present on the accused products, and it claims Dr. Madisetti conceded this point at the hearing. APostHB at pp. 92-93 (citing Tr., 983:20-24). However, in the cited testimony, Dr. Madisetti made no such admission. In fact, he testified that claim 12 "does not include any requirement that the fixed portion of the wireless communication network use an application registry to control the delivery of data." CX-2689C, Madisetti DWS at Q/A 298. And other independent claims in the '333 patent specifically include such a requirement, which further shows that it is absent from claim 12. MPostHB at p. 174.

---

[58] Apple argues that "[a]pparently struggling to formulate a coherent infringement theory, Motorola's allegations have morphed several times during this Investigation." APostHB at p. 93. But the fact that Motorola decided to drop certain arguments in order to simplify the case is irrelevant. And in its Response to the Order to Show Cause, Apple argued "[i]t is a consequence of the fast-paced nature of ITC investigations that parties frequently change positions as discovery develops and arguments are refined." Response to Order to Show Cause at p. 6.

Apple next argues that the filter commands are not sent in response to a change in accessibility of an application. APostHB at pp. 94-95. But Apple cannot dispute that the installation or deletion of a filter command is the "but-for" cause of the creation and transmission of a filter command. *See* MPostHB at p. 186. [

] Apple's own documents make clear that an iOS application typically registers for push notifications "right after it is installed on a device" (CX-235 at p. 4), which makes sense because most people will use an application shortly after they download it from the App Store. CX-2689C, Madisetti DWS at Q/A 290. Thus, it is untenable for Apple to label Dr. Madisetti's testimony on this issue as "misleading" (APostHB at p. 94 n. 25), because he is citing on Apple's own documents. CX-235 at p. 4. And while it is true not all applications support push notifications, as Apple notes (*id.* at 94), the accused products still infringe because they are programmed to practice claim 12 for push-enabled applications. *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010) ("'an accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even though it may also be capable of noninfringing modes of operation.'" (citation omitted)).

As Dr. Madisetti explained at the hearing, [

] CX-2689C, Madisetti DWS at Q/A 343, 345; Madisetti, Tr. at 1042:6-1043:14. Apple did not cross-examine Dr. Madisetti regarding this testimony. Instead, Apple argues that filter commands do not "include enough information for the fixed portion to make an identical change to its own copy of the application registry ..." APostHB at p. 95. But as noted above, claim 12 does not require the fixed portion to maintain a copy of the application registry, and other independent claims include this requirement, which means it is not an element of claim 12. *See* MPostHB at p. 174.[59]

Apple next argues that [

] Thus, the accused products infringe because they will practice claim 12. *See Finjan*, 626 F.3d at 1204; *Shamrock Technologies, Inc. v. Medical Sterilization, Inc.*, 903 F.2d 789,

[59] Apple then argues that registering for push notifications does not affect whether the application is listed in the alleged application registries. APostHB at p. 95. But as explained in Motorola's brief, this argument does not defeat infringement. *See* MPostHB at pp. 173-174.

792 (Fed. Cir. 1990) (holding that defendant infringed claim element requiring "uniform irradiat[ion]" even though the accused process did not achieve perfect uniformity of radiation).[60]

Next, Apple argues that it is[

] APostHB at p. 98. But claim 12 does not require the fixed portion to maintain a copy of the application registry, or recognize the specific change in accessibility. There are several ways to communicate a change in accessibility, as discussed in Motorola's Opening Post-Hearing Brief. MPostHB at pp. 186-187. Here, [

]

Finally, Apple argues [

] APostHB at p. 99. But as Dr. Madisetti explained at the hearing, whether a user is registered to use an application does not affect whether that application is accessible on the subscriber unit. Madisetti, Tr. at 994:16-23. As noted in the '333 patent, an application becomes accessible when it is installed. JX-002, '333 patent at 5:30-33 ("The processing system 206 then monitors the status of the subscriber unit 122 to determine 406 whether a change in the accessibility of an application has occurred, e.g., through the installation of a new application ..."). If the user is registered to use the application, then the application is currently accessible, as Dr. Madisetti explained. Madisetti, Tr. at 994:16-23. Claim 12 requires a communication to be sent "in response to a change in accessibility," not when the status of an application changes from accessible to currently accessible. Thus, this argument by Apple is simply irrelevant.[61]

---

[60] Mr. Bleau and Dr. Noble did not quantify or explain [

] which calls into question the relevance of this testimony. *See* RX-1294C, Bleau RWS at Q/A 52-53. Indeed,[ ] the picture on the Wikipedia entry for bloom filters. *See* en.wikipedia.org/wiki/ Bloom_filter (last visited 1/21/12). Thus, it is not surprising that Motorola did not cross examine Mr. Bleau at the hearing, and Motorola's decision not to cross examine him does not "compel the conclusion that there is no infringement of Claim 12," as Apple contends. APostHB at p. 99.

[61] Apple also argues that the solution disclosed in the '333 patent is inapplicable to the accused products because limited bandwidth is no longer a problem for modern mobile devices. APostHB at p. 71 n.12, 79. But claim 12 is not limited to subscriber units that operate in a limited bandwidth environment, and none of the constructions proposed by the parties impose such a requirement.

(CRB at 101-102.)

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Motorola argues:

> The Droid 2 maintains an application registry of all currently accessible software applications in the App tray. MPostHB at p. 195; CX-1386 at p. 9 ("[t]he App tray shows you all of your applications."). When an application is downloaded to the Droid 2, it is added to the App tray, and when an applications is deleted, it is removed from the App tray. *See* CX-1386 at 9 ("any new apps that you download … are added to the app tray"); CX-2689C, Madisetti DWS at Q/A 375. As it did for infringement, Apple identifies several "software applications" that are purportedly absent from the App tray. However, Apple's arguments fail for the same reasons as its non-infringement positions, because the programs identified by Apple are either system services that are different from "software applications," or they are already represented in the App tray by the mother application that runs and operates the program.
>
> ***The Home Screen:*** The home screen renders the App tray, and it is a system service, not a software application under Motorola's proposed construction. MPostHB at p. 196. As Dr. Madisetti explained at the hearing, the Android documents cited by Apple only describe the home screen as an "application," not as a "software application" as that term is used in claim 12 of the '333 patent. Madisetti, Tr. at 1000:6-20. The deposition testimony cited by Apple [
>
>]
>
> JX-0094C at 49:3-9. Apple suggests that Dr. Madisetti conceded that the use of the term "application" in the Android Developer Documents refers to the "software application" (APostHB at p. 102), but Dr. Madisetti made no such concession. *See* Madisetti, Tr. at 1000:15-20 ("I believe you are talking about the claim term, software applications. This [the Android developer guide] is talking about applications."). Indeed, Dr. Madisetti testified that the home screen is different from software applications. CX-2689C, Madisetti DWS at Q/A 378.
>
> Moreover, as noted by Dr. Madisetti, the home screen is actually represented as an icon in the App tray, as shown by the Droid 2 User Guide. CX-1386 at p. 9. Thus, even if the home screen was a software application, which it is not, it is displayed in the App tray. *Id.* Apple argues that the icon in the App tray for the home screen corresponds to a search function to identify the home screen, instead of the home screen itself. APostHB at pp. 103-104. But this argument is mere semantics because the icon in the App tray undoubtedly represents the home screen.

Widgets: Widgets are mini-application views into an existing application; they are not separate applications. MPostHB at p. 198; Madisetti, Tr. at 1001:21-1002:2, 1006:23-1008:8, 1009:2-24. Thus, widgets are represented in the App tray by the mother application whose application is displayed by the widget – such as the Gmail application. Madisetti, Tr. at 1010:12-17. Apple claims that Dr. Madisetti "argued that widgets are not provided with the Droid 2 and are strictly something that users install after acquiring the device." APostHB at p. 108 (citing Tr. at 1009:16-19). However, what Dr. Madisetti meant in the cited testimony was that widgets could be activated by a user after purchase of the phone. Indeed, in the testimony not cited by Apple, Dr. Madisetti mentioned widgets that are associated with applications that come with the phone (such as the compass and weather applications). Madisetti, Tr. at 1006:23-1009:19. Finally, as it did for web applications, Apple again argues that Motorola's position improperly creates an exception to claim 12, presumably because the network "must be able to distinguish how many [widgets] are installed on [the Droid 2]." APostHB at p. 84. As discussed above, there is no support for Apple's position in claim 12, and practically it makes no sense because a widget displays data from the mother application.

Web applications: On the Droid 2, the web browser application that operates web applications is represented in the App tray. *See* CX-2689C, Madisetti DWS at Q/A 380. Thus, the web applications are already represented in the registry by the mother application (the web browser) that operates the web applications. *Id.* For the Droid 2, Apple raises the same arguments that it did for web applications on the accused Apple products. As shown above, however, these arguments are untenable, and they fail for the same reason with respect to web applications on the Droid 2.

Live wallpaper picker / live wallpapers: Live wallpapers are videos that play in the background of the home screen, and the live wallpaper picker is used to select live wallpapers. RX-1288 at p. 1. Thus, as explained in Motorola's Opening Post-Hearing Brief, live wallpapers and the program used to select live wallpapers (the live wallpaper picker) are not software applications. MPostHB at p. 197-198.

(CRB at 102-104.)

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Motorola argues:

Using the Android Cloud to Device Messaging System ("C2DM"), [

]

[ ] *See* CX-2689C, Madisetti DWS at Q/A 386. Like the accused Apple products, shortly after installation of an application on the Droid 2 that is configured for C2DM, the user is prompted to permit notifications. CX-835 at p. 1; CX-2689C, Madisetti DWS at Q/A 358. When a user permits notifications for the application, the application fires off a registration intent to a C2DM server, which includes the sender ID and the application ID. CX-835 at p. 3.

Apple raises two arguments regarding this element of claim 12. First, Apple argues that "the Droid 2 communicates with the C2DM server *in response to* the user's choice to permit push notifications, not a change in accessibility (e.g., installation or deletion) of any applications." APostHB at p. 112. But as Dr. Madisetti explained at the hearing, one skilled in the art would understand that claim 12 requires a cause/effect relationship between the change in accessibility and the communication to the fixed portion, as opposed to a temporal condition. Madisetti, Tr. at 1080:23-1081:7 ("One of skill in the art would interpret this limitation as a cause/effect as opposed to a temporal condition."). The installation of an application is undeniably the but-for cause of the subsequent registration intent that is sent to the C2DM server, because without installation the registration would never be sent.

Next, Apple argues that "the Droid 2 does not actually *communicate a change in accessibility* to the C2DM servers." APostHB at p. 112. As an initial matter, Apple did not raise this argument in its Pre-Hearing Brief Regarding Domestic Industry (*see* pages 84-90), and therefore Apple is precluded from making this argument under Ground Rule 9(vi). *See Certain 3G Mobile* Handsets, 2010 WL 1649758 at 98-99. Moreover, Apple's theory is not supported by any expert testimony by Dr. Noble, because he did not raise this position in his Rebuttal Witness Statement. The testimony from Dr. Madisetti that the Droid 2 communicates changes in accessibility therefore is undisputed (*see* MPostHB at p. 199), and for that reason the Court should find that this element of claim 12 is met by the Droid 2.

(CRB at 104-106.)

4. Apple's Reply Allegations

In its reply brief, Apple argues:

The evidence of record demonstrates that the Droid 2 does not practice Claim 12 of the 333 Patent because (1) it does not maintain an application registry comprising a list of all software applications currently accessible to the subscriber unit, and (2) the Droid 2 does not, in response to a change in accessibility of a software application, communicate the change to the fixed portion of the wireless communication system.

(RRB at 38.)

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

Apple argues:

> The Droid 2 does not practice this limitation of the 333 Patent because there are numerous examples of software applications that are not listed in the Droid 2's Application Tray, including (1) the Home application; (2) the Live Wallpaper Picker application; (3) web applications; (4) widgets; and (5) live wallpapers.
>
> **(1) The Home application is a currently accessible software application not listed in the Application Tray.**
>
> As discussed in Apple's opening brief, the Home application is a software application under all of the parties' proposed constructions. RPostHB at 102-103. Motorola argues that the Home application is a "system service," (presumably attempting to draw a parallel with its "core services" argument) but Motorola fails to define "system service" or cite any evidence explaining how one determines whether a program is a "system service." In fact, the citation to Dr. Madisetti's witness statement does not discuss, mention, or even implicate the concept of a "system service." *See* CPostHB at 196, *citing* **CX-2689C** [Madisetti DWS] at Q.378. Nor is the concept of a "system service" defined anywhere in the 333 Patent, any of the dictionaries Motorola cited, or any of the parties' proposed claim constructions. Indeed, Motorola does not even include any analysis based on the claim constructions actually proposed by the parties. Accordingly, this conclusory assertion by Motorola should be rejected.
>
> Next, Motorola argues that the Home application is not a software application because all software applications appear in the Application Tray and the Home application is absent. As discussed in Apple's opening brief and explained in Dr. Noble's testimony, this logic is circular because it is premised on the very conclusion that Motorola must ultimately prove to establish domestic industry—that all software applications appear in the Application Tray. RPostHB at 103; **RX-1289C.36** [Noble RWS] at Q.78.
>
> Further, Motorola argues that requiring the Home application—which renders the Application Tray—to be included in the application registry contradicts the language of Claim 12 because, according to Motorola, Claim 12 "distinguishes" the application registry from software applications. CPostHB at 196. To the contrary, Claim 12's only requirement is that the application registry comprise a list of "all software applications," and does not exclude the application registry itself from being a software application, so long as it lists itself.
>
> Finally, Motorola alleges that Home application is represented by a home icon in the Application Tray. As Dr. Noble observed, Motorola does not present any

evidence of such an icon from a real Droid 2 phone. **RX-1289C.36** [Noble RWS] at Q.79; *see also* RPostHB at 103. Instead, Motorola relies on a simulated screen image and instructions that, according to Motorola's own public-facing documents, may not reflect actual deployment of the Android software. **CX-1386** [Droid 2 User Guide] at MOTO-APPLE-0003987694 ("All screen shots in this guide are simulated"; "Instructions to perform tasks in this guide may change depending on the software version on your phone"). Motorola has offered no evidence that the image and instructions upon which it relies accurately reflect actual use on a Droid 2 phone.

There is no dispute that the Home application is a software program. It performs a specific task for a user: providing users with a centralized location from which to initiate certain applications. **RX-192.1** [Android Developer Guide - Home]; **RX-1266C.7** [Android Developer Guide - Activity and Task Design Guidelines] at MOTO-APPLE-0000369217; **RX-1289C.38** [Noble RWS] at Q.80. Thus, it meets the definition of "software application" under both parties' proposed constructions. Because the Home application is not listed in the Application Tray, Motorola has failed to show that the Droid 2 practices Claim 12 of the 333 Patent.

(2) The Live Wallpaper Picker application is a currently accessible software application not listed in the Application Tray.

Motorola summarily dismisses the Live Wallpaper Picker application, arguing only that Dr. Noble cited no documents that refer to the Live Wallpaper Picker as a software application. As discussed in Apple's opening brief, however, there can be no reasonable dispute that the Live Wallpaper Picker is software, or that it is a computer program. RPostHB at 104. Further, the Live Wallpaper Picker "performs a specific task for a user" by allowing a user to select and display different live wallpapers. **RX-1289C.42** [Noble RWS] at Q.82. This task is "for a user" in the same way that the Gallery application, which Motorola does *not* dispute is a software application, performs a specific task "for a user" by allowing a user to select and display different photos. Thus, the Live Wallpaper Picker is a software application under both parties' proposed constructions. As Dr. Noble testified, the Live Wallpaper Picker is not listed in the Application Tray. *Id.*

(3) Web applications are currently accessible software applications not listed in the Application Tray.

Motorola does not dispute that web applications are software applications, and that they are currently accessible to the Droid 2. *See* CPostHB at 197. Motorola argues only that web applications are "listed" in the Application Tray because they are "represented in the registry" by a "mother application" that launches the applications, in this case the web browser.[62] As discussed in Apple's opening

[62] Motorola's brief also raises an additional software application not previously discussed, the Ringtone Picker, and then dismisses it by the same "mother application" reasoning. For the

brief, Motorola's "mother application" argument—which appears nowhere in any of the parties' claim constructions or the 333 Patent itself—is a blatant attempt to carve new, unsupported exceptions out of Claim 12's requirement that the application registry list "all software applications" and should be rejected for the same reasons discussed previously. *See* RPostHB at 105-107; *supra* Section III.B.1. Having conceded that web applications are software applications that are currently accessible (and that interact with users), Motorola cannot salvage a domestic industry by rewriting the claim language.

Motorola's "mother application" argument is also absurd in light of statements by Google, which provides the Android software used on the Droid 2. Google's developer documents clearly state [

] **RX-1266C.8** [Android Developer Guide - Activity and Task Design Guidelines] at MOTO-APPLE-0000369218. Gallery and Messaging are both indisputably software applications under all proposed constructions, and yet under Motorola's "mother application" theory, Messaging could be excluded from the Application Tray without defeating Motorola's domestic industry case because Gallery can launch Messaging, which makes it the "mother application." [

]

(4) Widgets are currently accessible software applications that are not listed in the Application Tray.

Motorola argues in its brief that widgets are interfaces into existing applications, not separate applications. CPostHB at 198. This argument is flatly contradicted by Motorola's own user guide for the Droid 2, which explains that widgets are small applications. **CX-1386** [Droid 2 User Guide] at MOTO-APPLE-0003987701 ("A widget is small app on the home screen"). Notably, Motorola does apply any party's proposed construction of "software application." Widgets are software applications under every proposed construction in this Investigation because they are software programs that perform specific tasks for a user, such as displaying "weather, news, and social networking updates." *Id.*; RPostHB at 107. Unable to refute the clear evidence that widgets meet all of the parties' proposed constructions for "software application," Motorola resorts again to its "mother application" theory to claim that widgets are listed in the Application Tray. For the reasons discussed in the preceding section with respect to web applications, the "mother application" theory finds no support in the evidence of record and should be rejected.

---

same reasons stated in this section with respect to web applications, Motorola's arguments with respect to the Ringtone Picker application fail.

(5) Live wallpapers are currently accessible software applications that are not listed in the Application Tray.

Motorola argues that live wallpapers are not software applications because providing animated backgrounds is not a "specific task for a user." CPostHB at 197. As Google explains, however, live wallpapers provide rich, animated, interactive backgrounds for users' enjoyment. **RX-1288.1** [Android Developer Guide - Live Wallpapers] ("Starting with Android 2.1 (API Level 7), users can now enjoy *live wallpapers*") (italics in original); *see also* RPostHB at 110. There can be no reasonable dispute that computer programs that provide enjoyment or amusement for a user—games, for example—are "for a user." Motorola also argues that live wallpapers are merely services provided by existing applications, but as Dr. Noble explained, not all live wallpapers are associated with existing applications. **RX-1289C.46** [Noble RWS] at Q.88. The Galaxy and Water live wallpapers, for example, which are included on the Droid 2, are standalone programs. *Id.* For these reasons, live wallpapers are currently accessible software applications that are not listed in the Application Tray.

For all of these reasons, Motorola has failed to prove that the Droid 2 practices Claim 12 of the 333 Patent.

(RRB at 38-43.)

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application, update the application registry; and control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Apple argues:

As discussed in Apple's opening brief, Motorola has failed to demonstrate that the Droid 2 communicates ***any*** change to the fixed portion of the wireless communication system in response to a change in accessibility of an application.

(1) The Droid 2 Does Not Communicate with the Fixed Portion in Response to a Change in Accessibility of an Application.

As Dr. Madisetti admitted at the hearing, Claim 12 requires a cause/effect relationship between the change in accessibility of an application and the communication with the fixed portion of the wireless communication system. **Tr.** [Madisetti] at 1080:23-1081:7, 1084:15-20. [

]

As Apple noted in its opening brief, this is consistent with Dr. Madisetti's testimony. RPostHB at 112; **CX-2689C** [Madisetti DWS] at Q.386.

(2) The Droid 2 Does Not Communicate a Change in Accessibility to the Fixed Portion of the Wireless Communication System.

Additionally, the Droid 2 does not actually communicate any change information to the C2DM servers. As explained by Google, every registration intent sent to C2DM only contains the sender ID and the application ID. **CX-835** [Android Cloud to Device Messaging Framework] at MOTO-APPLE-0005383110_36079; *see also* CPostHB at 199 (arguing that registration intent "includes the sender ID and the application ID"). Motorola offers no evidence that the C2DM server can distinguish between a user registering an installed, but previously unregistered application (*i.e.*, no change in accessibility) versus a newly installed application being registered. Because the intent sent to the C3DM server is independent of, and does not reflect, whether a change in accessibility has occurred, the Droid 2 fails to meet this limitation of Claim 12, which requires that it "communicate the change in accessibility."

(RRB at 43-44.)

5. Findings

I find that Motorola has not proven by a preponderance of the evidence that the Droid 2 practices the '333 patent.

a. "wherein the processing system is programmed to: maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit; and

I have already decided that Motorola's allegations concerning "all software application that are currently accessible to the software unit" do not prove infringement by the Accused Apple Products. Because Motorola essentially makes the same kind of arguments on the technical prong for the Droid 2 that it made concerning alleged infringement by the Accused Apple Products there is no need to discuss whether the Droid 2 practices claim 12 at length. Thus, because the Droid 2 does not maintain an application registry comprising a list ***all*** available software applications that are currently accessible to the subscriber unit , including

those accessible externally over the web through the Droid 2's Browser, it cannot practice the literal language of claim 12 for the same reasons discussed in the section on infringement above.

As I have written before concerning the Accused Apple Products, *e.g.*, the use of Safari, I reject the concept that a browser icon (the mother application according to Motorola) can stand in proxy for (represent) the various software applications that are externally accessible on the application registry so a device can practice claim 12. Beyond the fact that there is no intrinsic reference to either "mother" or "daughter" software applications in the '333 patent, I find Motorola's argument to be contrived and situational. For example: (1) nothing stops the software applications available through the browser bridge from being currently available through the browser; (2) these externally available software applications almost always serve a different purpose than the browser; (3) the people creating these applications are very often different from those who created the browser and have different interests; and (4) the purpose of the application registry would not be advanced by Motorola's "mother application" contention because such a mode of operation would do nothing to control a delivery of data from the fixed portion of the wireless communication system (as required by claim 12) because the "daughter applications" would neither be registered on the subscriber unit (not in the App tray) nor registered on the fixed portion of the unit. This defeats the purpose of the invention. Accordingly, I find Dr. Madisetti's testimony to the contrary to be both unpersuasive and contradicted by logic and the intrinsic evidence of the '333 patent.

