

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND
SOUTHERN DIVISION

TECHNOLOGY PATENTS LLC,
Plaintiff,
v.
DEUTSCHE TELEKOM AG, et al.,
Defendants.
Civil Action No. AW-07-3012

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Memorandum Opinion

Plaintiff Technology Patents, LLC (hereinafter "TPLLC") initially filed this action for patent infringement against 131 national and foreign telecommunication companies. The Court has previously addressed numerous motions to dismiss, see Doc. No. 1082, motions regarding the proper construction of the patent claims in dispute, see Doc. No. 1415, and motions for summary judgment, see Doc. No. 1428. Given the Court's prior rulings, the remaining Defendants are: AT&T Mobility Corporation (hereinafter "AT&T"), T-Mobile USA, Inc. (hereinafter "T-Mobile"), Cellco Partnership d/b/a Verizon Wireless (hereinafter "Verizon"), Sprint Nextel Corporation (hereinafter "Sprint"), Motorola, Inc. (hereinafter "Motorola"), Palm, Inc. (hereinafter "Palm"), LG Electronics Mobilecomm USA, Inc. (hereinafter "LG"), and Helio LLC (hereinafter "Helio").

Both sides now seek several minor revisions to the Court's claim-construction decisions, and Defendants have filed a battery of motions for summary judgment. The following motions are currently pending before the Court:

- 1) TPLLC's motion for clarification of claim construction, Doc. No. 1421,

- 2) Defendants' motion for clarification of claim construction, Doc. No. 1427,<sup>1</sup>
- 3) Palm's motion for summary judgment, Doc. No. 1432,
- 4) TPLLC's motion to amend its claim charts, Doc. No. 1435,
- 5) Palm's motion to strike the Declaration of Regis Bates, Doc. No. 1458,
- 6) Defendants' motions for summary judgment of non-infringement, Doc. Nos. 1474-76, 1479,
- 7) Defendants' motion for summary judgment of patent invalidity, Doc. No. 1480,
- 8) Motorola, Inc.'s motion to recognize a change of its name, Doc. No. 1520, and
- 9) Motorola Mobility, Inc.'s motion to join the lawsuit as a defendant, Doc. Nos. 1522-23.

The Court has reviewed the memoranda submitted by the Parties and finds that no hearing is necessary. *See* Loc. R. 105(6) (D. Md. 2010). For the reasons that follow, the Court will grant TPLLC's unopposed motion for clarification of claim construction, Doc. No. 1421, grant Defendants' motion for clarification of claim construction, Doc. No. 1427, grant one of Defendants' motions for summary judgment, Doc. No. 1474,<sup>2</sup> and deny TPLLC's motion for leave to amend its claim charts. Because these decisions suffice to close the case, the Court need not reach the Parties' other motions, which will all be denied as moot. *See* Doc. Nos. 1432, 1458, 1476, 1479-80, 1520, 1522-23.

The Court will first describe the RE39,870 Patent (hereinafter "the '870 Patent" or "the Patent"), summarize its prior holdings regarding claim construction, and resolve the Parties' current motions pertaining to claim construction. The Court will then summarize TPLLC's theories as to how Defendants' systems infringe the Patent. Finally, the Court will compare the

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<sup>1</sup> Defendants did not docket their requested adjustments to the Court's claim construction as a separate motion; instead, they incorporated their requests into their response to TPLLC's motion. *See* Doc. No. 1427.

<sup>2</sup> Granting the Defendants' first collective motion for summary judgment, Doc. No. 1474, necessarily also means granting Doc. No. 1475, in which Helio and Sprint move to join Doc. No. 1474.

system described in the Patent with the Defendants' accused systems. This comparison reveals that the systems are fundamentally different, resulting in the conclusion that Defendants are entitled to summary judgment on all of TPLLC's infringement theories.

## **I. The '870 Patent and the Court's Construction of the Patent**

### **A. The Purpose and Scope of the '870 Patent**

On October 9, 2007, the United States Patent and Trademark Office reissued Patent No. 6,960,983 to TPLLC as the '870 Patent. *See* Doc. No. 1292-3. The '870 Patent consists of thirty-nine distinct claims, all of which constitute various permutations of the same core invention. The central concept behind the Patent is a "global paging system using packet-switched digital data network and remote country designation." *Id.* at 1, 8 (capitalizations omitted).

The '870 Patent begins by documenting the drawbacks of several arguably similar prior inventions. At the time the '870 Patent system was designed, at least three other types of global paging systems existed: (1) a geographic-area satellite-based paging system, 2) a system for providing communications based on geographic location via radio-frequency technology, and 3) a wide-area paging system in which paging messages sent in one area can be sent to a receiver in another area "without necessarily broadcasting the message in all areas." *Id.* at 8.

