

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF CALIFORNIA**

<p>CARUCEL INVESTMENTS, L.P., a Delaware limited partnership,</p> <p style="text-align: right;">Plaintiff,</p> <p>v.</p> <p>NOVATEL WIRELESS, INC., a Delaware corporation; AT&amp;T MOBILITY LLC, a Delaware limited liability company; VERIZON COMMUNICATIONS, INC., a Delaware corporation; and CELSCO PARTNERSHIP d/b/a/VERIZON WIRELESS, a Delaware general partnership,</p> <p style="text-align: right;">Defendants.</p>	<p>Case No.: 16-cv-118-H -KSC</p> <p><b>CLAIM CONSTRUCTION ORDER</b></p>
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In the present action, Plaintiff Carucel Investments, L.P. asserts claims of patent infringement against Defendants Novatel Wireless, Inc., AT&T Mobility LLC, Verizon Communications, Inc., and Cellco Partnership d/b/a Verizon Wireless, alleging infringement of U.S. Patent No. 7,221,904, U.S. Patent No. 7,848,701, U.S. Patent No. 7,979,023, U.S. Patent No. 8,718,543, and U.S. Patent No. 8,849,191. (Doc. No. 58.) On July 26, 2016, the parties filed a joint hearing statement identifying disputed claim terms

1 from the patents-in-suit. (Doc. No. 119.) On August 17, 2016, the parties each filed an  
 2 opening claim construction brief. (Doc. Nos. 120, 123.) On August 31, 2016, the parties  
 3 each filed a responsive claim construction brief. (Doc. Nos. 126, 127.) On September 14,  
 4 2016, the Court issued a tentative claim construction order. (Doc. No. 129.)

5 The Court held a claim construction hearing on September 16, 2016. Michael K.  
 6 Lindsey and James M. Sarnecky appeared for Plaintiff. Amardeep L. Thakur and Bruce  
 7 R. Zisser appeared for Defendants. After considering the parties' briefs, the parties'  
 8 arguments at the hearing, and all relevant information, the Court construes the disputed  
 9 terms from the patents-in-suit.

### 10 **Background**

11 On May 27, 2015, Plaintiff Carucel Investments, L.P. filed a complaint for patent  
 12 infringement in the United States District Court for the Southern District of Florida against  
 13 Defendants Novatel Wireless, Inc., AT&T Mobility LLC, Verizon Communications, Inc.,  
 14 and TigerDirect, Inc., alleging infringement of U.S. Patent No. 7,221,904, U.S. Patent No.  
 15 7,848,701, U.S. Patent No. 7,979,023, U.S. Patent No. 8,463,177, U.S. Patent No.  
 16 8,718,543, and U.S. Patent No. 8,849,191.<sup>1</sup> (Doc. No. 1, Compl.) Specifically, Plaintiff  
 17 alleges that Defendants' mobile broadband hotspot devices infringe the patents-in-suit. (*Id.*  
 18 ¶¶ 28-29.)

19 On September 15, 2015, Carucel dismissed its claims against Defendant TigerDirect,  
 20 Inc. with prejudice. (Doc. No. 11.) On October 29, 2015, Defendants Novatel Wireless,  
 21 Inc., AT&T Mobility LLC, and Verizon Communications, Inc. each filed an answer to  
 22 Carucel's complaint. (Doc. Nos. 41-43.)

23 On December 16, 2015, Carucel filed a first amended complaint alleging  
 24 infringement of the same six patents and adding as a new Defendant Cellco Partnership  
 25 d/b/a Verizon Wireless. (Doc. No. 58.) On January 11, 2016, the Defendants each filed  
 26 an answer to the first amended complaint. (Doc. Nos. 64-76.)