In addition to not meeting the limitations applying to the "all" term pertaining to applications accessible through a browser, I also agree with Apple's contentions concerning the

Home Screen, Wallpaper, Web Apps,[63] Widgets, and Live Wallpaper for the reasons stated in Apple's briefs and discussed in detail above. I find that Apple's witness testimony, especially of Dr. Noble (*see* RX-1289 generally), is: (1) logical and well-reasoned (2) consistent with the intrinsic evidence; and (3) supported by other evidence of record mentioned in Apple' briefs, such as the Android Developer Guide (RX-1266C); the Droid 2 User Guide (CX-1386); and the Android Developer Guide – Live Wallpapers (RX-1288). This support makes Dr. Noble's testimony credible and persuasive.

In addition, with regard to Widgets, I was not persuaded by Motorola's attempt to explain Dr. Madisetti's testimony on this point in its Reply Brief. (CRB at 103.) Consequently, as opposed to Motorola's contentions, Apple's position is well supported and strong. Apple's position is strong because there is no doubt evidence establishes the listed software applications are programs that accomplish a task that is desirable or useful to a user (Motorola's construction) and equally obvious these software applications are not in an application registry. Accordingly, the Droid 2 cannot practice claim 12 because Home Screen, Wallpaper, Web Apps, Widgets, and Live Wallpaper, all of which are also software applications are not listed in the Droid Application tray (the application registry).

Finally, I find the Droid 2 also does not meet the "maintain an application registry comprising a list of *all* software applications currently accessible to the subscriber unit" limitation under the doctrine of equivalents for the reasons discussed in the section on the doctrine of equivalents above.

---

[63] These kind of applications are also discussed in the preceding section of this opinion.

b. "wherein the processing system is programmed to: in response to a change in accessibility of an application ... control the transmitter to communicate the change to the fixed portion of the wireless communication system."

Motorola asserts the C2DM processing system of the Droid 2[

]

Apple views the issue differently and asserts Motorola has failed to demonstrate the Droid 2, in response to a change in the accessibility of an application, updates the application registry or communicates any change to the fixed portion of the wireless communications system in response to a change in accessibility of an application.

Motorola responds to Apple's argument concerning the fact that the Droid 2

[

] by asserting that Dr. Madisetti explained that one skilled in the art would understand that claim 12 requires a cause/effect relationship between the change in accessibility and the communications to the fixed portion as opposed to a temporal condition. (Tr. at 1080:23-1081:7.) Motorola then argues installation of an application is undeniably the but-for cause of the subsequent registration intent that is sent to the C2DM server, because without installation the registration would never be sent. (*See also* CX-2689C at Q/A 385, 386.)

I agree with Dr. Madisetti about what a person skilled in the art would understand. Although it is possible that the Droid 2 will not practice this limitation for every application, since some software applications would not have to be downloaded to be accessible (my

previous construction applicable to externally sourced software applications), and some software applications would not need push enablement, etc., the C2DM would certainly work in the matter Motorola describes for those that do require push enablement. Hence, at least part of the time, the Droid 2 will practice the relevant language for this reason alone.

Although arguably mooted by my finding, I disagree with Motorola's defense to Apple's allegation that "the Droid 2 does not actually *communicate a change in accessibility* to C2DM servers." (RIB at 112) More specifically, Motorola alleges Apple did not raise this argument in its Pre-Hearing Brief regarding Domestic Industry (*See* pages 84-90 of the Domestic Industry portion of the pre-hearing brief) and requests I exclude this argument pursuant to Ground Rule 9(vi). I read the core meaning and intent of Apple's brief on this point differently. Even though it is true that Apple was referring to Android Market network, rather than C2DM in its Pre-Hearing brief, it is also true that Apple alleged generally that Motorola presented no evidence that any communications from the Droid 2 to the wireless network take place "*in response to* a change in accessibility" of an application, as required by claim 12. (*Id.* at 88). Apple goes on with more than one page of explanation of what Motorola might say to contradict its point on pages 88-89. At one point Apple even argues that [

]

[ ]

Accordingly, I reject Motorola's attempt to exclude Apple's argument because it does not refer precisely to the C2DM, for the intent of Apple's point is clear and through time, both parties gained a more refined understanding of how the various products worked, especially the applicable network and thus Motorola suffered no prejudice occurred as evidenced by Dr. Madisetti's testimony. (*Id.*)

G. Validity

1. Apple's Invalidity Contention

a. Grube '831 – U.S. Patent 5,502,831

According to Apple, U.S. Patent 5,502,831 ("Grube '831") discloses an invention that detects unauthorized modifications of mobile devices in order to prevent a less scrupulous manufacturer from making such modifications. (RIB at 114.) Apple argues a person of ordinary skill in the art attempting to solve the problems described in the '333 patent would have looked to Grube '831 because it addresses similar technology, discloses similar solutions, and was assigned to Motorola. (*Id.*)

According to Apple, the only evidence Motorola presented on the issue of invalidity was Dr. Madisetti's rebuttal witness statement. (*Id.*) In this statement, Apple asserts Dr. Madisetti disputed whether this reference discloses the "controlling a delivery of data" limitation of the preamble of Claim 12 (*see* CX-2701C, Madisetti RWS at Q/A 157-162); the "processing system" limitation (under Apple's proposed construction) (*see Id.* Q/A 163); the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation (*see Id.* at Q.164); or the "communicate the change to the fixed portion of the wireless communication system" limitation, (*see Id.* at Q.165). Apple asserts Dr.

Madisetti did not dispute that the other limitations of Claim 12 were disclosed by Grube '831. (RIB at 115.)

b. DeLuca '737 – U.S. Patent No. 6,008,737

Apple argues U.S. Patent No. 6,008,737 ("DeLuca '737") discloses an invention that controls utilization of a process added to a portable communication device and prevents unauthorized use of software applications and hardware modules. (RIB at 115.) Apple argues DeLuca '682, the parent application to DeLuca '737, similarly discloses an invention that controls utilization of a process added to a portable communication device and prevents unauthorized use of software applications and hardware modules. (*See* RX-64.) Apple argues a person of ordinary skill in the art attempting to solve the problems described in the '333 patent would have looked to DeLuca '737 because it addresses similar technology, discloses similar solutions, and was assigned to Motorola. (*See e.g.*, RX-1285C, Noble DWS at Q/A 151-154 (opining on potential motivation to combine Grube '831 with DeLuca '682).)

Apple contends Dr. Madisetti disputes whether DeLuca '737 discloses the "controlling a delivery of data" limitation of the preamble of Claim 12 (*see* CX-2701C, Madisetti RWS at Q/A 172-73); or the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation (*see Id* at Q/A 174-75). However, Apple asserts Dr. Madisetti does not dispute that the other limitations of Claim 12 were disclosed by DeLuca '737. (RIB at 115.)

c. DeLuca '682 – U.S. Patent No. 5,612,682

Apple asserts U.S. Patent No. 5,612,682 ("DeLuca '682"), the parent application to DeLuca '737, similarly discloses an invention that controls utilization of a process added to a portable communication device and prevents unauthorized use of software applications and hardware modules. (*Id.*) Apple asserts a person of ordinary skill in the art attempting to solve

the problems described in the '333 patent would have looked to Grube '831 and DeLuca '682 because they address similar technology, disclose similar solutions, and were all assigned to Motorola. (*See e.g.*, RX-1285C, Noble DWS at Q/A 151-154 (opining on potential motivation to combine Grube '831 with DeLuca '682).)

Apple asserts Dr. Madisetti also disputes whether DeLuca '682 discloses the "controlling a delivery of data" limitation of the preamble of Claim 12 (*see* CX-2701, Madisetti RWS at Q/A 181-82); the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation (*see Id* at Q/A 183-84); or the "processing system" limitation (under Apple's proposed construction), (*see Id* at Q/A185). Apple contends Dr. Madisetti did not dispute that the other limitations of Claim 12 were disclosed by DeLuca '682. (RIB at 116.) Apple asserts at the hearing, Dr. Madisetti openly acknowledged that DeLuca '682 disclosed the receiver, the processing system, and transmitter of Claim 12 of the '333 patent. (Tr.at 2069:13-2070:3.) Apple contends Dr. Madisetti also admitted that DeLuca '682 addressed essentially the same problem as the '333 patent, disclosed the same wireless communication system, disclosed similar base stations and subscriber units, disclosed similar hardware for the controller, a similar process of authorizing software for use by the subscriber unit based on a list of authorized processes, and an embodiment where the fixed portion completely shuts down the pager if it is using unauthorized software. (Tr. at 2065:22-2069:12; 2073:1-2081:14; RDX-7.2, RDX-7.4, RDX-7.5.) Finally, Apple also argues Dr. Madisetti's testimony at the hearing applies equally to DeLuca 737, which largely shares the same specification. (RIB. At 116.)

d. Obviousness

Apple first notes that Dr. Madisetti denies the combination of Grube '831 and DeLuca '682 discloses the "controlling a delivery of data" limitation of the preamble (*see* CX-2701C,

Madisetti RWS at Q/A188); or the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation (*see Id.* at Q/A189), for essentially the same reasons that he asserts each reference fails to disclose those limitations separately. (RIB at 116.) Dr. Madisetti also opined that he did not believe it would have been obvious to combine Grube '831 with DeLuca 682 [because they solve different problems]. (*See id.*)

e. Discussion of Limitations

Although not discussing matters not in dispute, Apple argues Dr. Noble explained how the "controlling a delivery of data" limitation of the preamble of Claim 12, the "processing system" limitation, the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation, and the "communicate the change to the fixed portion of the wireless communication system" limitation are all met by the Grube '831 and DeLuca prior art references. (*Id.*)

(1) "controlling a delivery of data"

Apple argues the preamble to claim 12 provides, "a subscriber unit in a wireless communication system for controlling a delivery of data from a fixed portion of the wireless communication system," the prior art references cited above disclose this limitation under either party's constructions. (*Id.* at 117.) Apple asserts controlling a delivery of data is disclosed by all of the referenced patents because each of these patents are directed toward detecting and responding to unauthorized hardware or software modifications in mobile devices. (*Id.*) As Dr. Noble testified, Apple argues it was well-known to those of ordinary skill in the art that wireless service providers could respond to unauthorized modifications by suspending wireless service to the affected device, thereby controlling delivery of data to that device by preventing any delivery of data. (*Id.*) Apple argues Dr. Madisetti admitted with respect to DeLuca '682, that one of the

disclosed embodiments completely shuts down a pager that is using unauthorized software, such that it would no longer be able to receive data from the base station. (Tr.at 2079:17-2081:14.)

(2) "processing system"

With respect to the "processing system" limitation, Apple argues Dr. Noble explained at length how this limitation was disclosed by Grube '831, DeLuca '737, and DeLuca '682 under both parties' proposed constructions. (*See* RX-1285 at Q/A79-83 (Grube '831), 109-112 (DeLuca 737), 131-34 (DeLuca 682); RDX-15-32; RDX-15-33; RDX-15-48; RDX-15-49; RDX-15 at 50, 51, 69-72; *see also* RX-106, Grube '831, at 2:63-3:17; 4:35-38; JX-76, DeLuca 737 at 7:43-58; 10:2-38; 16:16-19; and Figure 3; and RX-64, DeLuca 682 at 7:30-44; 9:55-10:23; 15:28-31, and Figure 3.) (As noted above, Apple is no longer seeking a construction of "processing system … for processing data.") In addition, since Dr. Madisetti does not dispute that DeLuca '737 discloses this limitation under Apple's proposed construction (or under Motorola's construction for that matter), Apple argues the same should be true for DeLuca 682, since the two patents are related and largely share the same specification. (RIB at 118.)

(3) "application registry comprising a list of all software applications that are currently accessible to the subscriber unit"

As for the "maintain an application registry comprising a list of all software applications that are currently accessible to the subscriber unit" limitation, Apple argues Dr. Noble explained how this limitation was disclosed by Grube '831, DeLuca 737, and DeLuca 682 under both parties' proposed constructions. (*Id.*) Specifically, Apple argues Grube '831 discloses a list of application serial numbers used to generate an assembly code using "any type of mathematical operand." (*See* RX-106, Grube '831 at 4:15-16.) As Dr. Noble explained, Apple argues a person of ordinary skill would understand this to include a concatenation operation that would preserve the full list of unique serial numbers for each software application. (*See* RX-1285C at

Q/A 88-91; RDX-15 at 35-36; *see also* RX-106 at 3:5-17, 4:8-14, and 4:35-38.) Apple asserts DeLuca '737 and DeLuca '682, on the other hand, each expressly disclose a list of software authorization records, with each disclosure uniquely identifying all applications currently accessible on a subscriber unit. (*See* RX-1285C, Noble DWS at Q/A 115-18 (DeLuca 737), Q/A 137-49 (DeLuca 682); RDX-15 at 54-56, 75-77; *see also* JX-76 [DeLuca 737] at 7:55-63, 15:8-12, 16:52-54, 16:59-63, and Figure 2; and RX-64 at 7:42-50, 14:20-24, 18:16-18, and Figure 2.) As Dr. Noble explained, while the '333 patent issued over DeLuca 737, which was cited during prosecution, Apple asserts the Examiner did not apply the parties' proposed constructions, which require that a currently accessible application must be available for immediate use. (RX-1285C at Q/A 118.)

(4) "communicate the change to the fixed portion of the wireless communication system"

Finally, with respect to the "in response to a change in accessibility of an application, update the application registry, and control the transmitter to communicate the change to the fixed portion of the wireless communication system" limitation, Apple argues Dr. Noble testified that this limitation was disclosed by Grube '831, DeLuca '737, and DeLuca '682 under both parties' constructions. (RIB at 119.) As discussed above, Apple argues each of these references discloses an application registry. (*Id.*) Aple contends Motorola does not appear to dispute that the "update the application registry" limitation is met to the extent these references disclose an application registry to update. (*Id.*) In addition, Apple asserts Dr. Noble explained how each of these references discloses communicating the change in accessibility to the fixed portion of the wireless communication system. (*Id.*) Specifically, Apple argues Grube '831 discloses that if software changes are detected, the communication unit updates its assembly code, which may consist of a list of application serial numbers, and transmits the code in a message to the fixed

portion of the wireless communication system. (*See* RX-1285C,Noble DWS at Q/A 98-100; RDX-15 at 41; *see also* RX-106 Grube '831 at 4:7-17, 4:32-38, and 4:47-51.) Additionally, Apple argues DeLuca '737 and DeLuca '682 both disclose that when an unauthorized application is detected (such as after a user installs new software), the subscriber unit sends a signal to the fixed portion alerting the communication system that an unauthorized module is found and, if necessary, seeking authorization. (*See* RX-1285C at Q/A 122 and 144; RDX-15 at 62 and 81; *see also* JX-76 at 10:2-38 and 16:15-18, and RX-64 at 9:55-10:22 and 15:28-31.)

f. Secondary Considerations of Non-Obviousness

In addition, Apple asserts Dr. Noble explained why Motorola's alleged secondary considerations of non-obviousness were not persuasive because Motorola failed to show any nexus between the invention of Claim 12 and the products that Motorola asserts were commercially successful or the revenue derived from licensing Motorola's patent portfolios. (*See* RX-1285C at Q/A 155-158.)

2. Motorola's Invalidity Contentions

Motorola asserts that contrary to Dr. Noble's opinions, claim 12 is not invalid in light of the three references identified by Apple – U.S. Patent No. 5,502,831 (RX-0106) ("Grube '831"), U.S. Patent No. 6,008,737 (JX-076) ("DeLuca '737"), and U.S. Patent No. 5,612,682 (RX-0064) ("DeLuca '682"). (CIB at 187.) Motorola argues these three patents are owned by Motorola and they address the problem of authorizing applications or detecting unauthorized modifications in operating software. (*Id.*) Motorola asserts none of them relate to the problem addressed by the '333 patent – controlling a delivery of data to a subscriber unit. (*Id.*) Thus, Motorola argues none of them disclose all the steps in claim 12 of the '333 patent. (*Id.*)

a. DeLuca '737 and '682

Motorola asserts Dr. Noble contends that DeLuca '737 and '682 each anticipates, or in the

alternative, renders obvious claim 12. (RX-1285C at Q/A 103, 125.) Yet, Motorola argues the Patent Examiner allowed the '333 patent to issue over DeLuca '737 reference, which is a continuation-in-part of DeLuca '682. (*See* JX-007 at 81-82; Madisetti, Tr. at 2082:5-18.) Thus, Motorola contends the Patent Examiner considered the common disclosure of both references in allowing the '333 patent to issue, and there is no reason to reach a different result here. (*Impax Laboratories, Inc. v. Aventis Pharmaceuticals, Inc.*, 545 F.3d 1312, 1314 (Fed. Cir. 2008).) ("When the examiner considered the asserted prior art and basis for the validity challenge during patent prosecution, that burden becomes particularly heavy.")

Motorola argues both DeLuca patents are addressed to the problem of "controlling utilization of a process added to a portable communication device," in order to "prevent unauthorized use of software applications and hardware modules." (*See* JX-076 at 1:14-15, 1:41-43.) Motorola contends they do not address the problem set forth in the '333 patent, and therefore they do not disclose at least two elements in claim 12 under either party's claim constructions – (i) an application registry comprising a list of all currently accessible software applications, and (ii) a subscriber unit … for controlling a delivery of data from the fixed portion of the wireless communication system. (CIB at 188.)

(1) An Application Registry Comprising a List of All Currently Accessible Software Applications

Motorola argues, as Dr. Madisetti testified, the DeLuca references do not disclose an application registry comprising a list of all currently accessible software applications. (CX-2701C at Q/A 174, 183.) Instead and contrary to Dr. Noble's opinion, Motorola argues the DeLuca references clearly contemplate that authorization records will not exist for all software applications currently accessible to the subscriber unit. (CIB at 188-189.) For example, Motorola argues, in the Background section, the DeLuca references explain that the invention

disclosed therein provides a way to register and control the use of "more sophisticated functions" such as email services, spread sheet applications, and stock market charts. (Madisetti, Tr. at 2083:19-2085:1; JX-076 at 1:22-33.) Motorola asserts the DeLuca references do not contemplate that simpler functions, such as to-do lists or a calculator application, would require authorization. As a result, authorization records would not exist for these simpler functions, as Dr. Madisetti explained at the hearing. (Tr. at 2083:19-2085:1.)

Additionally, Motorola asserts the DeLuca references specifically disclose an option where a recently-added software module is "immediately executed without initial authorization." (JX-0076 at 15:5-9, Fig. 7 (step 610); Madisetti, Tr. at 2085:2-2086:6, 2086:21-2087:7.) In this case, Motorola argues no authorization record will exist for this currently accessible application, and therefore the list of authorization records does not comprise an application registry of all currently accessible software applications. (Madisetti, Tr. at 2085:2-2086:6, 2086:21-2087:7.) Indeed, Motorola contends the DeLuca references explain that the ability to immediately execute an application is an important advantage of the invention:

> Another advantage of the present invention is the option for the system provider to program the portable communication device 122 to execute a hardware or software process without receiving immediate authorization. This option provides a user immediate access to a hardware or software process without burdening the user with the delay of receiving authorization for the process.

(JX-076 at 16:35-42.) Thus, Motorola argues the list of authorization records in the DeLuca references does not constitute an application registry with a list of all currently accessible software applications. (CIB at 189.)

(2) A Subscriber Unit For Controlling a Delivery of Data From the Fixed Portion

Motorola asserts the DeLuca references also do not disclose a subscriber unit for controlling a delivery of data from the fixed portion of the wireless communication system.

(CX-2701C, Madisetti RWS at Q/A 172, 181.) Motorola argues that Dr. Noble contends that the DeLuca references disclose "an apparatus for denying process execution on a subscriber unit; in other words, preventing a subscriber unit from running particular applications or disabling a device all together." (RX-1285C, Noble DWS at Q/A 129.) However, Motorola argues this argument fails for several reasons. (CIB at 190.) First, Motorola contends disabling a device or preventing use of an application is not the same as controlling a delivery of data, as Dr. Madisetti explained. (CX-2701C at Q/A 182.) Indeed, Motorola asserts the '333 patent describes disabling an application as a "predetermined action," not as controlling a delivery of data. (*Id.*; JX-002 at 5:15-18, claims 1 and 5.) Moreover, Motorola argues, in the DeLuca references, the act of disabling an application only occurs when an application is not currently accessible. (JX-0076 at Fig. 7 (steps 632 and 640).) Similarly, Motorola contends that when the DeLuca references request authorization to use a software process, the subscriber unit does not yet know whether the application will (or will not) be authorized for use. (*Id.* at Fig. 7 (step 614).) By contrast, Motorola contends, in the '333 patent, the subscriber unit facilitates the control of a delivery of data from the fixed portion by communicating a change in accessibility of an application. (CIB at 190.) Thus, the subscriber units in DeLuca do not enable controlling a delivery of data from the fixed portion of the network. (CIB at 190.)

b. Grube '831

For reasons similar to the DeLuca patents, Motorola argues Grube '831 does not anticipate or render obvious claim 12 under either party's claim constructions. (CX-2701C, Madisetti RWS at Q/A 156.) Motorola asserts Grube '831 relates to detecting unauthorized modifications on a communication unit; not controlling a delivery of data to a subscriber unit. (RX-0106 at 1:13-14, 2:20-24.) As a result, like the DeLuca references, Motorola argues Grube '831 does not disclose at least two elements of claim 12 – (i) an application registry comprising a

list of all currently accessible software applications, and (ii) a subscriber unit … for controlling a delivery of data from the fixed portion of the wireless communication system. (CIB at 190-191.)

Application registry: In his direct witness statements, Motorola argues Dr. Noble contends that Grube '831 discloses an application registry because it discloses that "serial numbers of the software programs are used to make up the communication unit's software identification code." (RX-0106 at 3:9-11.) Motorola contends this position should be rejected. (CIB at 191.) As an initial matter, Motorola argues Grube '831 never identifies the "software programs" as "software applications." (*Id.*) Indeed, Motorola contends Grube '831 states that the "software programs …. may be the algorithms needed to perform system features, such as talk group requests, interconnect calling, a private trunking, and data transmissions," which are system programs, not software applications. (*Id.* at 3:1-4.) Moreover, Motorola asserts Grube '831 never states that "the software programs" include "all software programs" on the communication unit. (CIB at 191.) As with the DeLuca references, Motorola contends Grube '831 only contemplates that software that is "patented and/or copyrighted" would be checked for unauthorized modifications, not all software on the device. (*Id.* at 2:20-24.) Thus, Motorola argues Grube '831 does not disclose a registry of all currently accessible software applications. (CX-2701C, Madisetti RWS at Q/A 164.)