The Patent maintains that it is an improvement on prior art in two significant ways: (1) it allows users to "remotely input country designations in which they are to be paged, and/or may remotely input a list of countries in which they desire paging services," and (2) it fulfills the need for a "more cost efficient . . . paging system which does not utilize costly and complex satellite technology and/or transmission-suspect data networks." *Id.* For instance, one of the prior inventions is faulted because it "do[es] not permit the subscriber to remotely select or designate

countries in which he or she will most likely be.” *Id.* Similarly, another is taken to task because, “other than the roaming feature, the receiving user cannot input into the system designated country locations where he or she expects to be in the future.” *Id.*

The Patent distinguishes between an “originating user” (hereinafter “OU”) and a “receiving user” (hereinafter “RU”). The OU is “the person or party who originates a page or cellular phone call, i.e. the one who desires to page or call the receiving user.” *Id.* at 9. The RU is “the recipient of a page or cellular phone call.” *Id.* The overriding purpose of the ‘870 Patent is to enable OUs to send messages to RUs located in a different country, even when the OUs do not know which country the RUs are located in.

The system effectuates this purpose by providing RUs with two different ways of designating the country (or countries) in which they may be contacted. First, the RU may “input into the paging system his or her expected whereabouts.” *Id.* at 10. The Patent provides a useful example: “when the [RU] leaves the U.S. and travels to Australia on business, the RU may access a server in the system . . . and then input or designate Australia as a ‘designated country.’” When the RU makes such a designation, the paging system will first attempt to page the RU in Australia each time he/she is paged by an OU.” *Id.* at 10-11.

In the event that the RU does not designate a particular country in which (s)he may be reached, the ‘870 paging system includes a fallback method for attempting to reach the RU. The system allows the RU to “input[] his or her ‘list’ of countries to be serviced . . . . The RU will typically list all countries or coverage areas . . . that he or she wishes to be reachable in by way of the paging system.” *Id.* at 10. Not only does the RU provide a list of countries, but (s)he also places the listed countries “in the order he or she wishes that they be accessed.” *Id.* Here, too, the Patent provides a helpful illustration:

For example, if the RU spends most of his time in the U.S. and Japan, the next most amount of time in France, some time in the U.K., Spain, Brazil, and Australia, and very little time in Mexico, the RU would likely . . . list his/her countries in the following order:

1. United States
2. Japan
3. France
4. Spain
5. United Kingdom
6. Brazil
7. Australia
8. Mexico

*Id.* If the RU has not designated a particular country in which (s)he may be contacted, but has input such a list, “the RU may only be paged in the[] [listed] countries.” *Id.* The system will “attempt to page the RU first in the [first-listed] country a predetermined number of times, then in [the second-listed country] said predetermined number of times,” and so on until the system attempts to reach the RU in the last country on the list. *Id.*

Originally, TPLLC alleged infringement of Claims 4-39 of the ‘870 Patent. In light of the Court’s claim-construction opinion, TPLLC has now abandoned Claims 9-39, and it continues to assert infringement only as to Claims 4-8. *See* Doc. No. 1435. Claims 5-8 incorporate all of the limitations of Claim 4, plus additional restrictions. *See, e.g., id.* at 12 (“5. The system of claim 4, wherein the digital data network comprises the Internet.”). As such, they are dependent claims, which can only be infringed if Claim 4 is also infringed. *See, e.g., Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1328 n.5 (Fed. Cir. 2008) (“A conclusion of noninfringement as to the independent claims requires a conclusion of noninfringement as to the dependent claims.”). Because the Court ultimately concludes that TPLLC cannot show infringement as to independent Claim 4, it is unnecessary to describe or analyze dependent Claims 5-8, and the remainder of this opinion will focus on Claim 4.

The most important features of Claim 4 have already been highlighted in the previous discussion. The precise wording follows:

4. A system for paging a receiving user in a country-selective paging system, comprising:

a paging system spanning a plurality of different countries of the world, the paging system including a plurality of servers, and wireless transmitters in different countries for transmitting paging messages to receiving users;

at least a packet-switched digital data network interconnecting servers so as to permit digital communication of signals between the plurality of servers via at least the packet-switched digital data network;

a first website or server located in a first country for allowing an originating user to page the receiver user who may be located in a second country different from the first country, the originating user not necessarily knowing what country the receiver user is located in;

wherein the paging system determines if the second country is currently designated by the receiver user as a designated country in which the paging system is to attempt to page the receiving user;

when the paging system determines that the second country has been designated by the receiving user, means for sending a paging communication via at least the packet-switched digital data network to a second website or server, the second website or server being in communication with a wireless transmitter located in the second country, and wherein the paging communication causes the second website or server to initiate paging the receiving user via the wireless transmitter in the second country; and

when the paging system determines that the second country has not been designated by the receiving user, the paging system initiates paging operations in another country in a predetermined order in an attempt to page the receiving user.

Doc. No. 1292-3 at 12.

## **B. The Court's Claim-Construction Rulings**

On August 25, 2010, the Court construed seventy-three disputed terms within the '870 Patent, including several that feature prominently in Claim 4. *See* Doc. No. 1415. For purposes of this opinion, the key terms that were clarified through claim construction are: "paging system," "designating [a country]," "when," "initiates paging operations in [a] country in a predetermined order," and "another country."