Subscriber unit for controlling a delivery of data: Additionally, Motorola asserts that Grube '831 does not disclose a subscriber unit for controlling a delivery of data from the fixed portion of the wireless communication network. (*Id.* at Q/A 157.) While Dr. Noble contends that Grube '831 anticipates claim 12, Motorola argues he admitted at deposition that Grube '831 does not disclose this step. (*Id.* at Q/A 159.) Instead, in Grube '831, Motorola argues the database unit merely generates a report upon finding an unauthorized modification, it does not

disable the device or the unauthorized application. (RX-106 at Fig. 2 (step 208 "generate report").) Moreover, Motorola argues it would not have been obvious to modify Grube '831 to disable a device or an unauthorized application, because Grube '831 is not addressed to the same problem as the '333 patent. (CX-2701C at Q/A 161.) Finally, Motorola contends, even assuming it would have been obvious to modify Grube '831, this references still does not invalidate claim 12, because disabling a device or an application is not the same as controlling a delivery of data, for the same reasons discussed above with respect to the DeLuca references. (*Id.* at Q/A 162.)

c. Grube '831 and DeLuca '682

Motorola argues Dr. Noble's contention that the combination of Grube '831 and DeLuca '682 renders claim 12 obvious fails for several reasons. (CIB at 192.) First, Motorola asserts these references do not disclose all of the elements of claim 12, as discussed in the preceding sections. (*Id.*) Where, as here, an obviousness combination does not disclose all of the claim elements, Motorola argues Apple has failed to sustain its burden that claim 12 is invalid. (*Vizio, Inc. v. International Trade Comm'n*, 605 F.3d 1330, 1342–43 (Fed. Cir. 2010)) (affirming Commission determination of nonobviousness given that not all limitations were disclosed in the prior art combinations proposed). As discussed above, Motorola asserts Grube '831 and DeLuca '682 do not disclose at least two elements in claim 12 – (i) an application registry comprising a list of all currently accessible software applications, and (ii) a subscriber unit … for controlling a delivery of data from the fixed portion of the wireless communication system. (CIB at 192.) Thus, Motorola argues claim 12 is not rendered obvious by this combination. (*Id.*)

Motorola argues Dr. Noble also failed to identify any reason why Grube '831 and DeLuca '682 should be applied to the problem disclosed in the '333 patent – controlling a delivery of data to a subscriber unit. (*Id.*) Motorola asserts these patents are directed to the

entirely different problem of authorizing applications and detecting unauthorized modifications and Dr. Noble has failed to provide any details as to why these references could be combined with any reasonable expectation of success by one of ordinary skill in the art. (*Id.*) Motorola also argues that since Dr. Noble was not one of ordinary skill in the art at the time of the '333 invention his opinions should be given little weight. (CIB at 193.) Specifically, Motorola argues the sum total of his industry experience in 1998 was limited to the three months that he worked at Motorola. (Noble, Tr. at 1521:4-9, 1522:4-8; *Flex-Rest, LLC v. Steelcase, Inc.*, 455 F.3d 1351, 1360 (Fed. Cir. 2006) (holding trial court properly excluded testimony of expert who was "not one of ordinary skill in the art at the time of the invention")); (*Phillips*, 415 F.3d at 1318 ("Third, extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence. The effect of that bias can be exacerbated if the expert is not one of skill in the relevant art …").)

Finally, Motorola contends Dr. Noble's obviousness opinion fails in light of strong secondary considerations of non-obviousness, such as licensing of the '333 patent and the commercial success of products that practice the patent. (*See U.S. Surgical Corp. v. Ethicon Inc.*, 103 F.3d 1554, 1563 (Fed. Cir. 1997).) As noted by Dr. Madisetti, Motorola argues other witnesses for Motorola testified as to the extensive licensing of the '333 patent, and the commercial success of the Droid 2, which practices claim 12 of the patent. (*See* CX-2690C, Mulhern DWS at Q/A 97-139; CX-2688C, Le Cannellier DWS at Q/A 88-94; CX-2701C, Madisetti RWS at Q/A 191.)

3. Motorola's Invalidity Contentions on Reply

Motorola argues Claim 12 of the '333 patent is valid over the three references identified by Apple – U.S. Patent No. 5,502,831 (RX-0106) ("Grube '831"), U.S. Patent No. 6,008,737 (JX-076) ("DeLuca '737"), and U.S. Patent No. 5,612,682 (RX-0064) ("DeLuca '682"). (CRB at

96.) As Motorola previously argued, Motorola contends the cited references are all Motorola patents and they do not address the problem of controlling a delivery of data to a subscriber unit. (*Id.*) Motorola reiterates the cited references do not disclose at least two critical elements of claim 12 – (i) an application registry comprising a list of all currently accessible software applications, and (ii) a subscriber unit for controlling a delivery of data from the fixed portion of the wireless communication system. (*Id.*)

Motorola asserts that as noted by Apple, Dr. Madisetti testified that the '333 and '682 patents relate to more sophisticated applications on subscriber units. (Tr. at 2065:17-2066:10.) But, Motorola argues Dr. Madisetti also testified the DeLuca references relate to "'controlling utilization of a process added to a portable communication device, not controlling the delivery of data to a subscriber unit.'" (CX-2701C, Madisetti RWS at Q/A 175, 181.)

Motorola asserts that Apple argues that "the only evidence Motorola presented on the issue of invalidity was Dr. Madisetti's rebuttal witness statement." (RIB at 114.) Nevertheless, Motorola contends Dr. Madisetti testified at length regarding his opinions that claim 12 is valid in light of the cited references. (Tr. at 2065:3-2088:11.) Motorola asserts that at the hearing Dr. Madisetti explained in detail why the DeLuca references do not disclose an application registry of all currently accessible software applications. (*Id.* at 2083:19-2088:11.) Motorola contends this means there is substantial evidence that claim 12 is valid in light of the cited references, as explained further below and in Motorola's Post-Hearing Brief. (CRB at 97.) Moreover, Motorola argues Apple did not cross examine Dr. Madisetti at the hearing regarding his testimony that the claim 12 is valid in light of Grube '831, or the combination of Grube '831 and DeLuca '682. (CIB at 187-193.)

a. DeLuca '737 and DeLuca '682

Motorola argues the common disclosure in the DeLuca patents was expressly considered

by the Patent Office during prosecution of the '333 patent (*see* JX-007 at 81-82; Madisetti, Tr. at 2082:5-18; ZJX-076 at 1:14-15, 1:41-43) (RIB at 188). Motorola contends this means Apple faces an "especially difficult" burden in attempting to invalidate claim 12 using these references. (*Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1467 (Fed. Cir. 1990).) Unlike the '333 patent, which addresses the problem of controlling a delivery of data to a subscriber unit (JX-002 at 1:8-10), Motorola contends the DeLuca patents are addressed to the problem of "controlling utilization of a process added to a portable communication device," in order to "prevent unauthorized use of software applications and hardware modules." (*See* JX-076 at 1:14-15, 1:41-43.) Hence, Motorola argues the DeLuca patents do not disclose at least two elements of claim 12 under either party's claim constructions – (i) an application registry comprising a list of all currently accessible software applications, and (ii) a subscriber unit … for controlling a delivery of data from the fixed portion of the wireless communication system. (CRB at 97-98.)

Application registry: Motorola argues the DeLuca references do not disclose an application registry comprising a list of all currently accessible software applications. (CX-2701C, Madisetti RWS at Q/A 174, 183.) As Dr. Madisetti explained at the hearing, Motorola argues, in the Background section, the DeLuca references explain that the invention disclosed therein provides a way to register and control the use of "more sophisticated functions" such as email services, spread sheet applications, and stock market charts. (Tr. at 2083:19-2085:1; JX-076 at 1:22-33.) As Dr. Madisetti testified, Motorola asserts the DeLuca references do not contemplate that authorization records would be created for simpler functions, such as a to-do list or a calculator application. (Tr. at 2083:19-2085:1.) Motorola contends this means the authorization records in the DeLuca references do not comprise a list of all currently accessible

software applications. (CRB at 98.) Also, Motorola argues the DeLuca references specifically disclose an option where a recently-added software module is "immediately executed without initial authorization," which is an important advantage of the invention. (JX-0076 at 15:5-9, 16:35-42, Fig. 7 (step 610); Madisetti, Tr. at 2085:2-2086:6, 2086:21-2087:7.) When an application is immediately executed as disclosed in the DeLuca references, Motorola argues no authorization record will be created for that application, and therefore the authorization records will not comprise a list of all currently accessible software applications. (*Id*, Tr. at 2085:2-2086:6, 2086:21-2087:7.)

Motorola contends, in a footnote, Apple argues that while the '333 patent issued over DeLuca '737, "the Examiner did not apply the parties' proposed constructions, which require that a currently accessible application must be available for immediate use." (RIB at 118 FN 28.) Regardless, during prosecution of the '333 patent, Motorola asserts the Patent Examiner was obligated to give claim 12 its "broadest reasonable construction 'in light of the specification as it would be interpreted by one of ordinary skill in the art.'" (*Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (citation omitted).) Motorola argues the broadest reasonable interpretation of claim 12 would at least include the requirement that a currently accessible application be available for immediate use. (CRB at 99.) Thus, contrary to Apple, Motorola contends it is simply irrelevant that the parties' proposed constructions were not before the Patent Examiner, and Apple's argument in no way detracts from the significance of the Examiner's decision to allow the '333 patent in light of DeLuca '737. (JX-002, claim 12.)

Subscriber unit for controlling a delivery of data: Motorola argues the DeLuca references also do not disclose a subscriber unit for controlling a delivery of data from the fixed portion of the wireless communication system. (CX-2701C, Madisetti RWS at Q/A 172, 181.)

As Dr. Madisetti testified, Motorola asserts, disabling a device or preventing use of an application is not the same as controlling a delivery of data, and the '333 patent describes disabling an application as a "predetermined action," not as controlling a delivery of data. (CX-2701C, at Q/A 182; JX-002 at 5:15-18, claims 1 and 5.)

Motorola asserts Apple did not cross-examine Dr. Madisetti regarding this testimony, or address it in its Opening Post-Hearing Brief. (CRB at 99.) Moreover, in the DeLuca references, Motorola contends the act of disabling an application only occurs when an application is not currently accessible. (JX-0076 at Fig. 7 (steps 632 and 640).) Similarly, when the DeLuca references request authorization to use a software process, Motorola argues the subscriber unit does not yet know whether the application will (or will not) be authorized for use. (*Id.* at Fig. 7 (step 614).) By contrast, in the '333 patent, Motorola argues the subscriber unit facilitates the control of a delivery of data from the fixed portion by communicating a change in accessibility of an application. (CRB at 99.)

b. Grube '831

Motorola asserts, at the hearing, Apple did not cross examine Dr. Madisetti concerning Grube '831, which relates to the detection of unauthorized modifications on a communication unit. (RX-0106 at 1:13-14, 2:20-24.) Motorola argues Grube '831 does not relate to the problem of controlling a delivery of data to a subscriber unit, as Dr. Noble admitted at his deposition. (CX-2701C, Madisetti RWS at Q/A 159.) As a result, Motorola contends Grube '831 does not disclose at least two elements of claim 12 – (i) an "application registry" comprising a list of all currently accessible software applications, and (ii) a "subscriber unit … for controlling a delivery of data from the fixed portion of the wireless communication system." (CRB at 100.)

Application registry: Motorola argures Grube '831 contemplates that software that is "patented and/or copyrighted" would be checked for unauthorized modifications, not all software

on the device. (*See* RX-0106 at 2:20-24.) Indeed, Motorola argues it would be unduly burdensome and undesirable to check for unauthorized modifications for all software applications on a device, including simpler functions like a to-do list or calculator application. (*See, e.g.*, Madisetti, Tr. at 2083:19-2085:1.) Motorola contends Grube '831 never discloses that "all" software programs are checked for authorized modifications. (CX-2701C, Madisetti RWS at Q/A 164.) As a result, Motorola argues the "software identification code" in Grube '831 does not comprise an application registry because it does not include all the software applications on the communication unit. (CRB at 100.) Moreover, Motorola argues Grube '831 describes the "software programs" as system programs such as "the algorithms needed to perform system features, such as talk group requests, interconnect calling, a private trunking, and data transmissions." (*See* RX-0106 at 3:1-5.) Under Motorola's proposed construction, Motorola asserts these system programs are not "software applications," and therefore Grube '831 does not invalidate claim 12 for this additional reason. (CRB at 100.)

Subscriber unit for controlling a delivery of data: Motorola argues in Grube '831, the database unit generates a report upon finding an unauthorized modification; it does not disable the device or the unauthorized application. (*Id.* at Fig. 2 (step 208 "generate report").) As a result, Motorola contends Grube '831 does not disclose a subscriber unit for controlling a delivery of data from the fixed portion of the network. (CRB at 101.) Motorola argues apple suggests that the "prior art references cited above [including Grube '831] disclose this limitation" (RIB at 117), but Dr. Noble admitted at his deposition that Grube '831 does not disclose this step. (CX-2701C, Madisetti RWS at Q/A 159.) Moreover, Motorola argues it would not have been obvious to modify Grube '831 to disable a device or an unauthorized application, because Grube '831 is not addressed to the same problem as the '333 patent. (CX-

2701C at Q/A 161.) Finally, even if Grube '831 was modified in this regard, Motorola contends it would not invalidate claim 12, because disabling a device or an application is not the same as controlling a delivery of data, as Dr. Madisetti testified. (*Id.* at Q/A 162.)

c. Grube '831 and DeLuca '682

As discussed above, Motorola argues Grube '831 and DeLuca '682 do not disclose at least two elements of claim 12, and therefore the combination of these references cannot render claim 12 obvious. (*See* CIB at 192; *Vizio, Inc. v. International Trade Comm'n*, 605 F.3d 1330, 1342–43 (Fed. Cir. 2010) (affirming Commission determination of nonobviousness given that not all limitations were disclosed in the prior art combinations proposed).) Moreover, as noted by Dr. Madisetti, Motorola argues it would not have been obvious to apply these references to the problem addressed by the '333 patent (controlling a delivery of data to the subscriber unit). (CIB at 192-193.) And Motorola asserts Dr. Noble has not provided any details as to why these references could be combined with any reasonable expectation of success by one of ordinary skill in the art. (CRB at 101.) Finally, Motorola contends Dr. Noble's obviousness opinion fails in light of strong secondary considerations of non-obviousness, such as licensing of the '333 patent and the commercial success of products that practice the patent. (*Id.* at p. 193.)

4. Findings

a. Anticipation

It is interesting that Apple seemingly forgets that the single biggest reason for why there is no infringement or technical prong to domestic industry is because claim 12 uses the word "all." Specifically, the use of the word "all" is also the most significant reason why the Grube '831, the DeLuca '737, or DeLuca '682 patents cannot anticipate clam 12.

In addition, I note that partially obscured in the briefing by both parties is the proper construction of claim 12, which Motorola almost dodges when it argues "the broadest reasonable

interpretation of claim 12 would at least include the requirement that a currently accessible application be available for immediate use." (*See* CRB at 98-99.) While not per se incorrect, there is nothing "at least" about this language. Instead, as I have construed claim 12, it clearly mandates the processing system maintain an application registry comprising "*a list of all software applications that are currently accessible to the subscriber unit, whether located on the subscriber unit or externally*." Plainly, if the software applications were not available for current access, the language would be contradicted or have no meaning. That being true, Motorola's point is made—the Examiner knew that current accessibility for all software applications on the registry was a requirement of claim 12 when he allowed the '333 patent and so whatever a proposed construction may have been (by either party) is irrelevant.

(1) Grube '831

Grube '831 contemplates checking only patented or copyrighted software for modifications, not all software applications. This means the registry in Grube '831 cannot include "all software applications" as required by claim 12. (CX2701 at Q/A 164.) Thus, I reject Dr. Noble's opinion to the contrary (RX1258C at 96), for his opinion relies upon an incorrect definition of the term software applications found in claim 12 and upon an incorrect premise that the "all software applications" in claim 12 somehow applies to only patented and copyrighted software, some of which are systems programs.

Apple correctly argues Grube '831 is an invention that detects unauthorized modifications of mobile devices and prevents dishonest manufacturers from making such modifications. (RX-106.) Motorola casts the issue in more relevant detail and more correctly asserts the real point of Grube '831 is to detect unauthorized modifications (of patented or copyrighted software) on a communication unit, not to control delivery of data to a subscriber unit. (*See* RX-0106 at 1:13-14, 2:20-24.) As Dr. Madisetti convincingly opines, generating a

report based upon unauthorized modifications is not controlling the delivery of data. (CX-2701C at Q/A 158.) Hence, there is credible expert testimony that at least one critical requirement or limitation of claim 12 cannot be anticipated by Grube '831 and accordingly Apple cannot sustain its burden on that point. Likewise, it would not have been obvious to one of ordinary skill in the art to modify Grube '831 to control delivery of data to a communications unit as set forth in claim 12 because Grube '831 does not disclose controlling a delivery of data from a fixed portion of the wireless communication system. (CX-2701C at Q/A 156-162.)

(2) DeLuca '737 and '682

Apple correctly asserts DeLuca '737 and its parent application, DeLuca '682, disclose an invention that controls utilization of a process added to a portable communication device and prevents unauthorized use[64] of software applications and hardware modules. (*See, e.g.*, JX-76 at 1:1-44.) Hence, Apple contends both DeLuca patents anticipates claim 12. (RX-1285 at Q/A 103, 125.)

Motorola accurately states the Patent Examiner allowed the '333 patent over the DeLuca '737 reference. (JX-02 at 2, list of references and JX-007 at 81-82; Madisetti, Tr. at 2082:5-18.) Thus, to reach a different result, Apple will have to sustain a particularly heavy burden. *See, e.g., Impax Laboratories, Inc. v. Aventis Pharmaceuticals, Inc.*, 545 F.3d 1312, 1314 (Fed. Cir. 2008).

Motorola argues the same major limitation applicable to Grube '831 likewise applies to the DeLuca patents. Specifically, Dr. Madisetti cogently explains the DeLuca patents do not disclose an application registry comprising a list of all currently accessible software applications and thus cannot disclose that element of claim 12. (CX-2701 at Q/A 174, 183, and 184.) As

---

[64] The patent uses the term "pirated." RX-64 at 1:33.

Dr. Madisetti explains, while the DeLuca '737 patent does disclose authorization records for processes to be used on the portable communications device, the reference does not disclose that these records identify all of the applications on the communications device available for current use, a requirement of claim 12. Dr. Madisetti also asserts that the automatic execution embodiment of certain software in the DeLuca '682 patent is inconsistent with creating authorization records of all applications that are currently accessible on the device. (*Id* at 183.) Moreover, the lack of an application registry in the DeLuca patents is consistent with the fact that neither DeLuca '737 nor DeLuca '682 patents are focused on controlling the delivery of data from a fixed portion of the wireless communications system. Hence, there is no need for a registry or a list of software applications that can be downloaded onto the device. (*Id.* at 183.)

Dr. Madisetti also states that DeLuca '737 and DeLuca '682 also do not disclose a processing system coupled to the receiver for processing the data. (CX-2701 at Q/A 174 and 183; *see also* Q/A 172, 173, 175, 177-183.) Moreover, as Dr. Madisetti correctly explains, controlling a delivery of data is different from preventing use (what the DeLuca patents teach), which is described in the '333 patent as a "predetermined action," not controlling a delivery of data. (CX-2701 at Q/A 182; JX-002 at 5:15-18.) Accordingly, the subscriber units in DeLuca do not enable controlling delivery of data from fixed portion of the network and thus there would be no reason they could anticipate claim 12.

Apple's anticipation proof and analysis is unconvincing. I do not find, by even the preponderance of the evidence, let alone clear and convincing evidence, that the '333 patent is invalid as anticipated.

b. Obviousness

In discussing why claim 12 is not anticipated, I have already found that Grube '831 and DeLuca '682 do not disclose two elements (limitations) of claim 12.[65] These are (1) an application registry comprising a list of all currently accessible software applications and (2) a subscriber unit in the wireless communication system for controlling delivery of data from a fixed portion of the wireless communication system. Grube '831 does not disclose controlling a delivery of data from a fixed portion of the wireless communication system. (CX-2701C at Q/A 156-162.) I agree with Dr. Madisetti's expert assessment that it would not have been obvious to one of ordinary skill in the art to modify Grube '831 to control delivery of data to a communications unit as set forth in claim 12. Since both of these references, taken together, do not disclose all the elements of claim 12, Motorola correctly argues Apple has failed to sustain its argument that claim 12 is invalid. (*Vizio, Inc., International Trade Com'n*, 605 F.3d 1330, 1342-43 (Fed. Cir. 2010).)

Dr. Noble testified a person of ordinary skill in the art attempting to solve the problems discussed in the '333 patent would have looked to DeLuca '737 because of its similarities. (RX-1285C, Q/A 151-154 (addressing combining Grube '831 with DeLuca '682).)

When asked about obviousness, Dr. Madisetti reiterated that:

1. The Grube '831 patent and the DeLuca '682 patent solve substantially different problems than the '333 patent, that is detecting unauthorized modifications to software verses controlling delivery of data to the subscriber unit;

---

[65] Dr. Madisetti finds the DeLuca '682 patent does not disclose several elements of claim 12 for the same reasons that the DeLuca '737 patent does not. (CX-2701at Q/A 180.)

2. Dr. Noble did not explain why there would have been an expectation that the Grube '831 and DeLuca '682 references could be combined with any reasonable expectation of success.

Based upon these two factors and the fact that two elements in claim 12 were not met by Grube '831 and DeLuca '682 in combination, I find it would not have been obvious to one of ordinary skill in the art to combine DeLuca '682 and Grube '831 to solve the problem addressed by the '333 patent of controlling delivery of data to the subscriber unit. (CX-2701 at Q/A 191.) Additionally, I find: (1) there is no basis for Dr. Noble's opinion that the prior art references could be combined; and (2) the intrinsic evidence (already discussed at length under anticipation) clearly establishes the problems the '333 patent was invented to solve are very disparate from the prior art reflected in Grube '831 or DeLuca '682. Specifically, I find there is no rationale or motivation to combine the teachings of Grube '831 with the teachings of DeLuca '682 and '737. In consideration of the foregoing, I conclude, Apple has fallen far short of meeting its burden of proof that claim 12 of the '333 patent is invalid due to obviousness by clear and convincing evidence. Rather, I agree with Dr. Madisetti that a person of ordinary skill in the art would not be able to implement a predictable variation of claim 12 of the '333 patent from Grube '831 and DeLuca '682. Therefore, I find claim 12 is not obvious in light of the prior art references.

Because I have found that Apple has failed to make a *prima facie* showing of obviousness, it is unnecessary to examine the alleged evidence of secondary considerations. Assuming *arguendo* that Apple had offered a prima facie showing of obviousness, I find that the alleged secondary considerations would not be sufficient to overcome such a showing.

Motorola argues the '333 patent has been widely licensed and products that practice the patent have been commercially successful. Specifically, Motorola argues the Droid 2 practices

claim 12 of the patent and has been commercially successful. (*See* CX-2690C, Mulhern DWS at Q/A 97-139.); (CX-2688C, Le Cannellier DWS at Q/A 88-94.) (CX-2701C, Madisetti RWS at Q/A 191.) However, as previously stated, I find the Droid 2 does not practice claim 12. Therefore, Motorola's arguments fail to show a nexus between the merits of the claimed invention to give the evidence substantial weight. *See Simmons Fastener Corp. v. Illinois Tool Works, Inc.,* 739 F.2d 1573, 1575 (Fed. Cir. 1984).

Based on the foregoing, I find that Apple failed to offer clear and convincing evidence that claim 12 of the '333 patent is obvious in view of Grube '831 combined with DeLuca '682 and '737.

IX. Domestic Industry

A. Motorola's Allegations

1. Generally

Motorola declares it has shown that a domestic industry exists under 19 U.S.C. § 1337(a)(2)-(3) for all of its asserted patents and articles protected by the asserted patents, that is, wireless communication devices, portable music and data processing devices, computers and components thereof, by virtue of Motorola's: (a) significant investment in plant and equipment; (b) significant employment of labor or capital; and (c) substantial investment in the exploitation of the asserted patents, including engineering, research and development, and licensing. (CIB at 200.) Motorola contends it is undisputed that it and its predecessor Motorola, Inc. are and always have been based in the United States. (*Id.*) Motorola contends it sells and distributes smartphones throughout the United States, including the Droid, Droid 2, Droid X, Cliq and Cliq XT (the "domestic industry products"). (*Id.*) Motorola alleges manufacturing of these products is completed in the United States, as is virtually all development, design, and prototype manufacturing. (*Id.*) Motorola contends it also maintains a substantial licensing

program based in the United States that licenses the asserted patents. (*Id.*) Motorola asserts all major mobile phone sellers in the United States have entered licenses with MMI except for Apple. (*Id.*) Motorola contends the factors set forth in *Certain Multimedia Display and Navigation Devices and Systems, Components Thereof, and Products Containing Same* (*Multimedia Display*), Inv. No. 337-TA-694 (Jul. 22, 2011) and the evidence in this investigation demonstrate conclusively that MMI maintains a domestic industry for each of the asserted patents. (*Id.*)

Motorola argues that Apple's criticism of its evidence under the economic prong is that it has failed to make a sufficient showing that its domestic investments can be allocated or attributed to the domestic industry products or patents. (*Id.* at 201.) Motorola states it is not required to make such a precise accounting. (*Id.*) (*See Stringed Musical Instruments*, Inv. No. 337-TA-586, Comm'n Op. at 26 (December, 2009) ("A precise accounting is not necessary, as most people do not document their daily affairs in contemplation of possible litigation.").) Moreover, Motorola contends, to the extent mathematical allocation of its investments assists in establishing a domestic industry, those investments can be appropriately allocated to the domestic industry products using the percentage of its sales revenues attributable to the domestic industry products, which it has calculated for this investigation. (*Id.* at 202.) (*Certain Laminated Floor Panels*, Inv. No. 337-TA-545, Initial Determination (non-reviewed), 2006 WL 814350, at **2-3 (Mar. 2, 2006)) (granting summary determination with respect to the economic prong where complainant used sales revenue to allocate expenditures on the domestic industry products from total employment expenses).

2. Motorola Argues It Has Significant Domestic Investments in Plant and Equipment and Significant Domestic Employment of Labor and Capital Relating to Articles Protected by the Asserted Patents

Motorola alleges the evidence establishes it has significant domestic: (1) investments in plant and equipment; and (2) employment of labor and capital that both relate to the domestic industry products, Motorola asserts evidence of its domestic activities is not reasonably in dispute and notes Apple waived cross examination of Motorola's fact witnesses who provided testimony relating to Sections 337(a)(3)(A) and (B), as well as of its expert Carla Mulhern. (*Id.* at 202-203.)

Additionally, Motorola reiterates its allegation that its Cliq, Cliq XT, Droid, Droid 2 and Droid X products (the "domestic industry products") are articles protected by the asserted patents. (*Id.* at 203.) Motorola asserts these products reflect a significant portion of its business, both in absolute numbers and as a relative matter. (*Id.*) As illustrated in a demonstrative exhibit prepared by Ms. Mulhern, Motorola claims that [ ] percent of MMI's total U.S. mobile handset revenues for 2010 were attributable to the domestic industry products:

[

]

(CDX-5.4 (and sources cited therein); *see also* CX-369C; CX-358C at Mulhern Report, Ex. 11.) On a unit basis, the domestic industry products represent [ ] of Motorola's sales. (CDX-5.4; CX-7171C; CX-889C.)

MMI explains it has global revenue (as split off from Motorola) of [ ] (CX-0364C; CX-358C, Mulhern Report at Ex. 6). [ ] of its global revenue is allocable to U.S. revenues (CX-0366C; CX-358C, Mulhern Report at Ex. 8). Motorola contends this means its U.S. Mobile Devices segment revenue is [ ] (CIB at 204.) Because Motorola's U.S. handset revenue for the domestic industry products is [ ] of U.S. revenue (CDX-5.4; CX-369C; CX-358C, Mulhern Report at Ex. 11), 2010 U.S. revenue attributable to the domestic industry products is approximately [ ] (CIB at 204.) Motorola argues this is significant in absolute and relative terms. (*Id.*)

a. Plant and Equipment Related to the Domestic Industry Products

Motorola alleges it conducts significant manufacturing activities in the United States, which includes development of prototype models, testing, validation, assembly, loading of vendor-specific software, and packaging. (CX-2684C (Deardorf, DWS) at Q&A 35, 38-54.) Motorola argues the addition of vendor-specific software in the United States is an important value-added step in the manufacturing process because it is required before products can be used with U.S. carriers such as Verizon, for without this software, the handsets would not work. (*Id.* at Q&A 50.)

Motorola states it invests significant resources in buildings and maintaining facilities relating to the domestic industry products, *i.e.,* it claims it has [ ] of space in the United States. CDX-5.5 (and sources cited therein); CX-35C, Confidential Exhibit E. On a sales revenue allocation basis, Motorola asserts [ ] of Motorola's global facilities (approximately [ ] are allocable to Motorola's Mobile Devices business segment, because [ ] of Motorola's [ ] global revenues in 2010 were attributable to the Mobile Devices segment. (CX-363C, Mulhern Report at Ex. 5; CX-364C, Mulhern Report at Ex. 6.) Motorola alleges that because [ ] of Motorola's total U.S. handset revenues in 2010 were attributable to the domestic industry products, [ ] of Motorola's facilities are allocable to the domestic industry products. (CIB at 204-205.) Motorola argues this amount is significant absolutely and in relation to Motorola's overall square footage. (*Id.* at 205.)

b. Labor and Capital Related to the Domestic Industry Products

Motorola alleges it employs significant labor and capital in the United States to support manufacturing activities related to the domestic industry products. (*Id.*) Motorola asserts it is

undisputed that its Mobile Devices business segment has nearly [ ] employees based in the United States. (CDX 5.6; CX-362C.) Motorola claims that on a sales revenue allocation basis, [ ] of these employees, or approximately [ ] are allocable to the domestic industry products. (CIB at 205.)

Motorola declares it has also expended significant investment on labor and capital relating to post-sale support, repair and replacement of the domestic industry products. (*See generally* CX-2682C, Calhoun DWS.) Motorola asserts that it incurred over [ ] million in expenses relating to U.S. call centers and employees providing post-sale support for its products. (CX-2682C (Calhoun, DWS) at Q&A 56-58.) Additionally. Motorola asserts it incurred [ ] in expenses relating to repair and replacement of products in the United States. (CX-2682C (Calhoun, DWS) at Q&A 77, 81, 85.) Hence, Motorola argues its investment in labor and capital is significant absolutely and in relation to its overall headcount for the Mobile Devices business segment. (CIB at 205.)

c. Motorola Argues Its Marketing Investments Further Support a Finding That MMI Has Satisfied the Economic Prong

Motorola alleges its 337(a)(3)(A) and (B) investments are greater when combined with its marketing investments directly related to the domestic industry products. (*See* CX-2688C (LeCannelier, DWS).) Moreover, Motorola claims that even though marketing alone may be insufficient to satisfy the economic prong, the Commission may appropriately consider MMI's investment in marketing in the context of its overall domestic industry investments. (CIB at 205.) (*Printing and Imaging Devices*, Inv. No. 337-TA-690, Order No. 24, 2010 ITC LEXIS 1058, at *20.)

3. Motorola Argues a Domestic Industry Exists Under 19 U.S.C. § 1337(a)(3)(C) by Reason of Motorola's and MMI's Substantial Investments in the Exploitation of the Asserted Patents

Under Section 337(a)(3)(C), Motorola asserts that two separate and independent grounds support a finding of domestic industry. (CIB at 206.) First, Motorola argues that it and its predecessor Motorola, Inc., have made, and continue to make substantial domestic investments in the exploitation of the asserted patents through licensing. (*Id.*) Second, Motorola argues it and Motorola, Inc., have made, and continue to make, substantial domestic investments in engineering, research and development related to the asserted patents. (*Id.*)

Motorola contends the Commission's opinion in *Multimedia Display* sets forth a number of factors that should be considered in determining whether a complainant's portfolio licensing activities have a nexus to its asserted patents. (*Id.*)

a. Motorola Alleges its U.S. licensing program is substantial by any measure

As described by Motorola witnesses Kirk Dailey and Brian Blasius, Motorola argues it has developed a robust intellectual property management and licensing organization to make money through exploitation of their extensive portfolio of patents. (*See, e.g.,* CX-505 (Declaration of Kirk Dailey); CX-2683C (Dailey, DWS); CX-2681C (Blasius, DWS; CX-1046C (Dailey Declaration).)

Motorola claims its investments in licensing are based in the United States and managed from[ ] (*See* CDX 5.7; CX-2683C (Dailey, DWS) at Q&A 10.) Motorola claims its revenues relating to royalty income are reported on its U.S. profit and loss statements. (CX-2681C (Blasius, DWS) at Q&A 36.) MMI claims its licensing employees are based in the United States. (CX-2683C (Dailey, DWS) at Q&A 35.) Moreover, Motorola argues the extent of its domestic licensing activity is substantial. As described by Motorola, its licensing program

has generated in excess of [ ] in royalty income and is an important part of its business. (CX-2681C (Blasius, DWS) at Q&A 35; CX-2683C (Dailey, DWS) at Q&A 31.)

Motorola alleges its contentions are supported by expert testimony. (CIB at 207.) Specifically, as illustrated by Ms. Mulhern, [ ] licenses license at least one of the asserted patents. (CX-2690C (Mulhern, DWS) at Q&A 98; CDX-5.8.)

Motorola alleges it has collected nearly [ ] in royalties between 2005 through 2010 from these [ ] licenses. (CDX 5.8.) Motorola argues it has, by licensing their patents, obtained substantial value[ ] (CX-2683C (Dailey, DWS) at Q&A 31; CX-2681C (Blasius, DWS) at Q&A 31, 32; Dailey, Tr. at 512:12-517:6.)

Motorola claims that [

] (CX-2683C (Dailey, DWS) at Q&A 31.)

Also, Motorola alleges [ ] of the royalties obtained by it from 2005-2010 are attributable to licenses that include one or more of the asserted patents. (*See* CX-2690C (Mulhern, DWS) at Q&A 109.) Motorola argues these revenues are substantial in absolute numbers and because

they are important to it. (CIB at 208.)

b. Motorola Alleges the Nexus Between ItsSubstantial Licensing Program and the Asserted Patents is Strong, Substantial and Grounded in Diverse Evidence

Using the *Multimedia Display* factors, Motorola alleges it has shown that there is a substantial nexus in this Investigation with respect to each of the asserted patents. (CIB at 209.) That is, Motorola alleges, as a general matter, that each of the asserted patents has been shown to be "particularly important or valuable within the portfolio" based on the factors set forth in the Commission's *Multimedia Display* decision as described below. (*Id.*) (*Multimedia Display* at 10.) More specifically Motorola alleges:

1. As described by Motorola's director of outbound licensing, Brian Blasius, each patent has been highlighted prominently in its license negotiations [ ] (CX-2681C (Blasius, DWS) at Q&A 50-52, 63, 64, 67-69, 79; and CX-1936C; CX 663C, CX 1935C.) These patents were also discussed in Motorola's license negotiations and discussions with [ ] (*See* CX-2683C (Dailey, DWS) at Q&A 74.) Motorola argues this discussion reveals the strength of the nexus. (*See Multimedia Display* at 9-10 (identifying factor demonstrating the relative value of a patent to be whether the patent was discussed during license negotiations).)

2. The Reardon '223 and Whinnett '697 patents are essential to "technology industry standards," which tends to support the significance of the patents to the portfolio under the Commission's decision in *Multimedia Display*. (*See Multimedia Display* at 10; CX-2690C (Mulhern, DWS) at Q&A 146.)

3. The Smith '333 patent has [ ] demonstrating its significance and its importance to Motorola's portfolio. (*See Multimedia Display* at 10 (listing factors that may demonstrate the relative value or importance of a patent in

a portfolio); CX-2683C (Dailey, DWS) at Q&A 74.

4. It successfully asserted the '333 and '223 patents in litigation against RIM, litigation Motorola considered an extension of its licensing program. (*See Multimedia Display* at 10, FN 7 (explaining that successful assertion of the patent in litigation demonstrates market recognition of its value); CX-2683C (Dailey, DWS) at Q&A 96, 100.)

5. Its patent portfolio licensing activities bear a nexus to the patents asserted in this investigation because the portfolio is cohesive, and the asserted patents have technical congruence with the portfolio. (*Id.* at Q&A 48; CX-1935C; CX-1936C.) (*See Multimedia Display* at 12 ("Evidence showing how the asserted patents fit together congruently with other patents in the portfolio covering a specific technology may demonstrate a stronger nexus to the licensing activity than evidence indicating that the patents cover a wide variety of technologies bearing only a limited relationship to one another.").) As described by Mr. Blasius, Motorola's licensing discussions with companies such as [ ] show that its portfolio is broadly applicable to technologies used in smartphones and other converged technologies. (*See* Blasius, Tr. at 567:21-572:7, 575:9-21; CX-1936C at MOTO-APPLE-0005218084_00777; CX-1935C at MOTO-APPLE-0005218084_00767.)

Motorola next alleges the following image from its licensing presentation to[ ] (CX-1935C) shows that it specifically discussed each of the patented technologies in its negotiations [ ] and shows that its asserted patents bear congruence with the broader set of technologies covered by its portfolio relating to smartphones and other devices with converged technology:

[

]

Motorola contends that this image, as described by Mr. Blasius, who prepared the presentation, [ ] icon relates to the Grivas '862 patent, and the [ ] relates to the Smith '333 patent. (*See* Blasius, Tr. at 567:21-572:7, 575:9-21.) Motorola argues the[ ] icon relates to its essential patents relating to WiFi, including the Reardon '223 patent, and the [ ] icon relates to its essential patents relating to 3GPP cellular standards, including the Whinnett '697 patent. (CIB at 211.)

6. It established its licensing activities relate to products using its patents in the United States, as evidenced by its licensees and negotiations with potential licensees selling products in the United States that use Motorola's essential patents, including the '223 patent and the '697 patent, and patents relating to smartphones including the '333 and '862 patents. (*See Multimedia Devices* at 10-11 (licensing activities relating to articles protected by the asserted patents are "by definition" related to those patents; infringement in the U.S. is a factor tending to show the importance of a patent).)

Motorola argues Apple seeks to diminish the nexus between the asserted patents and MMI's licensing activities by pointing out that MMI has a large patent portfolio. (CIB at 212.) Still, Motorola points out the size of MMI's portfolio does not undermine a finding of domestic industry in this Investigation. (*Id.*) Motorola alleges it has a large portfolio because it is an innovative company with a long history of investment in research and development, particularly with respect to wireless and cellular technologies. (*Id.*) Motorola argues its innovative history is evidenced by the domestic industry products, which utilize a broad array of technologies, including the patented technologies at issue. (*Id.*) Motorola contends the law was never intended to penalize U.S. companies for having many patents or discourage research and development. (*Id.*)

Motorola also alleges, based upon the factors in the Commission's *Multimedia Display* opinion, that MMI's domestic licensing activities bear substantial relation on a patent-by-patent basis to each of the patents asserted in this investigation. (*Id.*)

(1) The '697 patent

Motorola argues its domestic licensing activities bear a substantial nexus to the '697 patent. (*Id.*) According to Motorola, the '697 patent is essential to "technology industry standards," including the 3GPP UMTS/W-CDMA standard, which tends to support the significance of the patent to the portfolio. (*See Multimedia Display* at 10; CX-2690C (Mulhern, DWS) at Q&A 146. Second, Motorola argues the '697 patent is cohesive with its portfolio of cellular and wireless essential patents, and has been broadly licensed, another factor. (*Id.*) (*See Multimedia Display* at 10.) Motorola argues it and its predecessor Motorola, Inc. have entered into [ ] licenses relating to its cellular essential patents, and specifically [ ] (CDX-5.8.) Motorola asserts many of these licenses [ ]

[ ] *(See, e.g.,* CX-508C at MOTO-APPLE-0003988600 [ ] CX-676C at MOTO-APPLE-0003985508[ ] CX-1421C at MOTOAPPLE-0004351575_01463 [ ] CX-685C at MOTO-APPLE-0003986949 [ ]

As a 3GPP standard essential patent, Motorola argues its '697 patent also featured prominently in its recent licensing discussions with [

] (CX-2681C (Blasius, DWS) at Q&A 50-52, 63-69, 79; and CX-1936C; and CX-663, CX-1935C; CX-2683C (Dailey DWS at Q&A 74.) Based on the *Multimedia Display* factors, Motorola argues a substantial nexus exists between MMI's licensing activities ant the '697 patent. (CIB at 213.)

(2) The '223 patent

Like the '697 patent, Motorola alleges it has shown a substantial nexus exists between its domestic licensing activities and the '223 patent under *Multimedia Display* factors. (*Id.*) As with the '697 patent, Motorola argues the '223 patent relates to a "technology industry standard," *i.e.*, Motorola alleges the '223 patent is essential to the 802.11n WLAN standard. [WiFi] (*See Multimedia Display* at 10; CX-2690C (Mulhern, DWS) at Q&A 146.)

Motorola argues it and its predecessor Motorola, Inc., have engaged in substantial licensing activities relating to the WLAN essential patents, and have entered at least [ ] licenses relating to the '223 patent. (*See* CDX-5.8.) Motorola asserts the WLAN essential patents, including the '223 patent, have featured prominently in its recent licensing discussions with [

] (CX-2681C (Blasius DWS at Q&A 50-52, 63-69, 79, 81, 82 and CX-1936C; CX-663, CX-1935C; CX 725C; CX-2683C (Dailey, DWS) at Q&A 74.

Motorola claims it also successfully litigated the '223 patent against RIM. (CX-2683C (Dailey, DWS) at Q&A 96, 100; *see Multimedia Display*, at 10, FN. 7 (explaining that successful

assertion of a patent in litigation demonstrates market recognition of its value).) Motorola explains this litigation was an extension of its licensing program [

] (CX-2683C (Dailey, DWS) at Q&A 96, 100; CX-685C.) Thus, Motorola argues a nexus exists between its licensing program and the asserted '223 patent under the *Multimedia Display* factors. (CIB at 214.)

(3) The '333 patent

Motorola asserts it has demonstrated a substantial nexus between its licensing program and the asserted '333 patent. (CIB at 214.) Motorola states it has entered at least [ ] license agreements relating to the '333 patent. (CDX-5.8.) Moreover, Motorola contends the '333 patent featured prominently in its recent license negotiations with [

] (*See* CX-2681C (Blasius, DWS) at Q&A 50-52, 63-69, 79; and CX-1936C; CX-663, CX-1935C; CX-2683C (Dailey DWS at Q&A 74.)

Motorola also claims the '333 patented technology was highlighted in the following illustration in a licensing presentation it recently made to HTC:

[

]

(CX-1936C.) Motorola contends Brian Blasius, its director of outbound licensing who prepared the presentation, testified that the [

]

(See Blasius, Tr. at 570:16-572:7; 574:17-19.) Mr. Blasius also testified that the '333 patent was identified [

] (*See* Tr. at 568:6-570:15; CX-663C at MOTO-APPLE-0004104217.)

According to Motorola, the '333 patent is important to its patent portfolio and recognized as valuable: like the '223 patent, the '333 patent was successfully asserted in litigation against RIM, [

] Motorola asserts it also recognized the '333 patent as valuable when it awarded it the Patent of the Year award for 2010, which is an award to an inventor recognizing the significant impact of his patent to Motorola. (CX-2683C (Dailey, DWS) at Q&A 74.)

(4) The '862 patent

While Motorola makes allegations concerning domestic industry in its brief for this patent, these will not be discussed since this patent has been found to be invalid and thus no domestic industry can exist.

c. Motorola Argues Its Licensing Program is Product-Creating

Motorola alleges its licensing program is not just revenue-driven, but also product creating. (CIB at 218.) Motorola asserts it efforts and investment in licensing its portfolio allow it to leverage its portfolio to cross-license essential and nonessential technologies owned by third parties, permitting it to bring new products to market and also allowing its licensees to bring new products to market. (*Id.*) Motorola assert, as described by the Commission in its *Multimedia Display* opinion, "licensing activities that encourage practical applications of the invention or bring the patented technology to the market" support a finding that a domestic industry exists. (*Id.*) (citing *Multimedia Display* at 25 (internal quotation omitted).) By engaging in extensive cross-licensing of technologies, Motorola argues it has enabled both itself and its licensees to bring products to market that practice the asserted patents, including its domestic industry products. (CIB at 218.)

d. Motorola Argues Its U.S. Engineering and Research and Development is Substantial

Motorola argues it established a separate and independent ground showing a domestic industry under subsection (C) based on its substantial investment in engineering and research and development related to the asserted patents, as well as products incorporating the patents. (*Id.*) Motorola contends Apple's and its expert's (Mr. Bakewell) sole critique of its evidence showing its substantial investment in engineering and research and development is its assertion that Motorola must account for these investments on a patent-by-patent basis. (*Id.*) Motorola argues, under Commission precedent, it is required to make no such accounting, and it has provided sufficient evidence to establish a domestic industry. (*Id.* at 218-19.) (*See, e.g., DC-DC Controllers*, Order No. 38, 2010 WL 4780034 at 9 (July 2, 2010) (unreviewed) ("[D]omestic research and development expenditures directed to products that incorporate the patented technologies at issue are sufficient to satisfy the economic prong of the domestic industry requirement under 337(a)(3)(C)").)