First, the Parties disputed the meaning of the term "paging system." Specifically, Defendants sought to exclude cellular phones, whereas TPLLC sought their inclusion. The Court accepted TPLLC's proposed definition of paging system: "a system for routing messages to be sent to handheld portable electronic devices for receiving messages." *Id.* at 8.

Second, the Court resolved two disputed issues pertaining to “designation” of a country. Defendants argued that users may not “designate” a country merely by selecting a “country code.” The Court disagreed and held that the user may designate a country by choosing a country code. *Id.* at 16. However, the Court rejected TPLLC’s expansive definition of “designating”: “specifying a page receiving country . . . in which the receiving user is to be paged.” *Id.* at 12. Instead, the Court accepted Defendants’ definition of “designating” as “inputting,” because it “more accurately reflects selection than Plaintiff’s proposed construction.” *Id.* at 12-13. The Court therefore held that designating a country requires more than “automatic designation,” because the term “insinuates that the user is performing the ‘designation.’” *Id.* at 14, 16.

Third, the Parties differed as to the meaning of “when” as it appears, for example, in the last limitation of Claim 4: “[W]hen the paging system determines that the second country has not been designated by the receiving user, the paging system initiates paging operations in another country in a predetermined order . . . .” Doc. No. 1292-3 at 12. Defendants took the position that “when” means “at the time that,” whereas TPLLC maintained that it should be construed as “in the event that.” Doc. No. 1415 at 19. The Court concurred with TPLLC’s construction. *See id.*

Fourth, the Parties presented opposing interpretations of what it means to “initiate[] paging operations in another country in a predetermined order.” *Id.* at 19. Defendants contended that the “predetermined order” refers to an ordered list of countries created by the RU, whereas TPLLC argued that the predetermined order simply means that the system attempts to page the RU multiple times within the same country. The Court agreed with Defendants, holding that the limitation quoted above means: “begins to page the receiver user in another country that is first in an ordered list of two or more countries created by the receiving user before the paging system determines whether any country has been designated.” *Id.* at 20. The Court reached this conclusion in part by examining the prosecution history of the ‘870 Patent, during which TPLLC

told the Patent Office that the limitation “clearly requires that the receiving user is attempted to be paged in one country, then in another country, then in still another country, in a predetermined order.” *Id.* at 21-22 (quotation and quotation marks omitted).

The Court also found TPLLC’s proposed construction of the “predetermined order” term wanting for another reason: it failed to make clear that “the ordered list is to be created by the RU,” and that the RU must create the ordered list “before” the paging system determines whether the RU has designated a second country. *Id.* at 23.

Finally, the Parties disagreed as to the proper definition of “another country.” TPLLC’s construction would have required the “another country” to be “different than the second country,” but not necessarily different than “the first country [*i.e.*, the country from which the OU sends the message].” *Id.* at 24. The Court instead adopted Defendants’ construction: “another country” is a “country other than the first and second country.” *Id.*<sup>3</sup>

### **C. Motions Requesting Modifications of the Court’s Claim Constructions**

The Parties have requested several adjustments to the Court’s claim constructions, none of which pertain to the central disputed terms of Claim 4 summarized in the previous section. First, TPLLC points out that the Court included the word “currently” in its construction of Term II.D, which appears in Claim 4, but not in the similar Term II.E from Claim 36. TPLLC suggests that the omission was a typographical error, not intentional, and that “currently” should be added into the Court’s interpretation of Term II.E. *See* Doc. No. 1421. Defendants do not oppose this request, *see* Doc. No. 1427, and the Court agrees that the adjustment should be made for the reasons given by TPLLC. The motion will therefore be granted.

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<sup>3</sup> To be more precise, the Court adopted TPLLC’s approach to “another country” as it appears in Claims 19, 21, and 36, but embraced Defendants’ definition as to Claims 4, 6, 9, 13, 16, 18, 30, and 34. *See id.*

Defendants propose several additional revisions, which TPLLC opposes.<sup>4</sup> *See id.* First, Defendants urge the Court to construe the term “another country” as it appears in Claim 36 in accordance with Term IV.B (which defines “another country” in Claims 4, 6, 9, 13, 16, 18, 30, and 34) rather than Term IV.A (which defines “another country” in Claims 19, 21, and Claim 36). Defendants suggest that the Court’s inclusion of Claim 36 within the IV.A group was a scrivener’s error. After comparing the language of the various claims, the Court agrees with Defendants that “another country” in Claim 36 is used in the same fashion as it is used in Claims 4, 6, and other claims within the IV.B group, not as it is used in Claims 19 and 21, the IV.A group.

Next, Defendants request that the Court delete Terms IX.O, IX.P, and X.D on the ground that those terms are redundant in light of the Court’s construction of Term IX.E. The Court agrees and holds that the terms can be deleted without altering the substance of the claims.<sup>5</sup>

Finally, Defendants request that the Court construe Term IX.F with reference to Term II.E in light of their strikingly similar language, rather than with reference to Term IX.E. The Court agrees that Term IX.F bears little resemblance to Term IX.E, and that the Court’s previous equation of the two was likely a scrivener’s error. Term IX.F should be defined analogously to Term II.E, as Defendants’ proposed construction does. Thus, the Court will adopt all of the claim-construction adjustments proposed by the Parties.