Motorola argues the evidence shows that it and its predecessor Motorola, Inc. have made patent-specific investments in engineering and research and development. (Id. at 219.) Motorola contends no third party acquired the asserted patents, instead each named inventor was a Motorola employee, and the patents have always been owned by it or Motorola, Inc. (CX-2690C (Mulhern, DWS) at Q&A 156, 157.) For three of the four asserted patents, Motorola argues at least one inventor was in the U.S. when he made his invention. (*See* CDX 5.9.) Motorola asserts the evidence shows substantial salaries paid to these inventors. (CX-2690C (Mulhern, DWS) at Q&A 158.

In absolute terms, Motorola argues it has made a substantial investment. (CIB at 219.) Motorola asserts the value in terms of employees and salaries with respect to the asserted patents

is significant and in relative terms, 100% of the inventors were Motorola employees when they made their respective inventions. (*Id.*) Motorola says Apple contends Motorola's investment is insubstantial because it claims the inventor-employees were inventing other inventions and not just the asserted patents turns the law on its head. (*Id.*) Instead, Motorola argues the fact that Motorola hired the best and the brightest, and they have made many inventions for Motorola, supports a finding of domestic industry. (*Id.*) Thus, Motorola contends Apple's argument would penalize a domestic company for hiring and investing in inventive engineers. (*Id.*)

Motorola argues it has expended extensive and substantial research and development and engineering effort in the United States that is specifically related to the domestic industry products. (*Id.*) In 2010, Motorola asserts it spent [ ] on research and development, of which [ ] was related to the Mobile Devices business segment. (CX-2690 (Mulhern, DWS at Q&A 151.) As previously described, Motorola argues, on a sales revenue basis, [ ] of this investment may be allocated to the domestic industry products. (CIB at 220.)

Motorola contends it has also expended significant man-power on research and development directly relating to the domestic industry products. (*Id.*) Motorola argues there are [ ] U.S. employees who have devoted time to research and development relating to one or more of the domestic industry products, working in [ ] located in the United States. (CDX-510; CX-2690C (Mulhern, DWS at Q&A 153, 162.) Motorola asserts these employees worked [ ] between December 2007 and February 2011. (*Id.* at Q&A 166, CX-1937C.) Motorola argues the great majority of these hours were spent before product launch. (CDX 5.11.) Though some ongoing development work occurs after the initial product launch, Motorola argues this is common and expected for version

upgrades. (*See Id.*) Motorola asserts this investment is substantial both in absolute terms, and when considered relative to total hours. (*See Id.*)

B. Apple's Allegations

Apple alleges Motorola has failed to meet its burden of proof establishing domestic industry. (RIB at 211.) Apple alleges the Commission determined there is insufficient evidence Motorola made substantial investments in a licensing program that exploits the asserted patents under subprong (c). (*Id.* (citing *Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof*, Inv. No. 337-TA-745, Order: Vacatur and Remand of ID (USITC July 22, 2011).)

Apple's often repeated and central contention is that Motorola's licensing-based expenses are overstated and lack any nexus to the asserted patents. (RIB at 211.) Apple alleges there is also insufficient evidence that Motorola has made significant investments in plant and equipment under subprong (A), significant investments in labor and capital under subprong (B), or substantial investments in engineering and research and development under subprong (C). (*Id.*) Apple argues Motorola's product-related expenses are minimal when compared to the industry in question and Motorola's relative size. (*Id.*) In addition, Apple asserts many of Motorola's product-related expenses also pertain to activities performed by third parties outside of the United States and that Motorola has not shown how any of its investments have added any value to the domestic industry products. (*Id.* at 211-12.)

1. Legal Standards

Apple begins its discussion of the legal standard applicable to domestic industry by citing *Multimedia Display*. (*Id.* at 212.) Apple notes the domestic industry requirement consists of two prongs: the technical prong and the economic prong and cites *Certain Optical Disk Controller*

Chips and Chipsets and Prods. Containing Same, Inv. No. 337-TA-506, 2005 WL 1901371, at *66 (USITC May 16, 2005). (*Id.*)

Apple contends that under sections 337(a)(3)(A) and (B), the Commission has consistently held that relief in a patent-based investigation requires that the complainant establish a sufficient nexus between the domestic activity and the articles protected by the asserted patents. (*Id.*) (*See Certain Printing and Imaging Devices and Components Thereof* ("*Printing and Imaging Devices*"), Inv. No. 337-TA-690, Comm'n Op. at 27 (USITC Feb. 17, 2011) (stating that a complainant must establish that its domestic investment and/or employment activities are significant "with respect to the articles protected by the intellectual property right concerned").) Apple asserts when relying on research and development and engineering activities under Section 337(a)(3)(C), the complainant must also demonstrate a sufficient nexus between the domestic activity and the intellectual property right being asserted. (RIB at 213.) Apple asserts there is a significant line of authority that holds this nexus requirement is met only where the research and development or engineering activities are directed to the exploitation of the asserted patent itself. (*Id.*) (*See Certain Coaxial Cable Connectors and Components Thereof and Products Containing Same*, Inv. No. 337-TA-650, Comm'n Op. at 53 (USITC Apr. 14, 2010) (stating that the "statute specifically requires" that the complainant "show a substantial investment in the exploitation of the patent at issue"); *Certain Hybrid Electric Vehicles and Components Thereof* (*Hybrid Vehicles*), Inv. No. 337-TA-688, Order No. 5, 2010 WL 1138330, at *8 (USITC Feb. 26, 2010) (denying complainant's motion for summary determination as to domestic industry in part because there were issues of fact concerning the extent to which complainant's activities under § 1337(a)(3)(C) "relate specifically" to the asserted patents).)

2. Apple Asserts Motorola's Evidence of Investments in Licensing and Enforcement Activities Under Section 337(a)(3)(C) Fails to Satisfy the Economic Prong of the Domestic Industry Requirement

Apple alleges the investments Motorola identified in licensing and enforcement activities do not establish a domestic industry. (RIB at 213.) Apple claims that with respect to licensing, the Commission has explicitly held that the "inquiry focuses on the strength of the nexus between the licensing activity and the asserted patent." (*Id.*) (*Multimedia Display*, Inv. No. 337-TA-694, Comm'n Op. at 9.) Apple argues when a complainant relies on portfolio licensing activities that involve more than one patent, "the complainant must present evidence that demonstrates the extent of the nexus between the asserted patent and the complainant's licensing activities and investments." (*Id.*)

Apple contends the licensing activities Motorola asserts in this Investigation relate to licensing a portfolio of patents that contain a substantial number of patents. (RIB at 214.) Apple claims Motorola has failed to establish the necessary nexus to the asserted patents in this Investigation. (*Id.*) Apple states Motorola has offered no evidence demonstrating the relative value and/or importance of any of the asserted patents in relation to its portfolio. (*Id.* at 214-215.) Apple argues Motorola's evidence is virtually nonexistent as to at least three of the asserted patents—the '862 patent, the '223 patent, and the '333 patent, and the '697 patent are just one of [ ] of other patents licensed in large portfolios. (*Id.* at 215.)

Apple asserts Motorola's licenses and negotiations are overly broad in scope and generally do not highlight the asserted patents individually. (*Id.*) Apple argues Motorola's enforcement actions similarly relate to several patents and do not involve all of the asserted patents in this Investigation. (*Id.*) Thus, Apple contends Motorola cannot meet its burden of establishing domestic industry based on its licensing program. (*Id.*)

a. Apple Argues Motorola Has Failed to Establish a Nexus Between Its Licensing Activities and the Asserted Patents

Apple claims Motorola relies on generalized investments in a portfolio of patents and licenses that cover [ ] of patents in broad technological areas, rather than conducting the "fact-focused and case-specific inquiry" required to establish a domestic industry. (*Id.*) (*See Multimedia Display* at 5.) Further, Apple contends Motorola has not proffered evidence indicating that the licensing activities are *particularly* focused on the asserted patents among the portfolio. *See* RX-1295C (Bakewell, DWS) at Q&A 59.)

(1) Motorola's Portfolio Licenses

Apple alleges Motorola relies heavily on the fact that [ ] Motorola licenses include at least one of the asserted patents. (RIB at 215.) (*See* CX-2690C (Mulhern, DWS) at Q&A 98.) According to Apple, Motorola "broadly claims the asserted patents are covered by the licenses, but conducts little to no analysis as to the significance of the asserted patents in each of these licenses. (RIB at 215.) Instead, Apple alleges an analysis of these licenses reveals that most of the asserted patents are not specifically identified in the license agreements, and to the extent an asserted patent is specifically listed, it is part of a portfolio of[ ] of patents with no indication that the asserted patent was particularly relevant in the license negotiations. (*Id.* at 215-216.)

(a) '862 Patent

Apple argues Motorola's license agreements reveal the '862 patent is not specifically identified by number or name in any of Motorola's agreements with third parties. (RIB at 216.) Apple contends Motorola's corporate witness Mr. Blasius was unable to identify a single license specifically listing the '862 patent. (*Id.*) While Mr. Blasius identified [ ] licenses allegedly covering at least one of the asserted patents, Apple contends on cross examination he admitted

the '862 patent is not listed by name or number in any of the licenses. (*See* Tr. at 565:11-17, 565:18-21, 566:22-567:3, 565:22-25.) Finally, Apple argues Motorola has failed to offer other evidence exactly indicating the '862 patent was important or relevant to license negotiations leading up to an executed agreement. (RIB at 216.)

(b) '223 and '333 Patents

Apple points out the license agreements relating to the '223 and '333 patents show the '223 patent is identified in [ ] and the '333 patent is identified in[ ] (*See* [ ] Apple asserts Motorola does not dispute this point. (*See* Blasius, Tr. at 566:1-5.) Apple further contends that the sole [ ] license listing the '333 patent contains[ ] which includes [ ] is in addition to the '223 and '333 patents. (*Id.*) Apple contends there is no other indication the '223 or '333 patents were a pertinent part of the license negotiations or that they were of particular value to the licenses. (*Id.*)

(c) '697 Patent

Apple asserts the '697 patent is specifically identified in [ ] of the Motorola licenses. (*See* Tr. [Blasius] at 566:6-11.) Apple argues, as Mr. Blasius testified, however, those licenses include a grant to [ ] of other patents (both United States Patents and international patents). (*See* Id. at 534:10-537:18, 539:11-541:6, 550:23-553:12, 554:1-21, 558:17-559:18.)

Apple contends any link between licensing and the asserted patents is attenuated at best. (RIB at 217.) Even if there is some link because the asserted patents are covered by a very broad

license grant, Apple argues the licenses generally cover Motorola's entire cellular portfolio and rarely—if ever—specifically reference the asserted patents. (*Id.*)

As in *Multimedia Display*, Apple contends the evidence indicates a minimal role for the asserted patents in the activities in view of: (1) the many patents that offered by Motorola in its proposed license agreements and (2) the scope of the portfolio as compared to the narrow focus of the asserted patents. (*Id.*) Apple maintains Motorola failed to prove the licenses were particularly focused on the asserted patents among the group of patents in the portfolio or any other evidence that demonstrates the relative importance or value of the asserted patents within the portfolio. (*Id.*) Also, since many of the licenses are cross-licenses, Apple argues this further dilutes the significance of the asserted Motorola patents relative to all of Motorola's other patent rights. (*Id.*)

(2) Licensing Employees

Apple contends Motorola cannot demonstrate a nexus between the licensing activities of its employees and the asserted patents. (RIB at 217.) Instead, Apple contends Mr. Blasius testified all [ ] employees in the licensing group work on *all* of the patents that are in Motorola's portfolio:

> Q. If you look it says, at least [ ] people in Motorola are in Mr. Dailey's group, including engineers and business persons who identify and contact potential licensees. These employees are referred to as licensing on Exhibit 36. Do you see that? That's in your hand.
>
> A. Yes.
>
> Q. Again, is there any way to identify which of these individuals work on which specific patents?
>
> A. Not that I believe. I mean, all of these people work on all of the patents that were in the portfolio in the normal course of licensing. So to identify specific patents, I don't see how you could do it.

(JX-92C at 197:1-15.) Apple asserts Mr. Dailey confirmed Motorola cannot tell how much of the activity of those [ ] people was devoted to any one of the asserted patents. (*See* Tr. at 434:12-25.) This, Apple contends, means Motorola failed to demonstrate a nexus between the licensing activities of Motorola's employees and the asserted patents. (*See* RX-1295C.25 (Bakewell, RWS) at Q&A 98-100 ("the number of employees identified by Mr. Dailey is overstated and is not relevant here.").)

(3) License Negotiations with Third Parties

Apple states that Motorola claims its licensing efforts with third parties demonstrates the asserted patents are particularly important or valuable and thus should be considered as part of its domestic investments. (RIB at 218.) Specifically, Apple argues Motorola points to [

] (*See* CX-2681C (Blasius, DWS) at Q&A 50-51.) Nevertheless, Apple asserts that none of the evidence supports Motorola's assertion. (*See* [

] Instead, Apple maintains that even though the presentation highlights Motorola's "large, diverse and relevant" patent portfolio, Mr. Blasius testified the presentation that Motorola cites [

] (*See* CX-1936C; Tr. at 537:19-538:21.) Apple argues Mr. Blasius further testified that [

]

Apple argues nothing in the record pertaining to [

]

Apple next discusses Motorola referred to [

]

Apple next addresses Motorola's claims [

]

(4) Motorola's "Essential Patents"

Apple also attacks Mr. Dailey's testimony that Motorola has hundreds of essential patents, with a large portfolio relating to essential patents relating to cellular standards. (*See* CX-2683C at Q&A 51, 53.) Apple notes that Motorola has declared only two of the asserted patents in this Investigation essential to a standard setting organization. (RIB at 220.) Apple claims Mr. Dailey's testimony, by itself, is not indicative of the importance or value of the two asserted patents because it is well known in the industry that companies often declare more patents as essential to a standard than really are essential. (RIB at 220.) In support of this proposition Apple cites a June 30, 2005 article entitled 3G Cellular Standards and Patents by David Goodman and Robert Meyers, which analyzed allegedly essential patents. (*See* RX-1145.) In Figure 1, on page 4 of RX-1145, which lists the distribution of patent ownership for patents declared essential to 3GPP, Apple contends Motorola is shown to own 38 of the patents declared essential to 3GPP. (RIB at 220.) However, Apple argues in Figure 5 in Exhibit RX 1145.5, the authors judged Motorola only had 11 essential patents. (*Id.*) Apple argues this proves that just declaring a patent to be essential is not sufficient proof of the relative value or importance of the asserted patents in this Investigation. (*Id.*)

b. Apple Asserts Motorola Failed to Establish That Its Investments in Litigation are Tied to Licensing

Apple asserts Mr. Dailey testified Motorola's investments were substantial by virtue of its enforcement activities through patent litigation. (RIB at 221.) However, Apple asserts the Commission has held, "that patent infringement litigation activities alone, *i.e.*, patent infringement litigation activities that are not related to engineering, research and development, or licensing, do not satisfy the requirements of section 337(a)(3)(C)." (*Id.*) (*Coaxial Cable* at 43-44.) Further, Apple contends a complainant "must prove that each asserted activity is related to

licensing . . . [and] that licensing activities pertain to the particular patent(s) at issue." *Id.* at 50-51. Apple asserts one of the litigations Mr. Dailey testified about was the RIM litigation. (RIB at 221.) Specifically, Apple contends Mr. Dailey testified that Motorola[

] relating to the RIM litigation. (*Id.*)

Apple argues the total costs of the RIM litigation cannot be considered as part of the domestic industry analysis. (*See* RX-1295C (Bakewell, DWS) at Q&A 67-69. Apple contends Motorola is unable to allocate the investments to any one of the asserted patents. (*See* Tr., Dailey at 444:13-445:11.) Further, Apple contends all the costs incurred against RIM cannot count because the litigation involved only two of the patents asserted in this Investigation. (*See* CX-2683C (Dailey, DWS) at Q&A 100; *see also See* RX-1295C (Bakewell, RWS) at Q&A 68, in which Mr. Blakewell asserts that Motorola's expert, Ms. Mulhern, "never measures or ascertains the relative importance of the two Asserted Patents listed in relation to the other patents involved in the lawsuit".)

As Mr. Blasius explained, Apple contends Motorola cannot allocate the RIM litigation costs to any specific asserted patent here. (JX-92C at 211:25-212:3, 212:5-6.) Apple asserts Motorola also mentions its patent litigation suit against VTech. (RX-1247C.59, Motorola's Second Supp. Resp. to Apples First Set of Interrogs.) Apple contends that, as with RIM, however, none of the expenses incurred in the VTech litigation could be allocated to any of the asserted patents in this Investigation. (*See* JX-92C, Blasius at 213:9-214:20; *see also* RX-1295C (Bakewell, DWS) at Q&A 70.)

c. Apples Asserts Motorola Failed to Establish That Its Investments in Licensing Are Substantial

Apple contends Motorola did not proffer sufficient evidence to establish that its licensing investments are substantial. (RIB at 222.) Apple contends an analysis of the relevant factors

cited in *Multimedia Display* demonstrates the inadequacy of Motorola's evidence on this point. (*See* RX-1295C (Bakewell DWS) at Q&A 107-108.) Moreover, because of the remote relationship between Motorola's licensing activities and the asserted patents, Apple argues Motorola's total licensing expenses cannot be allocated to its investment in the exploitation of the asserted patents. (RIB at 222.) Even assuming Motorola's activities have a strong connection to licensing, Apple alleges they have a very weak relationship to the four asserted patents. (*Id.*)

(1) Licensing Royalties and Revenues

Apple contends that Motorola repeated mention of the royalties and revenues it receives through its licenses with third parties to tout the success of its licensing program [ ] patents) (*See generally* CX-2683C (Dailey, DWS)), is not determinative in an investigation covering only four asserted patents. (RIB at 222.) Apple points out that even though Mr. Dailey stated Motorola's licensing revenue [

] Apple contends Mr. Dailey and Mr. Blasius both testified Motorola cannot identify the portion of Motorola's licensing revenue that is attributable to any of the asserted patents in this Investigation. (*See* Tr. at 435:3-15; JX-92C, Blasius Tr. at 209:4-8; *see also* RX-1295C (Bakewell, DWS) at Q&A 87.)

Apple also asserts Mr. Dailey stated that Motorola received additional revenue [

]

[

] Apple points out the Commission explained in *Multimedia Display* at 24, that "although royalties received by a complainant can be circumstantial evidence that an investment was made, they do not constitute the investment itself." Hence, even though Motorola received considerable revenues over nearly 20 years, Apple argues these revenues the ITC must evaluated them in the context of the broad scope of the license grant and volume of patents licenses. (RIB at 223.) When placed in context, Apple argues Motorola has not demonstrated a substantial investment in the asserted patents. (*See* RX-1295C (Bakewell DWS) at Q&A106.)

(2) Other Licensing Expenditures

Apple alleges Motorola's other claimed costs used in support of domestic industry are also unpersuasive. (RIB at 223.) Apple argues Motorola's witnesses testified Motorola cannot allocate any costs in licensing to the asserted patents. (*See* Tr., Dailey at 435:3-15; Tr., Blasius at 533:21-534:1.) Apple states, as Mr. Blasius explained, the costs Motorola incurs in negotiating a license can only be attributed to the whole license, [

] (JX-92C at 193:19-23.) Therefore, Apple maintains that since Motorola does not keep track of how much it has invested in licensing or litigating a patent on a patent-by-patent basis, it cannot allocate any of its expenses to the asserted patents in this Investigation. *Id.* at 193:19-23; *see also* RX-1295C (Bakewell, DWS) at Q&A 101.

3. Apple Argues Motorola's Evidence of Research and Development and Engineering Activities Under Section 337(a)(3)(C) Fails to Satisfy the Economic Prong of the Domestic Industry Requirement

a. Apple Argues Motorola's Evidence of Its Alleged Total Investments in R&D and Facilities Fails to Satisfy the Domestic Industry Requirement

Apple next addresses Motorola's proffer that of[ ] in Research and Development (R&D) costs in 2010, [ ] is attributable to the

Mobile Devices segment. (CX-2690C (Mulhern, DWS) at Q&A 151. Apple notes Motorola established it performs R&D [ ] in the United States. (*Id.* at Q&A 151.) In opposition, Apple claims Motorola's total investments are not specifically related to the domestic industry products and that the facilities necessarily involve non-R&D activities and activities with respect to products other than the domestic industry products. (RIB at 224.) Apple claims, as its expert, Mr. Bakewell,[66] testified, Motorola's evidence of these investments is thus overstated and not meaningful to the domestic industry analysis. (RX-1295C at Q&A 109.) Apple alleges the record is devoid of any proof the R&D or facility investments have a clear nexus to the domestic industry products or are substantial in relation to Motorola's overall size or the industry in question. (*Id.* at 224-225.)

b. Apple Asserts Motorola's Evidence of Its Alleged Investments in Inventor Salaries Fails to Satisfy the Domestic Industry Requirement

Apple next challenges the [ ] in salaries Motorola paid to [ ] of the U.S based named inventors in the years surrounding their patent application filing dates. (CX-2690C (Mulhern, DWS) at Q&A 158.) Apple alleges these salaries are not sufficiently connected to the asserted patents because Apple claims there is no evidence supporting the conclusion that these inventors worked exclusively on developing the asserted patents. (*See* RX-1295C (Bakewell, DWS) at Q&A 110.) For example, Apple argues the inventors of the '862 patent were working on other technologies at the same time they were working on the patented features. (*See* JX-107C, Grivas Tr. at 53:15-20.) Specifically, Apple contends Mr. Bakewell prepared an exhibit showing the numerous patents and patent applications filed by some of the other named

[66] Mr. Blakewell is a financial expert with significant experience analyzing licensing activities, etc.

inventors. (*See* RX-925C.) Apple argues the time that these inventors spent working on technologies unrelated to the asserted patents should be deducted from Motorola's figures. (*See* RX-1295C (Bakewell DWS at Q&A 111.)

Apple further contends that Motorola's salary figures are not presented in relation to any relevant benchmark to determine whether the salaries are "substantial." (RIB at 225.) Apple argues Mr. Bakewell attempted such a comparative analysis and testified that the salaries constitute [ ] of Motorola's total U.S. handset sales in 2010 and [ ] of Motorola's market capitalization. (*See Id* at Q&A 112.) Apple asserts such a small percentage certainly cannot be substantial. (RIB at 225.)

c. Apple Asserts Motorola's Evidence of Its Alleged Investments in Employees Who Worked On R&D for the Domestic Industry Products Fails to Satisfy the Domestic Industry Requirement

Apple contends Motorola has also presented evidence that [ ] worked on R&D for the domestic industry products in 2010, and that Motorola's United States employees invested [ ] hours on R&D associated entirely with the domestic industry products between December 2007 and February 2011. (CX-2690C, Mulhern Q&A161, 166. *See also* CX-2684C (Deardorff, DWS) at Q&A 29-32 (testifying concerning document that purportedly shows timesheet data for the domestic industry products).) Apple argues Motorola's expert, Ms. Mulhern, testified that the estimated cost of these R&D activities to Motorola was [ ] Apple contends Motorola's evidence, however, is overstated, unreliable, and deficient under Commission precedent. (RIB at 226.)

(1) Apple Argues Motorola's Evidence of Investments in Employees Who Worked On R&D for the Domestic Industry Products Is Overstated and Based on a Document That Is Unreliable

Apple alleges Motorola's evidence of domestic investment in employees who worked on R&D for the domestic industry products is overstated and unreliable. (RIB at 226.) Apple asserts Motorola's evidence relates to products other than the domestic industry products as it is undisputed that two of the domestic industry products were released in 2009 and the others were released throughout 2010. (*See* CX-2690C (Mulhern, DWS) at Q&A 53-57 (testifying that the Cliq and Droid were first released in 2009 and the Cliq XT, Droid 2, and Droid X were first released in 2010); CX-2688C (Le Cannellier, DWS) at Q&A 41.) Apple also alleges Motorola's expert (Ms. Mulhern) erroneously included time spent through February 2011 in her analysis of Motorola's R&D in the domestic industry products. For this reason, her analysis is unreliable. (*See* RX-1295C (Bakewell, DWS) at Q&A 115.

Apple notes that Motorola based its testimony concerning its investments in employees who worked on R&D for the domestic industry products on a massive spreadsheet (CX-1937C). Apple alleges that while this spread sheet provides raw data, it does not provide a frame of reference for the significance of the hours shown or the type of work that was performed. (*See Id* at Q&A 116.) Apple also claims Motorola offered no testimony explaining how the data provided in the spreadsheet was compiled and Ms. Deardorff has provided what Apple calls "high-level" testimony about the document. (*See* CX-2684C (Deardorff, DWS) at Q&A 29-30.)

Apple alleges Ms. Mulhern's[67] estimate of [ ] incurred by Motorola is also unreliable because it is based on a calculated average salary (CX-2690C (Mulhern, DWS)

---

[67] Motorola's financial expert.

at Q&A172), not the actual salary of the employees involved in R&D. Apple argues Mr. Bakewell explained this methodology is unreasonable since Ms. Mulhern could have added the actual salaries of the engineers involved. (*See* RX-1295C at Q&A117.)

(2) Apple Asserts Motorola Presented Insufficient Evidence That Its Investments in Employees Who Worked On R&D for the Domestic Industry Products Is Substantial

Apple argues Ms. Mulhern presented no analysis of how Motorola's investments in employees who worked on R&D for the domestic industry products is substantial. (RIB at 227.) For example, Apple claims there is no evidence explaining how the time spent and number of employees devoted to the development of the domestic industry products compares to the time spent and number of employees devoted to other projects. (*Id.*) Apple contends this is deficient under the Commission's holdings in *Coaxial Cable Connectors*. (*Id.*)

d. Apple Asserts Motorola's Evidence of Alleged Investments in Prototypes Fails to Satisfy the Domestic Industry Requirement

Apple claims Motorola also relies prototype development costs of approximately $11.3 million associated with the domestic development of 22,357 prototypes of domestic industry products. (CX-2690C (Mulhern, DWS) at Q&A 179, 181; CX-2684C (Deardorff, DWS) at Q&A 44-45.) Apple claims this is irrelevant because it asserts Motorola has provided no testimony as to whether any of the prototypes practiced any of the claims of the asserted patents. (RIB at 228.) Accordingly, Apple argues Motorola's investments in these prototypes should be given little, if any, weight. (*Id.*) (*See, e.g., Coaxial Cable* at 53 (stating that the "statute specifically requires" that the complainant "show a substantial investment in the exploitation of the patent at issue").)

Apple avers Ms. Mulhern's analysis of Motorola's prototype investments is "facially deficient" under *Coaxial Cable.* (RIB at 228.) This is because Apple claims Ms. Mulhern

neither identified an industry for the prototype investments or compared the investments to Motorola's relative size or the industry in question to show substantiality. (*Id.*) Apple contends that Even if Ms. Mulhern had complied with the requirements of *Coaxial Cable* and compared the data to a relevant benchmark, Motorola's estimated costs for the prototypes would still be [ ] of Motorola's total U.S. handset sales in 2010 and [ ] of Motorola's market capitalization. (RX-1295C (Bakewell, DWS) at Q&A120. This, Apple alleges, cannot be substantial. (RIB at 228.)

e. Apple Asserts Motorola's Evidence of Investments in Post-Assembly Programming and Testing Fails to Satisfy the Domestic Industry Requirement

Apple argues Motorola submitted evidence concerning its investments in post-assembly programming and testing, effort [

] Apple contends Ms. Mulhern estimated Motorola incurred[

] between Q4 2009 and Q4 2010 in costs from the final production, testing, packaging, and distribution activities in the United States associated with the domestic industry products. (CX-2690C at Q&A 190.)

Apple contends Motorola's evidence of post-assembly programming and testing is unsatisfactory. (RIB at 229.) Apple claims Motorola presented no evidence how the domestic activities (i) relate to any of the patented features, or (ii) add any value to the domestic industry products. (*Id.*) (*See, e.g., Printing and Imaging Devices*, Inv. No. 337-TA-690, Comm'n Op. at 27) (stating that the Commission will consider "the value added to the article in the United States by the domestic activities.") Apple asserts Ms. Mulhern did not assess whether the [ ]

invested in these activities is substantial. (RIB at 229.) As Mr. Bakewell testified, Apple contends[ ] of Motorola's U.S. handset sales in 2010 and [ ] of Motorola's market capitalization. (RX-1295C at Q&A 123.) Apple stresses this is not substantial and does not establish domestic industry. (RIB at 229.)

f. Apple Asserts Motorola's Evidence of Investments in Post-Sale Product Support Fails to Satisfy the Domestic Industry Requirement

Apple notes that Motorola submitted testimony from Ms. Mulhern and Jennifer Calhoun concerning its post-sales support activities, which include call center operations, warranty and repair support activities, reverse logistics, investments in seedstock, etc. (*See* CX-2690C at Q&A 193-231; s*ee generally* CX-2682C (Calhoun, DWS). Relying on the testimony of Ms. Calhoun, Apple contends Ms. Mulhern testified Motorola's United States post-sale product support activities associated with the domestic industry products were [ ] from Q1 2009 to Q1 2011. (CX-2690C (Mulhern, DWS) at Q&A 230.) However, Apple argues this testimony (post-sales support activities) by Ms. Mulhern does not establish a domestic industry under *Printing and Imaging Devices* and *Coaxial Cable*. (RIB at 230.)

Apple asserts its speculative to conclude that Motorola's post-sale support activities—which can relate to fixing of errors, defects, bugs, and other problems—are R&D activities or have a nexus to the asserted patents. (*Id.*) Apple claims Motorola has provided no proof whether the post-sales product support activities were directed to the practice of the asserted claims. (RX-1295C (Bakewell, DWS) at Q&A 125; *see Printing and Imaging Devices* at 28 (holding that the Commission considers relevant whether the domestic activities are directed to the practice of one or more claims). Apple asserts this is not surprising since Ms. Calhoun testified that *none* of Motorola's investments in post-sale support such as call center and repair activities can be tied to the asserted patents. (*See* JX-97C, Calhoun, Tr at 19:4-14.)

Nor, Apple asserts, has Motorola presented evidence that its post-sales product support activities add value to the domestic industry products. (*See Printing and Imaging Devices* at 27 (declining to find that Complainant's repair activities satisfied the domestic industry requirement in part because Complainant "submitted no evidence to show how its domestic activities add any value to the completed saleable products").) Apple argues this is allegedly consistent with Ms. Calhoun testimony that she could not state with any certainty how the costs incurred by her organization affected the sales price of the alleged domestic industry products or any value added. (*See, e.g.*, JX-97C, Tr. at 36:14-37:1, 37:14-38:3, 34:21–35:6.)

Apple also alleges most of Motorola's domestic expenditures in post-sales product support relates to work [

] Apple points out Mr. Bakewell stated when Motorola pays its U.S. employees to support work occurring outside the United States, these expenditures do not contribute to a domestic industry. (RX-1295C, at Q&A 128.)

As with many of Motorola's other expenditures, Apple reiterates that Motorola has not presented evidence allowing for a comparison of the[ ] in expenditures to the industry in question or Motorola's size as required by *Printing and Imaging Devices* and *Coaxial Cable*. (RIB at 231.) Yet, Apple asserts its own comparison shows these [ ] in estimated costs for post-sale product support constitutes [ ] of Motorola's handset sales in the U.S. in 2010 and [ ] of Motorola's market capitalization. (*See* RX-1295C (Blakewell, DWS) at Q&A126. Apple alleges all of this means Motorola has not sustained its burden to establish its domestic post-sales support activities satisfy the economic prong of the domestic industry requirement. (RIB at 232.)

4. Apple Argues Motorola's Evidence of Investments in Plant and Equipment Under Section 337(a)(3)(A) Fails to Satisfy the Economic Prong of the Domestic Industry Requirement

According to Apple, Motorola also relies on its purported investments in plant and equipment under subprong (A)—[

]—to satisfy the economic prong of the domestic industry requirement. (*See* CX-2690C (Mulhern, DWS) at Q&A.63-65; CX-2684C (Deardorff, DWS) at Q&A 67-68.)

Again relying upon Mr. Bakewell's testimony, Apple emphasizes that Motorola's evidence of domestic investments in plant and equipment fails to establish a nexus to articles protected by the asserted patents. (*See* RX-1295C at Q&A 140.) Also consistent with its previous assertions, Apple first contends that Motorola's facilities are necessarily used for purposes other than those that pertain to the domestic industry products, particularly considering that Motorola sells dozens of other products. (RIB at 232.) Secondly, Apple asserts Motorola engages in activities that do not count toward the domestic industry requirement, such as marketing. (*Id.*) As a result, Apple argues that to the extent marketing-related activities are commingled with domestic industry activities, neither should be considered because the marketing expenses cannot be segregated. (*See Certain Vacuum Packaging Products*, Inv. No. 337-TA-496, Order No. 36, at 144 n.43 (USITC Dec. 16, 2003), *available at* 2003 WL 23210691, at *149 FN 43 (stating that "'marketing and sales' expenses . . . are not considered for domestic industry purposes").) Apple next postulates it is possible that space in Motorola's facilities is vacant or under-utilized because of Motorola's financial difficulties in recent years. (*See, e.g.*, RX-1084 ["Motorola Announces 4,000 More Layoffs," PC World]; RX-1085 ["Motorola Confirms Layoffs," PC World]; RX-1086 ["Motorola Speed Dials Cell Overhaul," Wall Street Journal].)

Apple asserts that because Motorola presented its data in absolute terms, Motorola has not established its expenditures on plant and equipment are significant with respect to benchmarks required by Commission precedent. (RIB at 233.)

5. Apple Argues Motorola's Evidence of Investments in Employment of Labor and Capital Under 337(a)(3)(B) Fails to Satisfy the Economic Prong of the Domestic Industry Requirement

According to Apple, Motorola attempts to prove the economic prong through labor expenses, *i.e.*, Motorola relies on evidence that it employs [ ] in its Mobile Devices segment, with annual salary expenses associated with these employees [

] As before, Apple offers Mr. Bakewell's opinion that neither Ms. Mulhern's nor Ms. Deardorff's testimony establishes a nexus to articles protected by the asserted patents because their testimony does not demonstrate how many of these [ ] worked specifically on the domestic industry products. (*See* RX-1295C at Q&A 144.) Nor, Apple alleges, does Motorola provide testimony as to why its investments in labor or capital are significant. (RIB at 233.) Hence, Apple again asserts Motorola's data is offered without any comparison to the industry in question or to Motorola's relative size and again cites *Coaxial Cable* at 51; *Printing and Imaging Devices* at 31.

6. Apple Argues Motorola's Evidence of Domestic Sales and Marketing Investments Are Irrelevant and Do Not Support a Finding that Motorola Satisfies the Domestic Industry Requirement

Apple notes Motorola submitted the testimony of Ms. Mulhern and Jean Pierre Le Cannellier concerning its marketing activities. (*See* CX-2690C at Q&A 232-49 and *see generally* CX-2688C.) Apple challenges the relevancy of the data Motorola provided concerning its marketing activities to the economic prong of the domestic industry requirement and again

cites *Vacuum Packaging Products* at 144 FN 43 in support of its position that marketing and sales expenses are not relevant for domestic industry purposes. (RIB at 234.)

Apple further argues, in the event that the ALJ or Commission finds Motorola's marketing costs relevant, that Motorola failed to prove its marketing activities have any nexus to the domestic industry products. (*Id.*) Particularly, Apple argues Ms. Mulhern and Mr. Le Cannellier testified about the total number of employees engaged in marketing, the costs incurred by Motorola by employing these individuals, and the costs incurred by Motorola by employing [

] Again relying upon Mr. Bakewell's opinion, Apple maintains Motorola failed to provide testimony identifying several critical characteristics concerning Motorola's marketing activities, including—(i) what products the marketers were promoting, (ii) the extent to which the marketers promoted products other than the domestic industry products, and (iii) the importance of the asserted patents to the products alleged to embody the asserted patents. (RX-1295C at Q&A 153.)

Apple contends Ms. Mulhern and Mr. Le Cannellier have also testified as to Motorola's total non-labor U.S. advertising and promotion expenditures. (CX-2690C at Q&A 233-38; CX-2688C at Q&A 79.) However, Apple reiterates that Motorola, through these witnesses or anyone else, failed to provide testimony or evidence explaining how the activities associated with these expenditures add value to the domestic industry products and/or were directed to any patented features. (RIB at 234-35.) Thus, Apple agues I should give Motorola's total non-labor U.S. advertising and promotion expenditures should be given little weight. (*See* RX-1295C (Bakewell, DWS) at Q&A 155. Finally, as it has consistently argued for all of its expenditures

and expenses, Apple declares Motorola has not presented any evidence that its marketing activities are "significant" or "substantial" because the marketing data is presented in absolute terms. (RIB at 235.)

C. Motorola's Reply Allegations

Motorola states that throughout its post-hearing brief, Apple has insisted that in order to satisfy the domestic industry requirement, Motorola must be able to quantify the portion of its domestic investments and activities attributable to each of its asserted patents. (CRB at 106.) For example, with respect to Motorola's licensing program, Motorola argues that Apple asserts that "Motorola does not keep track of how much it has invested in licensing or litigating a patent on a patent-by-patent basis and therefore cannot allocate any of its expenses to the asserted patents in this Investigation." (RIB at 224; *see also* RIB at 218 (activities of licensing employees), 221 (litigation expenses), 223 (licensing revenues).) Motorola says this argument by Apple is incorrect because Commission precedent makes clear that "[a] precise accounting is not necessary, as most people do not document their daily affairs in contemplation of possible litigation." (CRB at 106.) (citing *Stringed Musical Instruments* at 26.) Accordingly, Motorola argues a complainant need not "define or qualify the industry in absolute mathematical terms." *Id.*

Motorola argues it "need only demonstrate a sufficiently focused and concentrated effort to lend support to a finding of substantial investment." (CRB at 106.) (citing (*Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 227-TA-710, Order 102, 2011 WL 1576536 at 10 (internal quotation, citation omitted).) Motorola emphasizes that as a company founded in and continuously operating in the United States it has produced extensive evidence showing its substantial U. S. based activities, including exploitation of the asserted patents through licensing and research and development, and significant investments in

value-added United States manufacturing, support, repair and replacement activities. (CRB at 106-107.) (*See* CIB at 202-220.)

Motorola also declares Apple mischaracterized the Commission's decision reversing former Chief ALJ Luckern's initial determination that a domestic industry exists. (CRB at 107.) Apple asserted the Commission previously determined that there was insufficient evidence to support a finding of domestic industry based on its U.S.-based licensing activities. (*See* RIB at 211.) Motorola notes that contrary to Apple's assertion, the Commission only remanded the question of whether a domestic industry exists based on Motorola's licensing program and its other domestic investments to the ALJ for further consideration based on its intervening decision in the '694 investigation. (*See* Commission Order: Vacatur and Remand of Initial Determination at 3 (July 7, 2011) ("In order to allow the ALJ to more fully consider the implications of the Commission's decision in *Multimedia Display Devices*, we vacate and remand the ID.").) Hence the Commission took no position on Motorola's evidence. Motorola argues that analysis of *Multimedia* will establish that Motorola, for a variety of reasons, satisfies the domestic industry requirement.

Motorola notes that Apple contends the Commission and I lack sufficient "benchmarks" to evaluate whether Motorola's U.S.-based activities are significant in light of its relative size or the industry in question. Motorola rejects Apple's suggestion the Commission would be unable to evaluate whether Motorola (the only other major U.S.-based handset manufacturer besides Apple) has shown it has made significant domestic investments satisfying the economic prong is false and contrary to logic. Motorola explains that as a threshold matter, "[t]here is no requirement in the statute that an industry must be of a particular size." *Certain Optical Disk Controller Chips and Chipsets and Prods. Containing Same, Including DVD Players and PC*

Optical Storage Devices, Inv. No. 337-TA-506, Final Initial and Recommended Determinations, 2005 WL 1901371 at 59 (May 16, 2005). The only requirement is the investments or activities be substantial.

Motorola argues its domestic investments are substantial by any measure, for as set forth in Motorola's opening post-hearing brief, Motorola has significant U.S.-based activities directed at exploiting its asserted patents and in plants, equipment, labor and capital relating to articles protected by its asserted patents. Motorola reiterates its position that the articles protected by its asserted patents are significant to its business, [ ] percent of Motorola's total U.S. mobile handset revenues for 2010 were attributable to the domestic industry products.

Motorola renews its argument that, on a patent-by-patent basis, a nexus exists between its patent licensing activities and each of the patents asserted in this investigation. Motorola asserts it complies with the purpose of Subsection C, which it notes is intended to permit the domestic industry requirement to be satisfied by "all 'holders of U.S. intellectual property rights who are engaged in activities genuinely designed to exploit their intellectual property' in the United States." *Multimedia Display* at 7.

Motorola emphasizes its argument concerning the '697 patent. Motorola reiterates that a nexus exists because this patent has been specifically identified in many license agreements, [

] Motorola notes that licenses that grant rights to a patent for the production of "articles protected by" [cellphones] that patent are, by definition, connected to that patent. *Multimedia Display* at 10.

Apple argues it also established a nexus between the'862, '223 and '333 patents and its licensing activities.[68] Motorola asserts that unrebutted evidence shows that each of these patents has featured in [

] Motorola also argues has established other factors showing the relative importance of these patents to its portfolio: for example, it alleges the '223 patent is a standard-essential patent, and both the '223 and '333 patents have been successfully asserted in litigation. (*See Multimedia Display* at 10; CX-2683C (Dailey, DWS) at Q&A 96, 100. Motorola also insists it has established a nexus, because of the cohesiveness and technical congruence of its portfolio, and the fact that its licensing activities relate to products using its patents in the United States. (*See* CIB at 209-212.)

As for substantiality, Motorola reiterates its licensing program is substantial by any measure. Although not explaining in detail the nexus between the asserted patents and its licensing program, Motorola does correctly assert its licensing program has generated [

] in royalty income, including [ ] attributable to licenses (at least) related to the asserted patents between 2005 and 2010. (*See* CX-2681C (Blasius, DWS) at Q&A 35; CDX-5.8.)

Motorola's program is a U.S.-based activity [

] Motorola claims Apple's main critique of this evidence is that Motorola's investments in its licensing program and royalty income cannot be allocated to the asserted patents on a

---

[68] I found the '862 patent to be invalid, so the question of any domestic industry is irrelevant. Similarly, I found both the '333 patent is not infringed, so domestic industry is also ultimately irrelevant but is discussed. Domestic industry is also discussed for the '223 patent, even though it is anticipated by prior art.

patent-by-patent basis, which Motorola alleges it is not required to prove in any event. *Stringed Musical Instruments* at 26. Motorola closes this part of its reply out by optimistically arguing that because it established a strong nexus between its portfolio-based licensing activities and each of the asserted patents, it is appropriate to consider the entirety of its domestic licensing activities in determining that a domestic industry exists. *See Multimedia Display* at 8.

Motorola reiterates its argument that it satisfied the economic prong by showing its substantial investments in plant, equipment, labor and capital relating to articles protected by its asserted patents under subsections A and B. (*See* CIB at 202-206.)

Motorola argues its post-sale support, repair and replacement activities can satisfy the economic prong by demonstrating its significant service and repair activities with respect to the articles protected by its patents and cites several previous Commission opinions in support for that general proposition. (*See, e.g., Certain Battery-Powered Ride-on Toy Vehicles and Components Thereof*, Inv. No. 337-TA-314, USITC Pub. 2420, Initial Determination at 20-21 (unreviewed in relevant part) (1991) (services under warranty and replacement parts for patented dual control power pedal units shown to be significant to complainant's U.S. business); *Certain Airtight Cast-Iron Stoves*, Inv. No. 337-TA-69, USITC Pub. 1126, Comm'n Op. at 10-11 (1981; *Certain Airless Spray Pumps and Components Thereof*, Inv. No. 337-TA-90, USITC Pub. 1199, Comm'n Op. at 10-11 (1981) (frequent warranty servicing required over lifetime of pumps protected by the patents added significant value and satisfied the economic prong); *Certain Video Displays, Components Thereof, and Prods. Containing Same*, Inv. No. 337-TA-687, Order No. 20, Initial Determination (May 20, 2010) (unreviewed) (complainant's post-sale service operations, including warranty repairs and refurbishments, return merchandise authorizations, customer call center operations, and technician activities with respect to video displays protected

by complainant's patents, were significant and satisfied the economic prong).) Motorola reiterates the same general proposition by arguing that with respect to post-assembly domestic manufacturing activities, the Commission has found that such activities may satisfy the economic prong when they add value to the articles protected by complainant's patents. (*See Certain Male Prophylactics Devices,* Inv. No. 337-TA-546, Comm'n Op. at 43 (May 16, 2008).)

Motorola asserts that Apple's main critique with respect to its post-manufacturing activities is its allegation that Motorola has failed to provide an assessment as to whether its investments are substantial in relation to its "relative size or the industry in question." (RIB at 229-232.) Motorola argues its investments of [ ] are substantial by any measure. Motorola argues it has proven it conducts significant manufacturing activities in the United States, in particular value-added activities such as loading vendor-specific software, without which its phones would not work on U.S. networks. (*See* CX-2684C (Deardorf, DWS) at Q&A 35, 38-54.) Motorola argues its U.S. manufacturing activities are not disputable and asserts Apple declined to cross-examine Motorola's fact witnesses and its expert witness on these issues.