## **II. The Accused Systems and TPLLC’s Theories of Infringement**

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<sup>4</sup> TPLLC suggests that the Court should not consider Defendants’ proposed revisions, as Defendants’ memorandum was filed outside of the fourteen-day period for filing a motion for reconsideration. The Court agrees with Defendants that the memorandum seeks clarification of typographical errors rather than reconsideration of controversial substantive issues.

<sup>5</sup> However, as per TPLLC’s request, *see* Doc. No. 1438, the Court also finds that the “causing . . .” language in Term IX.E is part of the function in the means-plus-function clause.

## **A. Summary of TPLLC's Claims**

Although the Court's prior rulings have considerably simplified this litigation from its original array of 131 Defendants located all across the globe, the case still involves highly complex theories of infringement against numerous telecommunication companies. TPLLC's infringement contentions differ somewhat between the various Defendants. First, TPLLC alleges infringement of Claims 4, 5, 6, and 8 against all Defendants, as well as infringement of Claim 7 by AT&T, T-Mobile, Sprint, and Verizon (hereinafter "carrier Defendants"). TPLLC does not allege infringement of Claim 7 by LG, Palm, or Motorola (hereinafter "handset Defendants"). Second, TPLLC claims that the carrier Defendants directly and indirectly infringe the Patent, whereas the handset Defendants are only asserted to be indirect infringers.

TPLLC alleges three distinct ways in which the carrier Defendants directly infringe the Patent. First, TPLLC accuses them of violating 35 U.S.C. § 271(a) because they "use[] [the '870 Patent] within the United States" by running a system that transmits international text messages from OUs in the United States to RUs abroad.

TPLLC claims that the carriers also infringe section 271(a) in a second way: not only do they "use[]" the Patent when they transmit international text messages, but they also "sell[]" and "offer[] to sell" the patented invention by advertising and selling international texting technology to their customers.

Finally, TPLLC avers that the carrier Defendants directly infringe under section 271(f). According to TPLLC, the U.S.-based carriers, through their contracts with U.S. customers and foreign carriers, "suppl[y] or cause[] to be supplied in or from the United States all or a substantial portion of the components of a patented invention, . . . in such manner as to actively

induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.”

Those three theories are the only grounds upon which the Court could find that any Defendant *directly* infringes the Patent. However, TPLLC also alleges indirect infringement against both the carrier Defendants and the handset Defendants. *See* § 271(b) (“Whoever actively induces infringement of a patent shall be liable as an infringer.”).

To establish that the Defendants induce infringement by some other entity, TPLLC must show that the induced entity directly infringes the Patent. *See ACCO Brands, Inc. v. ABA Locks Mfrs. Co.*, 501 F.3d 1307, 1312 (Fed. Cir. 2007). TPLLC not only argues that the handset Defendants induce direct infringement by the carrier Defendants along the lines of the direct-infringement theories discussed above, but also that *all* of the Defendants induce direct infringement by OUs. They do this by instructing and encouraging OUs to send international text messages. It is worth noting that TPLLC does *not* argue that RUs directly infringe the Patent: TPLLC’s theories of direct infringement focus on use and sale of the patented invention by the carrier Defendants and use of the invention by OUs.

## **B. TPLLC’s Description of the Accused System**

TPLLC’s theories of liability differ in their nuances, but they all fundamentally rely on the premise that the system for international text messaging employed by Defendants is identical or substantially similar to the system envisioned in the ‘870 Patent. *See, e.g., Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 812 (Fed. Cir. 2002) (“After claim construction, the fact finder compares the properly construed claims to the accused device or process.”). Rather than documenting TPLLC’s factual allegations relating to particular theories of liability—*i.e.*, whether AT&T “sells” the patented invention within the meaning of section

271(a), or whether Palm’s advertising induces direct infringement by OUs—the Court will focus its factual summary here, and its subsequent legal analysis, on the nature of the accused system.

The following discussion of the accused systems tracks TPLLC’s claim charts and the extensive report prepared by TPLLC’s lead expert, Regis Bates. *See* Doc. No. 1492 (hereinafter “Bates Decl.”); *cf. Masson v. New Yorker Magazine, Inc.*, 501 U.S. 496, 520 (1991) (holding that courts must, when reviewing motions for summary judgment, evaluate disputed facts in the light most favorable to the non-moving party and “draw all justifiable inferences” in its favor). Bates provides multiple scenarios describing how the carrier Defendants’ systems effectuate the delivery of international text messages in ways that allegedly infringe the ‘870 Patent. The following discussion will focus on Scenario #1 for the AT&T system, which reflects the important features of all the other scenarios discussed in the report.

In this scenario, an OU in the United States uses an AT&T handset to send a text message to a RU outside of the United States. *See* Bates Decl. at 11. The text message flows through numerous components of the system before it reaches the RU, in the following sequence: the Mobile Switching Center (hereinafter “MSC”); the first Short Message Service Center (hereinafter “SMSC”); the Message Application Router; the Open Messaging Gateway; a second SMSC; the Internet Protocol Transfer Point; the Signal Transfer Point; a second MSC; and a Base Station Subsystem. *See id.*

After summarizing this processing sequence, Bates provides a series of charts in which he articulates his theories for how the various factual scenarios implicate each limitation of Claim 4. The first significant discussion pertains to Term D of Claim 4, which provides the following limitation: “a first website or server located in a first country for allowing an originating user to page the receiving user who may be located in a second country different from the first country, the originating user not necessarily knowing what country the receiving user is located in.” *Id.* at

28-29. Bates explains that in Scenario #1, the “first server” is the AT&T server located in the United States, and thus the United States is the “first country.” *Id.* at 29. The server allows an OU to page a RU in a “second country.” The example Bates uses for the second country is Germany. *Id.*

Bates then goes on to discuss Term IV.E: “wherein the paging system determines if the second country is currently designated by the receiving user as a designated country in which the paging system is to attempt to page the receiving user.” *Id.* at 31. According to Bates, AT&T allows the RU to designate a second country (in his example, Germany) by designating a carrier that provides service within that country. For instance, “if the RU has input a selection of the network of O2.de (a carrier in Germany), then the Germany country code (CC) 49 of O2.de (DE = Germany) has been input into and is currently stored in the AT&T [Home Location Register] to be used by the system as the country in which to attempt to page the receiving user.” *Id.* In other words, the RU selects a second country by selecting a carrier, because the carrier is linked to a country code.

Bates further explains that the RU’s carrier / country selection can be made in “either a ‘manual’ mode or in an ‘automatic’ mode.” *Id.* at 33. In the manual mode, “the receiving user via his/her AT&T handset manually selects a given carrier which necessarily causes the mobile country code of that carrier to be selected and input to the system.” *Id.* By contrast, in the automatic scenario, the RU “can manually select ‘automatic’ under the heading ‘network selection’ . . . , and this causes the mobile country code of a preferred carrier in that country to be selected and input to the system.” *Id.* at 34. Bates views the differences between these two methods of selecting a country as insignificant, because in both scenarios, the designation “requires user action,” and thus it can appropriately be said that “the user is inputting the selection of the second country.” *Id.*

The final element of Claim 4 is IV.H: “when the paging system determines that the second country has not been designated by the receiving user, the paging system initiates paging operations in another country in a predetermined order in an attempt to page the receiving user.” *Id.* at 47-48. According to Bates, if the RU has not input a selection of the second country (Germany), the system “begins to page the receiving user in another country . . . that is first in an ordered list of two or more countries created by the receiving user.” *Id.* at 47. The “another country” referred to here “may be France, the U.K[.], Switzerland, Mexico, or the like.” *Id.* Bates uses France as an example: “when registering in France, [the RU] created an ordered list of two country codes (France country code and U.S. country code), and this ordered list of country codes causes the system to first begin to page the receiving user in France, and if unreachable in France then to begin retries in the U.S.” *Id.* at 47-48.

To be clear, Bates does not say that the user selects a French carrier, and then, in a distinct act of selection, chooses a U.S. location to be contacted in the event that (s)he cannot be reached in France. Instead, the two selections result from the same act by the RU: when the RU selects the French carrier / country code, the RU’s handset “also sen[ds] a U.S. country code from his/her [International Mobile System Identity] to the MSC/[Visitor Location Register] in France . . . , which in turn sen[ds] the France and U.S. country codes (ordered list of country codes) to the AT&T [Home Location Register].” *Id.* at 48. The only sense in which the list is “created by the receiving user” is that “the receiving user pressed a button/menu item on the handset, such as a network/country selection button/item or any other button/item which caused the signal including the two country codes to be sent.”

### **C. TPLLC’s Claim Charts**

TPLLC originally filed its claim charts articulating its theories of infringement on June 15, 2009. *See* Doc. No. 1251-3. In light of the Court’s claim-construction rulings dated August 25, 2010, TPLLC moved to amend its claim chart on October 12, 2010. *See* Doc. No. 1435. The original claim charts contained theories that were unquestionably vulnerable in light of the Court’s claim-construction rulings. *Compare, e.g., id.* at 9 (stating that the “another country” that is first in an ordered list of countries created by the RU is “different than the second country, but . . . may or may not be the first country”), *with* Doc. No. 1415 at 24 (holding that for purposes of Claim 4, “another country” means a “country other than the first and second country,” explicitly rejecting TPLLC’s proposed construction). The amended charts delete TPLLC’s infringement contentions as to Claims 9-39 and modify its allegations as to Claims 4-8.

Defendants oppose TPLLC’s proposed amendments on procedural grounds (*i.e.*, the amendments are untimely and prejudicial), and also on the merits. The Court need not consider the procedural grounds for denying leave to amend because, for the reasons stated below, even if the Court were to allow TPLLC to amend its claim charts, Defendants would still be entitled to summary judgment. Thus, the proffered amendments are futile, and they will be denied for that reason. *See, e.g., U.S. Dev. Corp. v. Peoples Fed. Sav. & Loan Ass’n*, 873 F.2d 731, 736 n.4 (4th Cir. 1989) (indicating that when a plaintiff seeks to avert summary judgment by proposing amendments that are equally susceptible to summary judgment, “the proper way to handle such tactics is . . . [to] deny leave to amend on the grounds of futility”).