D. Apple's Reply Allegations

Apple's reply presents no new insights. (RRB at 100 – 115.) Instead, even when replying to Motorola, Apple repeats the arguments it made in its opening brief. But, in particular, Apple fastens on to what is arguably Motorola's most difficult burden of proof (nexus) and reiterates its contention that Motorola's evidence does not establish a nexus to domestic industry.

Apple disputes Motorola's position that Motorola's evidence of total investments under subprongs (A)-(C) satisfies the domestic industry requirement. Apple reiterates is reasoning for disputing that Motorola's: (1) U.S. facility space comprising [ ] (2) investment in [ ] in the Mobile Devices business segment;

(3) [ ] investment in research and development relating to the entire Mobile devices segment, satisfy the economic prong of the domestic industry requirement or that these expenditures/investments establishes a domestic industry under subprong (C). (*See* CIB at 219-20.) As before, Apple argues Motorola has overstated its investments and simply has not proven a nexus between this effort and the asserted patents or even domestic industry products.

Apple argues an analysis of Motorola's investments in U.S. facilities under subprong (A), [ ] exemplifies the lack of nexus between Motorola's total investments and the domestic industry products. Apple notes, again, [ ] none of which manufacture any domestic industry products. (RRB at 102 and *see*: CX-2690C (Mulhern, DWS) at Q&A184; CX-2684C (Deardorff, DWS) at Q&A 47.)[69] Apple then reiterates its argument concerning other purposes the [ ] facilities for which Motorola may use these facilities.

Apple alleges the same reasoning is applicable to Motorola's investment in [ ] in the Mobile Devices business segment under subprong (B) and [ ] in research and development relating to the Mobile Devices segment under subprong (C). Specifically, Apple argues these investments are so overstated that their relationship to the domestic industry products is practically nonexistent.

Apple next argues the opinion in *Certain Laminated Floor Panels* ("*Laminated Floor Panels*"), Inv. No. 337-TA-545, Init. Det., 2006 WL 814350, at *2-3 (USITC Mar. 2, 2006), which Motorola argued permitted it to use sales revenue to allocate expenditures on the domestic industry products from total employment expenses, cannot be used under the facts of this

---

[69] I note these references do not support Apple's proposition. The Deardoff exhibit says that handsets are manufactured in China, not that no domestic products are manufactured in any of these facilities. The other exhibit does not address this point.

Investigation. Apple argues *Laminated Floor Products* (where Apple alleges manufacture of 100% of the complainant's domestic product actually occurred in one U.S. plant and where a strong nexus arguably existed) should not apply to the facts of the present Investigation and argues, why it believes it is inappropriate for Motorola to use the *Laminated Floor Products* methodology. Consistent with its allegations from the beginning, Apple alleges Motorola cannot use its evidence of total investments to prove domestic industry because they are so overstated they have no relationship to domestic industry products actually produced by Motorola, which is unlike the facts in *Laminated Floor Products*. Apple contends this makes Motorola's calculated investments based on these total investments meaningless.

Beyond its investment in [ ] in the Mobile Devices segment, Motorola also argues that its expenses of [ ] in 2010 relating to U.S. call centers and [ ] relating to repair and replacement of products are evidence of a domestic industry under subprong (B). (*See* CIB at 205.) Apple reiterates it position that Motorola's investment in labor and capital relating to post-sale product support does not support a finding that Motorola satisfies the economic prong because the evidence (1) does not establish a clear relationship between the activities performed and the asserted patents, (2) does not explain how the activities add value to the domestic industry products, and (3) is largely directed to supporting activities that are performed outside the United States. (*See* RIB at 229-32.) Apple repeats its often repeated argument that Motorola's investment (all of its investments) is deficient under Commission precedent because it is minimal when compared to the industry in question and Motorola's relative size. (*See* RIB at 229-32; *Coaxial Cable* at 51 ("[W]hether an investment is substantial will depend on the industry in question, and the complainant's relative size.") (internal quotation omitted).) Apple next reiterates its position that Motorola's associated

marketing investments (*See* CIB at 205) are irrelevant for domestic industry purposes and should be disregarded as discussed in Apple's Post-Hearing Brief. (*See* RIB at 234 and RRB at 106.)

Apple again contests what it terms Motorola's attempt to deemphasize its burden to allocate its licensing activities to domestic industry patents and asserted patents. (RRB at 106.) As Apple correctly asserts, the Commission, in *Multimedia Devices*, requires complainants relying on portfolio licensing activities "*must present evidence that demonstrates the extent of the nexus* between the asserted patent and the complainant's licensing activities and investments." *Multimedia Display* at 9. Thus, as Apple has repeatedly alleged, Motorola fails to establish a nexus between its licensing portfolio and the asserted patents or even establish its investments are substantial when compared to the industry in question or Motorola's relative size. (RRB at 107.)

Apple correctly argues the size of Motorola's patent portfolio is relevant in assessing nexus under *Multimedia Devices* in assessing nexus is the number of patents in the portfolio. *Multimedia Devices* at 10. Even though Motorola emphasizes that there are "47 licenses that license at least one of the asserted patents" and cites to a chart its expert Ms. Mulhern created that lists the number of licenses that cover each of the asserted patents, Apple alleges Motorola does not address how many licenses are in these portfolios, some of which cover [

] of patents. [

] Apple argues this attenuates any nexus.

As it did before, Apple discounts Motorola's evidence [

] Thus, Apple argues that Motorola really has no way to establish the value of the asserted patents.

Apple also reiterates that Motorola has not proven nexus because it has not proven "the relative value contributed by the asserted patent to the portfolio." Instead, Apple argues that Motorola only offers conclusions, even when addressing the alleged essential nature of the '223 and '697 patents.

Apple again states that Motorola's evidence of investments related to the RIM litigation, which involved the 223 and 333 Patents, is overstated and unpersuasive. Apple alleges Motorola failed to show how can allocate its litigation to investments in licensing for each of the asserted patents and thus these expenses have little relevance to the domestic industry analysis. In support of its contention, Apple notes: "that patent infringement litigation activities alone, *i.e.*, patent infringement litigation activities that are not related to engineering, research and development, or licensing, do not satisfy the requirements of section 337(a)(3)(C)." *Coaxial Cable* at 43-44. The problem for Motorola here is that this litigation only relates to two of the patents – the '223 and the '333 patents.

As it did in its initial brief, Apple challenges Motorola's claim of [ ] in licensing program revenue because this is for Motorola's *entire* cellular-essential licensing program and is not limited to revenue collected for the asserted patents. (RRB at 110 and RIB at 222-223.) Apple also contends Motorola does not attempt to allocate revenue by patent and admits it cannot.

Apple again contests Motorola's argument that its investments in inventor salaries evidence a domestic industry. Apple alleges that because Motorola did not discuss how much of

the inventors' time involved the asserted patents it cannot establish the industry it seeks to prove. Apple alleges Motorola did not prove the inventors' salaries were related to the practice of the asserted patents and should have deducted the portions of the salaries that relate to time spent working on technologies unrelated to the patented technologies, but Motorola did not do this. (RRB at 112.) Hence, Apple claims Motorola overstates the salaries of the inventors.

Apple disputes Motorola's assertion that its investments are substantial "in relative terms" because "100% of the inventors were Motorola employees when they made their respective inventions" misses the point. Instead, Apple argues Commission precedent requires Motorola to establish whether the investments are substantial with respect to the industry in question and Motorola's relative size. *See Printing and Imaging Devices* at 27; *Coaxial Cable* at 51. Since the inventor salaries constitute only [ ] of Motorola's total U.S. handset sales in 2010 and [ ] of Motorola's market capitalization, Apple argues the salaries are not significant enough to prove the economic prong of domestic industry.

Apple also renews its attack on the Motorola argument that its investments in [ ] devoted to research and development of the domestic industry products who worked [ ] between December 2007 and February 2011 satisfy the domestic industry requirement. (RRB at 113.) Apple repeats its allegation that R&D effort is based on an allegedly unreliable document (CX-1937C) that provides only raw data with no frame of reference for determining the significance of the hours worked or the type of work that was performed. Apple again argues Motorola failed to provide the comparative analysis required by *Printing and Imaging Devices* and *Coaxial Cable* to explain, for example, how the time spent on research and development compares to the time spent on other projects. This makes Motorola's

evidence of investments in employees who worked on R&D relating to the domestic industry products insufficient to establish domestic industry.

Apple also renews its attack on Motorola assertions relating to its investments in the domestic development of [ ] of the domestic industry products at a cost of over [ ] and among other things, notes there is no testimony establishing whether any of the prototypes practiced the asserted patents and that the expenses are minimal when compared to relevant industry benchmarks, for the [ ] constitutes only[ ]of Motorola's total U.S. handset sales in 2010 and only [ ] of Motorola's market capitalization.

Apple's repeats its challenge to Motorola's assertions that its investments of millions of dollars in post-assembly programming and testing and post-sale product support satisfy the economic prong of the domestic industry requirement under subprong (C). (RRB at 114.) Apple again claims it is speculative conclude that investments in post-sale support activities constitute the type of "R&D" activities that satisfy the domestic industry requirement. Moreover, Apple argues that Motorola's corporate designee admitted Motorola cannot tie its investments in post-sale product support (such as call center and repair activities) to the asserted patents. (*See* RIB at 230 (citing JX-97C, Calhoun at 19:4-14).) Apple also asserts it remains unclear what value the post-manufacturing activities add to the domestic industry products or whether any of the activities are directed to the practice of the asserted claims, but more than that, Apple again notes that most of Motorola's post-sale product support expenses are directed to supporting activities occurring outside the United States. Moreover, consistent with almost every category of Motorola revenue or expense but licensing, facilities, or R&D employee effort, Apple argues these post manufacturing expenses are not significant when compared to relevant industry benchmarks as required Commission precedent.

E. Findings on Domestic Industry

1. Applicable Law

a. Generally

In a patent-based complaint, a violation of section 337 can be found "only if an industry in the United States, relating to the articles protected by the patent . . . concerned, exists or is in the process of being established." 19 U.S.C. §1337(a)(2). Under Commission precedent, this "domestic industry requirement" of section 337 consists of an economic prong and a technical prong. *Stringed Musical Instruments* at 12-14. The complainant bears the burden of establishing that the domestic industry requirement is satisfied. *See Certain Set-Top Boxes and Components Thereof*, Inv. No. 337-TA-454, Final Initial Determination at 294, 2002 WL 31556392 (June 21, 2002) (unreviewed by Commission in relevant part).

b. Economic Prong

Section 337(a)(3) sets forth the following economic criteria for determining the existence of a domestic industry in such investigations:

> (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned –
>
> (A) significant investment in plant and equipment;
>
> (B) significant employment of labor or capital; or
>
> (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

Given that these criteria are listed in the disjunctive, satisfaction of any one of them will be sufficient to meet the economic prong of the domestic industry requirement. *Certain Integrated Circuit Chipsets and Prods. Containing Same*, Inv. No. 337-TA-428, Order No. 10, Initial Determination (unreviewed) (May 4, 2000).

There is no one formula for determining whether a domestic industry exists; instead, the Commission "favor[s] case-by-case determination in light of the realities of the marketplace that encompass not only the manufacturing operations but may also include distribution, research and development and sales." *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, Order 102, 2011 WL 1576536, p. 4 (Apr. 6, 2011) (unreviewed by Commission in relevant part) (internal quotation, citation omitted). To establish a domestic industry, the complainant "need only demonstrate a sufficiently focused and concentrated effort to lend support to a finding of substantial investment." *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, Order 102, 2011 WL 1576536 at 10 (internal quotation, citation omitted). The complainant need not "define or qualify the industry in absolute mathematical terms." *Stringed Musical Instruments* at 26. As the Commission has stated:

> The language of sections 337(a)(2) and 337(a)(3)(A) and (B) taken together indicated the intent of Congress that in order to establish domestic industry, a complainant's investment in plant and equipment or employment of labor or capital must be shown to be "significant" in relation to the articles protected by the intellectual property right concerned. Thus, under the statute, whether complainant's investment and/or employment activities are "significant" is not measured in the abstract or in an absolute sense, but rather is assessed with respect to the nature of the activities and how they are "significant" to the articles protected by the intellectual property right. The legislative history of section 337(a)(3) evidences that Congress intended to codify the Commission's practice with respect to the first two factors and to expand the scope of the domestic industry by adding the third factor "substantial investment 'in intellectual property's] exploitation as set forth in section 337(a)(3)(C). H.R. Rep. No. 40, 100th Cong., 1st Sess. Pt. 1, at 157 (1987).

Printing and Imaging Devices at 26.

With regard to the licensing aspect of the economic prong of domestic industry, the Commission has recently issued significant direction and the parties are aware of it, having cited to it in their briefs. Specifically, in *Certain Multimedia Display and Navigation Devices and*

Systems, Components Thereof, and Products Concerning Same, Inv. No. 337-TA-694, Comm'n Op. July 11, 2011, the Commission articulated a series of specific issues, questions, and factors I must consider in determining whether Motorola met 19 U.S.C. § 1337(a)(3)(C) for its licensing activities. I will apply *Multimedia Display* to determine the extent Motorola may or may not meet the economic prong as it relates to licensing.

c. Technical Prong

The technical prong of the domestic industry requirement is satisfied when the complainant in a patent-based section 337 investigation establishes that it is practicing or exploiting the patents at issue. *See* 19 U.S.C. §1337 (a)(2) and (3); *Certain Microsphere Adhesives, Process for Making Same and Prods. Containing Same, Including Self-Stick Repositionable Notes,* Inv. No. 337-TA-366, Comm'n Op. at 8, 1996 WL 1056095 (Jan. 16, 1996). "The test for satisfying the 'technical prong' of the industry requirement is essentially [the] same as that for infringement, *i.e.*, a comparison of domestic products to the asserted claims." *Alloc, Inc. v. Int'l Trade Comm'n,* 342 F.3d 1361, 1375 (Fed. Cir. 2003). To prevail, the patentee must establish by a preponderance of the evidence that the domestic product practices one or more claims of the patent, either literally or under the doctrine of equivalents. *Bayer,* 212 F.3d at 1247. It is sufficient to show that the products practice any claim of that patent, not necessarily an asserted claim of that patent. *Certain Microsphere Adhesives*, Comm'n Op. at 7-16. This aspect of domestic industry has already been discussed per patent in this Initial Determination.

2. Analysis of Domestic Industry

a. Generally

I find all the evidence in this Investigation convincingly establishes that the '697 patent, which I have found infringed and valid, advances the science of mobile communication devices

(cell phone) technology. What is more, I have already found that practicing the '697 patent is necessary for compliance with mobile communication industry standard—the 3GPP TS 25.213.

I also agree with Motorola that the Commission recognizes those who hold intellectual property rights do not usually account for expenses and profit on a per patent basis. For example, such holders would have difficulty in accounting for effort that, while perhaps advancing the art or their understanding of the art, does not lead to a patent, *e.g.*, a R&D department decides not to apply for a patent or has a patent application denied.

Similarly, valuing an individual patent within a family of patents necessary for a family of devices to succeed also is not done. For example, the devices at issues in this Investigation are cell phones. Cell phones are complicated and are the results of decades of effort and thousands of patents and components made by numerous manufacturers, including diverse kinds of chip manufacturers, and optical device [camera] manufacturers. This creates a situation where most manufacturers cannot make a cell phone without licensing the intellectual property of other concerns, which is why there are so many cross licenses between the various manufacturers. Cell phones are then designed, integrated, assembled and marketed by huge concerns like Complainant and Respondent, who typically sell them to work through a particular carrier like Verizon, AT&T, or Sprint. This entire process leads to one inescapable conclusion – it is a rare patent that has any accountable value apart from the rest of the patents in a portfolio or in conjunction with patents (or portfolios) held by other concerns. Hence, it is unusual, at least with anything as complicated as patents applicable to cell phones, that any concern can precisely allocate costs or effort by a type of patent.

b. Practicing the Asserted Patents

I have already addressed whether Motorola is actually practicing the asserted patents under the respective section addressing each patent. By way of review, I have determined

Motorola is practicing the '223 patent (the Motorola Droid 2) and the '697 patent (Motorola CliqXT) and is not practicing the '333 patent. No findings were made concerning the '862 patent because I found it to be invalid because it was incapable of construction and a mobile device utilizing that patent cannot be made useful for its intended purpose and is thus indefinite.

c. Investments in Plant, Equipment, Labor and Capital

Motorola asserts it established [ ] of its total U.S. Mobile handset revenues for 2010 were attributable to domestic industry products. (CIB at 203-204 – see CX-358C.) Domestic Industry Products include the Cliq, Cliq XT, Droid, Droid X and Droid 2. (CX-2684C (Deardoff, DWS) at Q&A 27.) In round dollars, this means that Motorola's 2010 revenue for domestic products is [ ] While Apple argues against the reliability of this number and the statistics that flow from this number, I find Apple's arguments are not convincing as to the derivation of the [ ] number, but are rather more convincing as to whether the numbers flowing from this number are "'significant' in relation to the articles protected by the intellectual property rights concerned" as required by the Commission in *Printing and Imaging Devices at 26.* What is more, I find Motorola's briefing is rather more summary and conclusory and does not always recite evidence that could be helpful to its cause or to me in finding proof of the economic prong.[70]

According to Motorola, revenue attributable to **practiced** domestic products are as follows: (1) The CliqXT is responsible for [ ] of all of MMI's handset unit count and [ ] of its revenues [ ] and (2) The Droid 2 is responsible for [ ] of all of MMI's

---

[70] *See* CX-2682C (Calhoun, DWS) at Q&A 33-34, wherein Ms. Calhoun stated Motorola tracked its repair and call center costs on a product by product basis, but the evidence Motorola provided, e.g., CX-0753C, was on an operating system basis. It seems Motorola cast its proof on the assumption that all of its patents were valid and had been infringed.

handset unit count and [ ] of its revenue [ ] Accordingly, from devices I have found practice valid patents in this case, MMI claims it derives approximately [ ] of its revenue or [ ]

As noted above, MMI argues that its investments in plant, equipment, labor and capital related to the asserted domestic products satisfy the economic prong of the domestic industry requirement under Subsections (A) and (B). (CIB at 202-06, CRB at 110.)

Motorola allocates its expenditures related to the asserted domestic products as a percentage of its U.S. mobile phone sales. (*See* CX-358C, Ex. 11; CX-369C; CDX-5.4 (and sources cited therein).) The Commission has accepted this allocation methodology in other investigations. *See, e.g.*, *Laminated Floor Panels* (granting economic prong summary determination where complainant used sales revenue to allocate expenditures on the domestic industry-products from total employment expenses). And, even though Apple has attempted to distinguish the facts of *Laminated Floor Panels* from the facts of this case to as discussed above, its argument misses the point that such a methodology is acceptable, as long as the complainant can prove the sales revenue it is seeking to use to allocate expenditures bears a significant relationship to the intellectual property rights at issue. This means Motorola must be able to show on a per patent basis (and not in an absolute sense) that the revenue is significant.

Apple's often repeated refrain that I should not consider MMI's alleged domestic industry costs because they are allegedly so overstated to cause them to have no relationship to domestic industry products actually produced by MMI is raises a matter of concern. While I have found that MMI's practiced domestic products account for [ ] in revenue, this is in the absolute sense, *i.e.*, that revenue is for devices that may practice the patent at issue along with many other patents. Thus, the domestic effort associated with this

component, *i.e.*, the plant, equipment, labor, and capital likely plays some kind of a role in [ ] in revenue. The real question is has Motorola proven the role the plant, equipment, labor and capital play is significant.

MMI's evidence establishes that while MMI has call centers in [ ] to handle routine technical support calls, all calls that concern advanced or complex technical issues are routed to MMI's call center [ ] where real value is added. (CX-2682C (Calhoun, DWS) at Q&A 32.) The evidence shows that [ ] Unfortunately, for Motorola, it has introduced no evidence that would permit me to apportion the calls received by each domestic product, but instead has given me an absolute number based upon devices sharing a common operating system. Hence, I find there is nothing in Motorola's brief that leads me to evidence in the Record that will permit me to decide, even approximately, how to apportion these calls to the Droid 2 or the Cliq XT. This means I would have to guess the number of calls because there is no reason to believe there is any correlation between revenue or handsets produced and the number of calls received, since one product may be much easier to use or be more reliable. Accordingly, I cannot find Motorola has established, by the preponderance of the evidence that its investments in labor for [ ] related to the Cliq XT and the Droid 2 were significant.

Motorola also identified a combination of labor and capital costs associated with post-sale warranty repair and replacement of products in the United States. (CIB at 204; CX-2682C (Calhoun, DWS) at Q&A 59 – 85). Ms. Calhoun directly identified [ ] in Cliq XT

seedstock and [ ] in Droid 2 seedstock (Motorola provided replacement cell phones for the carriers to distribute to customers as warranty replacements). (*Id.* at Q&A 82-85.) This is undoubtedly a valuable effort, one that adds value to consumers' purchase of these products. Because Motorola can directly identify the exact cost by domestic product and thus a direct connection to the patents at issue, I find Motorola has proven, by the preponderance of the evidence that its investment in seedstock is significant, even considering Motorola's total revenues.

In addition to seedstock replacements directly attributable to the practiced domestic industry products, Motorola also claims it incurred warranty labor (CIB at 205) costs for: [ ] to support the warranty program (unspecified in amount); (2) returns processing in 2010 of [ ] and (3) repair and refurbishment parts storage of [ ] in 2010 for [ ] in total domestic industry costs. I have the same exact problem with apportioning these costs as with the call center calls and costs. Motorola has simply not provided sufficient reliable information for me to do more than guess what repair and refurbishment costs can be allocated to the Cliq XT and Droid 2 or how these costs were significant to the relevant patents or how much value they may have added to the Cliq XT or Droid 2.

Motorola also expends effort developing its domestic industry products. Motorola alleges a substantial portion of the development of these products occurs in the United States. (CX-2684C (Deardoff, DWS) at Q&A 29 – 40.) For example, Motorola developed [ ] of the domestic industry products in the United States while expending [ ] in capital effort developing prototypes, not including labor. (*Id.* at Q&A 43 – 46.) Again, Motorola has failed to provide a reasonable way I can apportion these costs to the Cliq XT and the Droid 2. Instead, I find there is nothing in Motorola's brief that leads me to

evidence in the Record that will permit me to decide, even approximately, how many of the prototypes can be apportion to the Droid 2 or the Cliq XT or how this effort may have added value to the Droid 2 or Cliq XT. Accordingly, I find Motorola has not proven, by the preponderance of the evidence, that its investments in non-labor prototype costs related to the Cliq XT and the Droid 2 are significant.