### **III. Standard of Review**

Summary judgment is only appropriate “if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(c); *see Celotex*

*Corp. v. Catrett*, 477 U.S. 317, 323-25 (1986). The Court must “draw all justifiable inferences in favor of the nonmoving party, including questions of credibility and of the weight to be accorded to particular evidence.” *Masson v. New Yorker Magazine, Inc.*, 501 U.S. 496, 520 (1991) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986)).

To defeat a motion for summary judgment, the nonmoving party must come forward with affidavits or other competent evidence to show that a genuine issue of material fact exists. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986). A disputed fact presents a genuine issue “if the evidence is such that a reasonable jury could return a verdict for the non-moving party.” *Anderson*, 477 U.S. at 248. Although the Court should believe the evidence of the nonmoving party and draw all justifiable inferences in his or her favor, a party cannot create a genuine dispute of material fact “through mere speculation or the building of one inference upon another.” *Beale v. Hardy*, 769 F.2d 213, 214 (4th Cir. 1985).

#### **IV. Summary Judgment**

Defendants have filed five distinct motions for summary judgment. *See* Doc. Nos. 1432, 1474, 1476, 1479, 1480. Broadly speaking, these motions present three grounds for summary judgment: (1) none of the Defendants have infringed the Patent, *see* Doc. Nos. 1474, 1476, 1479, (2) Palm has not infringed the Patent, *see* Doc. No. 1432, and (3) the Patent is invalid because it would be obvious to an artisan of ordinary skill at the time it was designed, *see* Doc. No. 1480.

The Court agrees that Defendants are entitled to summary judgment for the following reasons: (1) the accused systems do not allow RUs to input a second country, (2) the accused systems do not allow RUs to create an ordered list of countries, and (3) the accused system does not differentiate between the RU’s inputting of a second country and the RU’s creation of an

ordered list.<sup>6</sup> Given the multiplicity of reasons to grant summary judgment to all Defendants based on non-infringement, it is unnecessary to consider Palm’s specific non-infringement contentions or the Defendants’ challenge to the validity of the ‘870 Patent.

### **A. Legal Framework**

To establish infringement under any theory, TPLLC must show that the accused system “meets each claim limitation either literally or under the doctrine of equivalents.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 812 (Fed. Cir. 2002). To determine whether TPLLC has satisfied its burden, the fact-finder must “compare[] the properly construed claims to the accused device or process.” *Id.* An accused device literally infringes a patent when the accused device “contains each limitation of the asserted claim.” *Id.*

Even if the accused device does not literally infringe every limitation of the invention, it “may still infringe under the doctrine of equivalents if each limitation of the claim is met in the accused device either literally or equivalently.” *Id.* A component of the accused system is equivalent to a claim limitation when the differences between them “are ‘insubstantial’ to one of

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<sup>6</sup> TPLLC vigorously contends throughout its various memoranda that the Court should not apply a joint-infringement standard of use to system claims (such as Claim 4), because joint-infringement only applies to method claims. The Court need not revisit this question here, because joint infringement has no bearing on the Court’s grounds for decision, which all find, in essence, that the system described in the Patent is fundamentally different from the accused systems as described by TPLLC’s claim charts and the Bates Declaration.

However, joint infringement does supply an independent basis for granting summary judgment to Defendants. The Court has already considered the applicability of the joint-infringement standard in its previous opinion on summary judgment. There, the Court resolved the issue adversely to TPLLC, holding that the joint-infringement standard of review applies, and that TPLLC cannot satisfy that standard because there is no basis for finding vicarious liability among the various actors—users, domestic carriers, and foreign carriers—who must perform elements of the claims. *See* Doc. No. 1428 at 11-15. As much as TPLLC urges the Court to adopt conclusions that would contradict its prior holding, it has never directly asked the Court to reconsider that ruling. The Court will treat its prior disposition of that issue as law of the case. *See, e.g., United States v. Aramony*, 166 F.3d 655, 661 (4th Cir. 1999) (“[W]hen a court decides upon a rule of law, that decision should continue to govern the same issues in subsequent stages in the same case.” (quoting *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 816 (1988))).

ordinary skill in the art.” *Id.* (quoting *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 40 (1997)).

The doctrine of equivalence is “not the prisoner of a formula,” and therefore it may require different applications within unique factual contexts. *Tex. Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1566 (Fed. Cir. 1996). Nevertheless, the typical test for determining the equivalence of two devices is whether they “do the same work in substantially the same way, and accomplish substantially the same result, . . . even though they differ in name, form or shape.” *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950) (quotation and quotation marks omitted).<sup>7</sup>

In order to prevail under the doctrine of equivalents, a plaintiff must “provide particularized testimony and linking argument as to the ‘insubstantiality of the differences’ between the claimed invention and the accused device or process.” *Tex. Instruments Inc.*, 90 F.3d at 1567. This evidentiary requirement helps ensure that the Court will not, “under the guise of applying the doctrine of equivalents, erase a plethora of meaningful structural and functional limitations of the claim on which the public is entitled to rely in avoiding infringement.” *Perkin-Elmer Corp. v. Westinghouse Elec. Corp.*, 822 F.2d 1528, 1532 (Fed. Cir. 1987).

## **B. The Accused Systems Do Not Allow the RU to Input a Second Country**

The first crucial difference between the patented invention and the accused systems relates to the RU’s ability to designate a second country. The paging system envisioned by Claim 4 of the ‘870 Patent enables an OU in a first country to send messages to a RU located in a different country. *See* Doc. No. 1292-3 at 12. When the OU sends the message, the paging

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<sup>7</sup> TPLLC urges the Court to apply the *Graver Tank* test for equivalence, *see* Doc. No. 1490 at 33, and Defendants never propose an alternative framework in their reply memoranda. The Court finds the test suitable in light of the facts presented here and will apply it accordingly.

system first “determines if the second country is currently designated by the receiver user as a designated country in which the paging system is to attempt to page the receiving user.” *Id.* During claim construction, the Court clarified that the phrase “designated by the receiving user” means “inputted by the receiving user.” Doc. No. 1415 at 12-13.

Other language in the Patent sheds further light on the meaning of this limitation. The patented invention enables a RU to “input into the paging system his or her expected whereabouts.” Doc. No. 1292-3 at 10. The following illustration is provided: “when the [RU] leaves the U.S. and travels to Australia on business, the RU may access a server in the system . . . and then input or designate Australia as a ‘designated country.’ When the RU makes such a designation, the paging system will first attempt to page the RU in Australia each time he/she is paged by an OU.” *Id.* at 10-11.

TPLLC’s theory for how a RU designates a second country is that the RU can manually or automatically select a carrier in the country (s)he is in. (S)he can also select a carrier from a nearby country if (s)he is close enough to the border for any neighboring-country carriers to show up on his/her phone’s list of available networks. According to TPLLC, by selecting a carrier, the RU also thereby selects a country, because the RU’s handset conveys both the country code and the carrier information to the accused system.

TPLLC’s description of the accused system simply does not even resemble Claim 4, much less literally match it. In all of the scenarios provided by TPLLC, it is the receiving handset, not the RU, that inputs the country code into the Defendants’ system. In manual mode, all the RU does is select a carrier. In automatic mode, the RU does not even do this much: instead of selecting a particular network carrier from a list, the RU simply clicks “automatic,” at which point the handset selects a carrier without any further input from the RU.

TPLLC articulates two counter-arguments. First, because the act of selecting a carrier necessarily results in the selection of a country code (and, thus, a country), TPLLC contends that a RU selects a country when (s)he selects a carrier. This position is untenable. It is akin to saying that when a person sends an e-mail, (s)he sends all of the obscure electronic information and server requests that e-mailing technology entails. It is more sensible to say that the individual user sends the message, whereas the computer and/or the servers send the accompanying electronic signals. Analogies aside, the Patent at issue clearly envisions a system in which the RU selects the *location* (a country) where (s)he expects to be reached at, not just a carrier that shows up on a list of carriers that happen to provide coverage within the RU's location at a given time. *See, e.g.*, Doc. No. 1292-3 at 10 (indicating that the invention allows a RU to “input into the paging system his or her expected whereabouts.”).

Second, TPLLC pervasively implies (and in one footnote, expressly argues) that the phrase “receiving user” is “the combination of the person and the handset.” Doc. No. 1490 at 34 n.18. This construction is unpersuasive in light of the plain meaning of the phrase “receiving user,” how that phrase is used in the claims and specification of the Patent, and the Court's claim-construction opinion.<sup>8</sup> Although the Patent specification does not expressly state that a RU must be a person, it does define an OU as a “*person or party* who originates a page or cellular phone call.” Doc. No. 1292-3 at 9 (emphasis added). The Court sees no justification for defining “user” to include only a “person or party” in one context, while defining it to encompass non-personal things in a related context.

Furthermore, the Patent specification indicates that one of the crucial features that separates the '870 Patent from prior art is that the latter relied on “roaming feature[s]” by which

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<sup>8</sup> The Court recognizes that this portion of its analysis involves the construction of a term that was not addressed directly in its prior decision. The Court's construction of “receiving user” is guided by the same legal framework that it applied in its claim-construction opinion. *See* Doc. No. 1415 at 4-6.

the handset would designate the RU's country, whereas the '870 Patent system enables RUs to "remotely input country designations in which they are to be paged." *Id.* at 8.<sup>9</sup> Thus, TPLLC's proposed definition would make it possible to infringe the Patent by means of roaming technology and automatic country designations by the handset, with no input from the individual user. Thus, TPLLC's approach would effectively undo one of the central innovations of the '870 system relative to prior art. For these reasons, the Court will instead adopt a person-centered construction of RU that better comports with the language and the overall point of the Patent.