Post-assembly loading of vendor-specific software and testing for all Motorola handsets sold in the United States occurs at a facility [

] Motorola calls the work related to this effort conversion. [ ] also packages and distributes the handsets from Fort Worth. (*Id.* at 54.) I find this work is critical to make the handsets useful for the individual carriers for consumer use and also find it confers great benefit to the practiced devices.

In 2010, Motorola used [ ] employees to manage and support the activities of Cinram. (*Id.* at 55.) In 2010, Motorola paid [ ] in conversion costs to [ ] Motorola spent [ ] in 2010 paying Motorola employees involved in managing the efforts of its [ ] (*Id.* at Q&A 63.) Conversion costs for Motorola's domestic products thus totals [ ] Nevertheless, I find there is nothing in Motorola's brief that leads me to evidence in the Record that will permit me to decide, even approximately, how much of these costs I can apportion to the Droid 2 or the Cliq XT. For example, Motorola offers no proof that it converted "x" number of Droid 2 handsets and that this effort constituted "y" percentage of the work performed by Cinram. Instead, it has essentially provided me with nothing but the rawest of numbers and invited me to presume the result is significant. This I cannot do. Accordingly, I find Motorola has not established by the preponderance of the evidence that its investments in conversion costs

related to the Cliq XT and the Droid 2 are clearly significant or what value may have been added to these products.

Motorola maintains [ ] in the United States. (CDX-5.5; CX-35C, Confidential Exhibit E; CX-2684 at Q&A 68.) Motorola apportions [ ] of its global facilities [ ] to its mobile devices business segment, because [ ] of its [ ] in 2010 global revenues were attributable to this segment. (CIB at 204; *see* CX-363C, Mulhern Report at Ex. 5; CX-364C, Mulhern Report at Ex 6.) Motorola contends that since [ ] of its total U.S. handset revenues in 2010 were attributable to domestic industry products, [ ] should be apportioned to that effort.

Apple disputes Motorola's figures and logic. Apple argues Motorola uses these facilities for other purposes (products), conducts marketing from these facilities (which does not count for domestic industry), and speculates that these facilities are underutilized since Motorola has been suffering from financial difficulties and laying individuals off. Thus, Apple argues, since Motorola's data is presented in absolute terms, it has failed to establish its expenditures are significant with respect to benchmarks required by the Commission. Apple is not incorrect.

Earlier, I found that the two devices practicing the '223 patent and the '697 patent account for[ ] of Motorola's domestic industry revenues respectively. Nevertheless, that is insufficient information upon which to establish what percentage of Motorola's domestic facilities actually are related to the Cliq XT and Droid 2. Instead, Motorola only proffers its facility space in absolute terms, without any kind of meaningful explanation (*prima facie* proof) of how this facility space added value to the practiced domestic products, which is not true of the seedstock costs for example, which bears a discernible nexus to the asserted patents [the articles protected by the patent] because these costs

add value to them. *See Printing and Imaging Devices* at 32. Nor does Motorola brief or explain how I can find evidence explaining how these activities were important to the practiced patents in the context of Motorola's operations, the marketplace, or the cell phone industry or had any bearing on the practice of the patent. Therefore, I find Motorola has failed to prove a nexus for its facility costs by the preponderance of the evidence.

Motorola employs [ ] people in the United States. (CX-890C; CX-2684C (Deardoff, DWS) at Q&A 78.) Of Motorola's [ ] work in the mobile devices segment and they received [ ] in salaries in 2010. (*Id* at Q&A 79-80.) In its brief, Motorola argues that on this basis, since [ ] of its revenue is related to domestic industry, it should be able to allocate [ ] to domestic industry products. (CIB at 205). I have the same problem with apportioning a percentage of Motorola's labor costs to the practiced domestic products as I had with apportioning facility space. Again, Motorola has proffered its labor or employee costs in absolute terms without even offering a *prima facie* explanation (proof) of how all these costs add value to these practiced domestic products. In other words, as required by *Printing and Imaging Devices* at 30, I find that Motorola has failed "to submit evidence to substantiate the nature and significance of its activities with respect to the articles protected by the patents." Nor do I find evidence explaining how these activities were important to the practiced patents in the context of Motorola's operations, the marketplace, or the cell phone industry or had any bearing on the practice of the patent. Moreover, even though I consider it likely Motorola's labor costs probably include R&D costs, etc., that add value to the practiced domestic industry products, I cannot make a finding based upon the preponderance of the evidence on that basis.

Motorola also alleges its marketing expenses enhance its proof under 337(a)(3)(A) and (B). (CIB at 205). In the witness statement Motorola cites, Pierre LeCannellier, its director of Americas Marketing group, states [ ] work of cell phone marketing within the U.S. and [ ] work specifically on marketing for the asserted domestic products sold by Verizon, generating [ ] in salary. (CX-2688C (LeCannellier, DWS) at Q&A 59-74.) Mr. LeCannellier also stated that Motorola incurred [ ] marketing expenses, including advertising and media expenses of all kinds, training for non-MMI employees, sales materials, etc., for domestic industry products 2009 and 2010. (*Id.* at Q&A 76-82.) I agree with Motorola that its marketing expenses alone cannot establish domestic industry, but find it is unnecessary to further consider them because I found one independent ground to establish domestic industry for the '223 and '697 patents.

I have found hereinabove that Motorola's investments in its seedstock costs are related to the Cliq XT and Droid 2 and significant enough to establish domestic industry. With regard to the rest of Motorola's claimed costs, I am unable to find that Motorola has established, by the preponderance of the evidence, what relationship there should be between the costs it incurred and the Droid 2 and the Cliq XT as required by *Printing and Imaging Devices.*

d. Licensing

With regard to whether licensing establishes domestic industry in this Investigation, I find a strong relationship between the facts of this Investigation and those found relevant in *Multimedia Display*. For example, while Motorola does license the '223 and '697 patents, Motorola does so as part of a larger portfolio. Accordingly, since Motorola's licensing activities are clearly associated with both the asserted patents and many unasserted patents, the key issue in this Investigation is whether Motorola has established a nexus between its activities and the

'223 and '697 patents. Moreover, while I have fond no infringement or practice of the '333 patent, I will also decide whether Motorola's licensing efforts bear a nexus to that patent.[71]

(1) Generally

Motorola established it runs a massive and U.S. based licensing program, one that has generated[ ] of revenue since 2000 where one or more of the asserted patents are part of the license. (CIB at 208.) What is more, Motorola asserts it and Motorola, Inc. have obtained substantial value [ ] (CX-2683C (Dailey, DWS) at Q&A 31; CX-2681C (Blasius, DWS) at Q&A 31, 32; Dailey, Tr. at 512:12-517:6; *see* CIB at 208.) In addition, Motorola attributes [ ] of the royalties received by it or Motorola, Inc. between 2005-2010 to license that include on or more of its asserted patents. Motorola points out that [

] Certainly, by any evidentiary standard, it would constitute error for me to conclude Motorola does not have a substantial and vital U.S. based licensing program. Thus I reject Apple's peripheral attack on Motorola's active licensing program and find Motorola maintains a substantial investment in its U.S. based licensing program.

(2) Nexus Requirements

Nevertheless, my inquiry cannot end with finding Motorola maintains a licensing program that includes the asserted patents. I must find a nexus between those specific patents and the licensing program. To find a nexus, I must assess the evidence demonstrating the relative value or importance of the asserted patents to the portfolio. This means Motorola must present evidence that demonstrates the extent of the nexus between the asserted patent and the

---

[71] The '862 patent is invalid per se as indefinite and thus it can have no domestic industry related to it. Even though I found the '223 patent invalid, I am discussing domestic industry with regard to it.

Motorola's licensing activities and investments. As the Commission explains, I must ascertain if Motorola has established whether its licensing activities are focused on the asserted patent(s) among the group of patents in the portfolio or through other evidence that demonstrates the relative importance or value of the asserted patent within the portfolio. *Multimedia Display* at 9.

The first example the Commission mentions in *Multimedia Display* (at 10), concerning nexus, is whether a licensee's product is an "article protected by" the patent. If that is true, then the license is by definition connected to that patent. In the present Investigation, even though it is likely it is true, there is no evidence in the Record establishing any of Motorola's licensees directly practice any of the asserted patents, although it is likely true since they do manufacture 3G handsets. Thus I find Motorola has not proven any of its licensees practiced any of the asserted patents.

The Commission next identifies other factors I should consider, including: (1) the number of patents in the portfolio; (2) the relative value contributed by the asserted patent to the portfolio; (3) the prominence of the asserted patent in licensing discussions, negotiations and any resulting licensing agreement; and (4) the scope of the technology covered by the portfolio compared to the scope of the asserted patent. *Multimedia Display* at 10. To demonstrate the relative value or importance of a patent in a portfolio, I may consider whether [the patent] (1) was discussed during the licensing negotiation process; (2) has been successfully litigated before by complainant; (3) it relates to a technology standard; (4) is a base or pioneering patent; (5) it is infringed or practiced in the United States; or (6) the market recognizes its value in some other way. *Multimedia Display* at 10-11.

Among the matters the Commission also notes mitigates in favor of finding a nexus, is whether a complainant's licensing activity is performed and directed within the United States,

which weighs in favor of a strong nexus between the activities and the United States. *Multimedia Display* at 14 (citation omitted).

(a) Portfolio Information Findings

The portfolios Motorola has provided that contain the asserted patents are with cell phone manufacturers or those involved in some way with the cell phone industry, [ ] All of the asserted patents have an obvious connection to cell phones (mobile communication devices) based upon the intrinsic evidence in each patent and the record as a whole.

(b) Locus of Licensing Activities Findings

Motorola established by the preponderance of the evidence the locus and focus of its licensing activities is Libertyville, Illinois. (CIB at 207.) Motorola also established: [ ] are located in the United States; (2) [ ] are involved in the licensing program (including legal support); and (3) total patent licensing salaries for 2010 is [ ] (CX-2683C (Dailey, DWS) at Q&A 33-39.)

(c) Findings on Number of Patents in the Portfolio

Motorola's patent portfolios containing the asserted patents contain hundreds, if not more, of patents. Motorola has licensed one or more of the asserted patents [ ] times for a total value of [ ] (*See* CIB at 208 and its reference to CDX 5.8 and the other exhibits supporting this fact.) Motorola also established [ ] of all of its royalties between 2005 and 2010 are attributable to licenses that include one or more of the asserted patents. (CX-2690C (Mulhern, DWS) at Q&A 109.)

(d) Relative Value of Patent Findings

As I have already found, any concern seeking to practice 3G technology would have to practice the '697 patent since it is part of the industry standard for 3G cell phones (the 3GPP standard) and practiced by Motorola.[72] Motorola also established the '697 patent is mentioned in [ ] separate licenses of the [ ] licenses involving one or more of the asserted patents with a total value of [ ] – the same dollar total as all of the asserted patents. (CIB at 208.) Hence, it is clear the '697 patent is a relatively important patent and probably the most important patent of those asserted. Still, Apple challenges its importance and argues Motorola has not emphasized or mentioned it enough in the various licenses to bear out its alleged importance. This will be discussed later.

As with the '697 patent, I have found the '223 patent is practiced by Motorola (even if invalid) and essential for the practice of a standard, the IEEE 802.11n industry standard, which is essential to send information on a wireless network. Motorola also established that the '223 patent is mentioned in [ ] licenses involving one or more of the asserted patents. (CIB at 208.) Thus, the '223 patent would be a relatively important patent, if it were valid. Nevertheless, as with the '697 patent, Apple challenges its importance and argues Motorola has not emphasized or mentioned it enough in the various licenses to bear out its alleged importance. I will also discuss this later.

Motorola presented insufficient evidence to establish the '333 patent is a relatively important patent. First, as already discussed, I agree with Apple that Motorola did not prove that anyone either practices or infringes the '333 patent. Nor can I understand by Motorola, why this

---

[72] Apple's defense to whether a patent met a standard is to assert concerns claim too many patents as being standard essential. In any event, I have found the standard patents in this Investigation ('223 and '697) are required for practicing the standard.

patent was named as patent of the year, because its use of the word "all" so severely limits its scope as to make it of questionable utility. Specifically, the '333 patent is unlikely to be practiced, even if licensed, by those making and selling cell phones because the industry has clearly moved from relatively small memory/limited bandwidth pagers underlying the '333 patent to high memory cell phone (virtual mini-computer) devices operating at 3G or better. Moreover, by its own language, the use of the word "all" in claim 12 is so severely limiting in the context of how mobile devices operate that it is hard to conceive of a purpose (practice) for this patent within the context of modern mobile devices. Therefore, while MMI may have named the '333 patent patent of the year within Motorola, I find the context or reason for that award is unclear and thus the award is not probative.

(e) Findings on prominence in licensing discussions

Motorola argues vigorously that all of its asserted patents were prominent during licensing discussions. To prove its point Motorola submits evidence of [

] I find Motorola has proven the technologies applicable to all of the asserted patents were prominently discussed [

] even though the license consists of [ ] of patents, because the evidence identifies that only [ ] were discussed specifically, including the asserted patents. (CIB at 211; CX-1935C; Blasius, Tr. At 567:21-572:7, 575:7, 575:9-21.)

In addition to licensing discussions with[ ] Motorola established, by the preponderance of the evidence, the '223 and '697 patent was also [

]

Concerning the '333 patent, Motorola makes similar arguments about it as it did with the '223 patent. Motorola proved it entered at least [ ] license agreements relating to the '333 patent. (CDX-5.8.) Motorola also proved the '333 patent was featured in [

]

(f) Enforcement Litigation Findings

The '223 patent was the subject of a successful enforcement action against RIM. (CX-2683C (Dailey, DWS) at Q&A 96, 100.) Like the '223 patent, Motorola also proved the '333 patent was successfully asserted in litigation against RIM, [

]

(g) Infringement Locus

I have already found that Apple infringes the '223 and '697 patents for products it sells in the United States.

(3) Finding of sufficient nexus

To review, I have found both the '223 and '697 patents are practiced by Motorola and infringed by Apple within the U.S., which is the locus of Motorola's clearly substantial and

successful licensing program. In addition, I have found that Motorola has proven it maintains a very substantial licensing program directed at cell phone or other mobile device communications concerns, which is the purpose of both the '223 and '697 patents. Relatively speaking, both the '223 and '697 patents are industry standard patents and thus have a clear relative value, but the '697 is clearly the more important and it is valid, unlike the '223. In addition, I have found that both the '223 and '697 patents were licensed numerous times, with the '697 patent being licensed [ ] times when the asserted patents were involved and the '223 patent licensed 12 of 47 times. In addition,[

] I also note that the [ ] licenses in question have resulted in[

] in revenue to Motorola, not including [ ] between 2000 and 2011. Next, I note that Motorola successfully litigated the '223 patent against RIM [ ] Hence, based upon the factors discussed in *Multimedia Display*, I hold that Motorola has established, by the preponderance of the evidence, that there is a nexus between the patents and its U.S. based licensing activities sufficient to establish that it has made a substantial investment in the exploitation of the '223 and '697 patents through licensing and thus has proven domestic industry under § 337(a)(3)(C).

With regard to the '333 patent, I find it to be much less important than the '223 or '697 patent, even though it was the subject of emphasis by Motorola during the very same licensing discussions as the '223 and '697 patents. In making this finding, I reiterate that the '333 patent is neither infringed nor practiced within the U.S. and that relatively speaking, it is a far less important patent than the '697 patent, despite Motorola's protestations to the contrary. It is also

less important than the subject matter of the '223 patent, which while invalid, at least has the virtue of being practiced and being an industry standard. In making these findings about the '333 patent, I do acknowledge Motorola's successful litigation of the '333 patent against RIM and its claims of this patent as patent of the year. Finally, I note that I find the use of the word "all" within claim 12 of the patent to be so severely limiting as to mean it is unlikely anyone will ever practice this patent with modern cell phones. Hence, I do not find Motorola has established by the preponderance of the evidence sufficient nexus between the '333 patents and Motorola's U.S. based licensing activities sufficient to establish that it has made a substantial investment in the exploitation of the '333 patent through licensing and thus Motorola has not proven a domestic industry under § 337(a)(3)(C).

X. Conclusions of Law

1. The Commission has personal jurisdiction over the parties, and subject-matter jurisdiction over the accused products.

2. The importation or sale requirement of Section 337 is satisfied.

3. The '697 accused products literally infringe asserted claims 1-4 of U.S. Patent No. 6,246,697.

4. Apple induces others to infringe asserted claims 1-4 of U.S. Patent No. 6,246,697.

5. The '223 accused products literally infringe asserted claim 1 of U.S. Patent No. 5,636,223.

6. Apple induces others to infringe asserted claim 1 of U.S. Patent No. 5,636,223.

7. The '333 accused products do not infringe asserted claim 12 of U.S. Patent No. 6,272,333.

8. The '862 accused products do not infringe asserted claim 1 of U.S. Patent No. 6,246,862.

9. Asserted claims 1-4 of U.S. Patent No. 6,246,697 are not invalid under 35 U.S.C. § 102 for anticipation.

10. Asserted claims 1-4 of U.S. Patent No. 6,246,697 are not invalid under 35 U.S.C. § 103 for obviousness.

11. Asserted claims 1-4 of U.S. Patent No. 6,246,697 are not invalid for failure to satisfy the written description requirement of 35 U.S.C. § 112.

12. Asserted claims 1-4 of U.S. Patent No. 6,246,697 are not invalid for failure to satisfy the best mode requirement of 35 U.S.C. § 112.

13. U.S. Patent No. 6,246,697 is not invalid for unclean hands.

14. Asserted claim 1 of U.S. Patent No. 5,636,223 is invalid under 35 U.S.C. § 102 for anticipation.

15. Asserted claim 12 of U.S. Patent No. 6,272,333 is not invalid under 35 U.S.C. § 102 for anticipation.

16. Asserted claim 12 of U.S. Patent No. 6,272,333 is not invalid under 35 U.S.C. § 103 for obviousness.

17. Asserted claim 1 of U.S. Patent No. 6,246,862 is invalid under 35 U.S.C. § 112.

18. The domestic industry requirement has been satisfied for U.S. Patent No. 6,246,697.

19. The domestic industry requirement has been satisfied for U.S. Patent No. 5,636,223.

20. The domestic industry requirement has not been satisfied for U.S. Patent No. 6,272,333.

21. The domestic industry requirement has not been satisfied for U.S. Patent No. 6,246,862.

22. There is a violation of 19 U.S.C. § 1337(a)(1) with respect to U.S. Patent No. 6,246,697.

23. There is no violation of 19 U.S.C. § 1337(a)(1) with respect to U.S. Patent No. 5,636,223.

24. There is no violation of 19 U.S.C. § 1337(a)(1) with respect to U.S. Patent No. 6,272,333.

25. There is no violation of 19 U.S.C. § 1337(a)(1) with respect to U.S. Patent No. 6,246,862.

XI. Initial Determination and Order[73]

Based on the foregoing, it is the Initial Determination of this Administrative Law Judge that a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain wireless communication devices, portable music and data processing devices, computers and components thereof that infringe claims 1-4 of United States Patent No. 6,246,697.

It is also the Initial Determination of this Administrative Law Judge that a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has not occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of Certain Wireless Communication Devices, Portable Music and Data Processing Devices, Computers and Components Thereof by reason of infringement of one or more claims of claim 1 of U.S. Patent No. 5,636,223, claim 12 of U.S. Patent No. 6,272,333 and claim 1 of U.S. Patent No. 6,246,862.

The undersigned hereby CERTIFIES to the Commission this Initial Determination, together with the record of the hearing in this investigation consisting of the following: the transcript of the evidentiary hearing, with appropriate corrections as may hereafter be ordered;

---

[73] The failure to discuss any matter raised by the parties or any portion of the record herein does not indicate that said matter was not considered. Rather, any such matter(s) or portion(s) of the record has/have been determined to be irrelevant, immaterial or meritless. Arguments made on brief which were otherwise unsupported by record evidence or legal precedent have been accorded no weight.

and the exhibits accepted into evidence in this investigation as listed in the attached exhibit lists.[74]

The Secretary shall serve a public version of this Initial Determination upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order (Order No. 1) issued in this Investigation..

Pursuant to 19 C.F.R. § 210.42(h), this Initial Determination shall become the determination of the Commission unless a party files a petition for review pursuant to 19 C.F.R. § 210.43(a) or the Commission, pursuant to 19 C.F.R. § 210.44, orders on its own motion a review of the Initial Determination or certain issues therein.

Within seven days of the date of this document, each party shall submit to the Office of the Administrative Law Judges a statement as to whether or not it seeks to have any portion of this document deleted from the public version. The parties' submissions must be made by hard copy by the aforementioned date and must include a copy of this document with red brackets indicating any portion asserted to contain confidential business information to be deleted from the public version, along with a list indicating each page on which such a bracket is to be found. The parties' submissions concerning the public version of this document need not be filed with the Commission.

SO ORDERED.

Thomas B. Pender
Administrative Law Judge

[74] The pleadings of the parties filed with the Secretary need not be certified as they are already in the Commission's possession in accordance with Commission rules.

IN THE MATTER OF CERTAIN WIRELESS COMMUNICATION DEVICES, PORTABLE MUSIC AND DATA PROCESSING DEVICES, COMPUTERS AND COMPONENTS THEREOF **337-TA-745**

CERTIFICATE OF SERVICE

I, Lisa R. Barton, hereby certify that the attached **PUBLIC INITIAL DETERMINATION** has been served upon the following parties via first class mail and air mail where necessary on May 16, **2012.**

Lisa R. Barton, Acting Secretary
U.S. International Trade Commission
500 E Street, SW, Room 112A
Washington, DC 20436

FOR COMPLAINANT MOTOROLA, INC. & MOTOROLA MOBILITY, INC.:

Charles F. Schill, Esq.
STEPTOE & JOHNSON LLP
1330 Connecticut Avenue, NW
Washington, DC 20036

( )Via Hand Delivery
(\)Via Overnight Mail
( )Via First Class Mail
( )Other:_____

FOR RESPONDENT APPLE:

Mark G. Davis, Esq.
Weil Gotshal & Manges LLP
1300 Eye Street NW., Suite 900
Washington, DC 20005

( )Via Hand Delivery
(\)Via Overnight Mail
( )Via First Class Mail
( )Other:_____

PUBLIC MAILING LIST

Heather Hall
LEXIS - NEXIS
9443 Springboro Pike
Miamisburg, OH 45342

( )Via Hand Delivery
( )Via Overnight Mail
(\)Via First Class Mail
( )Other:_____

Kenneth Clair
THOMSON WEST
1100 – 13th Street NW
Suite 200
Washington, DC 20005

( )Via Hand Delivery
( )Via Overnight Mail
(\)Via First Class M ail
( )Other:_____