### **C. The Accused Systems Do Not Allow the RU to Create an Ordered List of Countries**

The accused systems also lack a second vital feature of the '870 Patent system: the capacity to determine whether a RU has created an ordered list of countries at which (s)he may be reached in the event that (s)he has not designated a second country in the manner discussed above. This limitation requires that "the paging system initiate[] paging operations in another country in a predetermined order in an attempt to page the receiving user." *Id.* at 12. The Court has construed this phrase to mean that the paging system "begins to page the receiving user in another country that is first in an ordered list of two or more countries created by the receiving user." Doc. No. 1415 at 20.

TPLLC suggests that the RU creates this ordered list of two countries in essentially the same way that it designates the "second country": the RU selects a carrier; the carrier is linked to a country code; and the RU's handset communicates both the carrier selection and the country code to the accused system. This might initially appear to only result in the selection of a single country, but TPLLC argues that the handset also sends the RU's home country code (the United

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<sup>9</sup> The Court's opinion on claim construction further confirms that the country must be input *by the user*, not merely by the handset in reliance on roaming features. *See* Doc. No. 1415 at 14.

States, in the example provided by Bates) along with the foreign country code, resulting in a list of two countries. Furthermore, TPLLC claims that paging attempts are directed at these two countries in an ordered list: the accused system will first attempt delivery in the “another country” (*i.e.*, the country of the selected carrier), and then to the United States.

TPLLC’s ordered-list theory falters for the same reason as its designation-of-second-country theory: the RU merely selects a carrier; it is the handset that supplies the country code that relates to the carrier. However, there are additional, equally formidable differences between the Patent’s ordered-list limitation and the corresponding features of the accused systems. First, in each scenario discussed by TPLLC, the RU’s involvement in creating the list (and the order of elements within the list) is even more attenuated than the RU’s designation of the first country on the list. The first country is linked to a carrier, and the carrier is selected by the RU (when the selection is made in manual mode, at least). However, the second country on the list—the home country of the handset user (in Bates’s example, the United States)—is automatically sent by the handset regardless of which carrier / country the RU selects.

Thus, it appears that the RU has no say whatsoever in what country appears second on the list, and TPLLC has presented *no scenario* in which the RU can select a third country for the list that differs from the first and second countries. Furthermore, TPLLC has given no indication that the RU has any control over which of the two countries appears first within the ordered list: in all scenarios, it seems that the first country on the list is the country of the designated carrier, and the second country is the RU’s home country. For all of these reasons, the “ordering” feature of the accused systems bears virtually no resemblance to the ordering system envisioned in the Patent specification. *See* Doc. No. 1292-3 at 10.

#### **D. TPLLC Blends Distinct Limitations of Claim 4**

TPLLC's comparison of the Patent system to the accused systems suffers from yet another fundamental deficiency: the accused system is unable to distinguish the action of designating a second country from the action of creating an ordered list beginning with another country. TPLLC's theory attempts to satisfy both limitations with reference to the exact same action by the RU: selection of a carrier.

The '870 Patent, by contrast, clearly envisions a distinction between the RU's selection of a second country and the RU's creation of an ordered list. It directs the paging system to determine, *first*, whether the RU has selected a second country, and then, in the event that the RU has not designated a second country, initiate paging operations in various countries according to the ordered list created by the RU. *See id.* at 12. The separateness of these steps is underscored by the Court's claim-construction decision, which held that the "another country" that shows up first in the RU's ordered list is a country different from the "second country" referred to in the RU-designation limitation. Doc. No. 1415 at 24. Thus, the accused system's inability to distinguish between RU designation of a "second country" and the RU's creation of an ordered list beginning with "another country" is fatal to TPLLC's infringement contentions.

#### **E. Doctrine of Equivalents**

TPLLC attempts to make up for its clear inability to literally satisfy the second-country-designation and ordered-list limitations of Claim 4 by appealing to the doctrine of equivalents. However, as the foregoing discussion establishes, the discrepancies between the literal language of Claim 4 and the accused systems are not mere technicalities. Rather, the accused systems possess no features that bear more than a passing resemblance to the second-country-designation and ordered-list limitations of Claim 4.

TPLLC provides no argument to the contrary apart from conclusory and repetitive assertions from the Bates declaration. *See, e.g.*, Doc. No. 1490 at 33 (“[A]ssuming for the sake of argument that there is some difference between whether the receiving user’s handset, or the person operating it, selects/inputs the second country, the exact same function (mobile country code of the second country is selected and the country code of the second country is stored in the AT&T HLR) is performed and the exact same result is achieved (the second country is designated as the country in which to attempt to page the receiving user.)”). TPLLC has failed to proffer facts from which a reasonable juror could find that “each limitation of the claim is met in the accused device either literally or equivalently,” *Catalina*, 289 F.3d at 812, and Defendants are therefore entitled to summary judgment on all of TPLLC’s theories of infringement.

## V. Conclusion

The decisions rendered in this opinion will be memorialized in a separate order.

August 4, 2011

Date

/s/

Alexander Williams, Jr.  
United States District Judge