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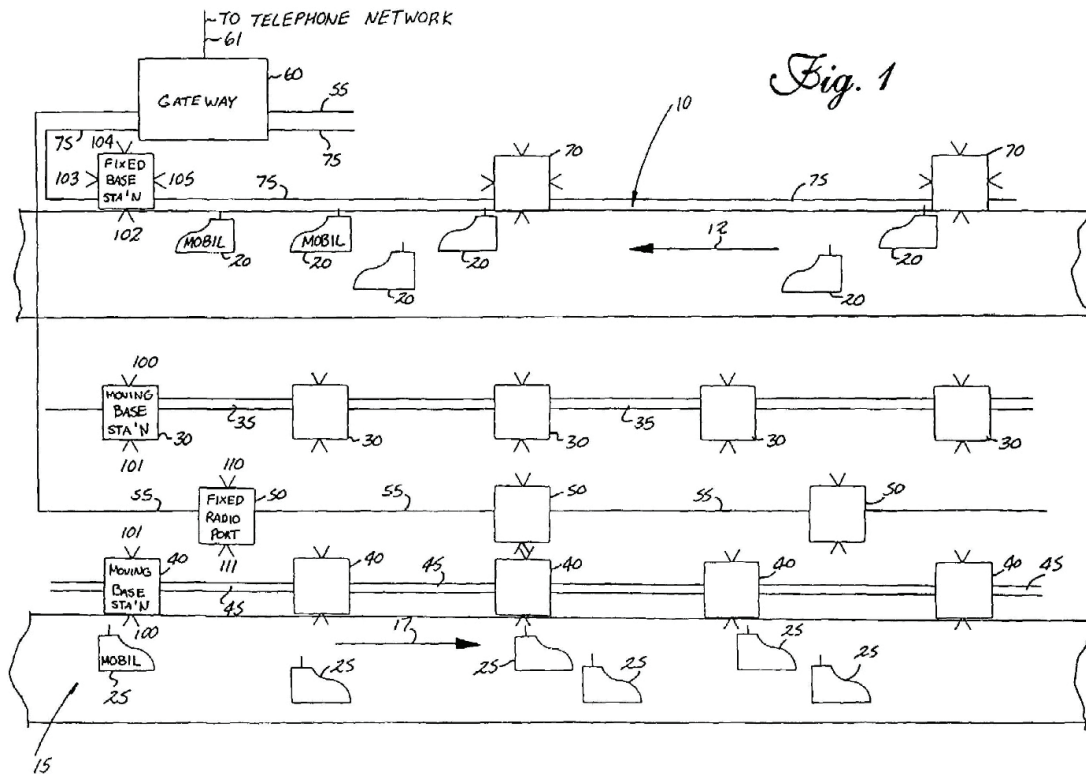
27  
 28 <sup>1</sup> The '177 patent is no longer asserted in this action. (Doc. No. 120 at 1; Doc. No. 123 at 1.)

1 On January 15, 2016, the action was transferred to the Southern District of  
2 California. (Doc. Nos. 69-70.) On January 20, 2016, the action was transferred to the  
3 calendar of the Honorable Marilyn L. Huff. (Doc. No. 75.) On February 11, 2016, the  
4 Court issued a scheduling order, (Doc. No. 85), and, on April 18, 2016, the Court issued  
5 an amended scheduling order. (Doc. No. 98.)

6 The patents-in-suit are all entitled “Mobile Communication System with Moving  
7 Base Station” and share an essentially identical specification. (See Doc. No. 1, Compl.  
8 Exs. A-C, E-F.) The invention disclosed in the patents-in-suit “relates to cellular telephone  
9 systems in which a mobile unit communicates by wireless communication to a base station  
10 connection to the wire telephone network and more particularly to cellular telephone  
11 systems adapted for use with fast-moving mobile units.” ’904 Patent at 1:16-19. The  
12 specification details the problems that prior art telecommunications systems have with fast-  
13 moving mobile units, particularly the problem of dealing with transfers of fast-moving  
14 mobile units between stationary cell sites as the mobile units move through the cellular  
15 network. See id. at 1:22-2:61. The specification provides the following summary of the  
16 invention:

17 These and other problems of the prior art are overcome in accordance with  
18 this invention by means of a moving base station which is interposed between  
19 a moving mobile telephone unit and a fixed base station. In accordance with  
20 this invention, a movable base station moves with the traffic at a rate of speed  
21 which is comparable to the speed of the traffic and communicates with a  
22 moving mobile telephone unit via standard mobile radio transmission. The  
23 movable base station further communicates by radio signals with a plurality  
24 of fixed antennas spaced along the path of travel of the mobile base station.  
25 The several fixed antennas are connected to a telephone wire line network via  
26 a telephone gateway office in a standard fashion. In accordance with this  
27 invention, the fixed radio ports are synchronized and the interface between the  
28 moving base station and the fixed radio ports is a time division multiplexed  
(TDM)-direct-sequence, spread-spectrum CDMA.

Id. at 3:18-34. Figure 1 of the ’904 patent displays an embodiment of the claimed system:



As an example of the claimed invention, Claim 22 of the '904 Patent provides:

An apparatus adapted to move in accordance with a movement of a mobile unit moving relative to a plurality of fixed radio ports, the apparatus comprising:

a receiver adapted to receive a plurality of signals, each of the plurality of signals transmitted from each of the plurality of fixed radio ports within a frequency band having a lower limit greater than 300 megahertz;

a transmitter adapted to transmit, within the frequency band, a resultant signal to the mobile unit in accordance with at least one of the plurality of signals; and

a processor adapted to maximize an amount of transferred information to the mobile unit by evaluating a quality of each of the plurality of signals transmitted from the plurality of fixed radio ports.

Id. at 12:65-13:11.

## Discussion

### **I. Legal Standards for Claim Construction**

Claim construction is an issue of law for the court to decide. Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 838 (2015); Markman v. Westview Instr., Inc., 517 U.S. 370, 372 (1996). Although claim construction is ultimately a question of law, “subsidiary factfinding is sometimes necessary.” Teva, 135 S. Ct. at 838.

“The purpose of claim construction is to ‘determin[e] the meaning and scope of the patent claims asserted to be infringed.’” O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1360 (Fed. Cir. 2008). “It is a ‘bedrock principle’ of patent law that the ‘claims of a patent define the invention to which the patentee is entitled the right to exclude.’” Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

Claim terms “‘are generally given their ordinary and customary meaning[,]’” which “is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Id. at 1312-13. “In some cases, the ordinary meaning of claim language as understood by a [PHOSITA] may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” Id. at 1314. “However, in many cases, the meaning of a claim term as understood by persons of skill in the art is not readily apparent.” O2 Micro, 521 F.3d at 1360. If the meaning of the term is not readily apparent, the court must look to “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean,” including intrinsic and extrinsic evidence. See Phillips, 415 F.3d at 1314. A court should begin with the intrinsic record, which consists of the language of the claims, the patent specification, and, if in evidence, the prosecution history of the asserted patent. Id.; see also Vederi, LLC v. Google, Inc., 744 F.3d 1376, 1382 (Fed. Cir. 2014) (“In construing claims, this court relies primarily on the claim language, the specification, and the prosecution history.”).

In determining the proper construction of a claim, a court should first look to the language of the claims. See Vitronics, 90 F.3d at 1582; see also Comark Commc’ns v.

1 Harris Corp., 156 F.3d 1182, 1186 (Fed. Cir. 1998) (“The appropriate starting point . . . is  
 2 always with the language of the asserted claim itself.”). The context in which a disputed  
 3 term is used in the asserted claim may provide substantial guidance as to the meaning of  
 4 the term. See Phillips, 415 F.3d at 1314. In addition, the context in which the disputed  
 5 term is used in other claims, both asserted and unasserted, may provide guidance because  
 6 “the usage of a term in one claim can often illuminate the meaning of the same term in  
 7 other claims.” Id. Furthermore, a disputed term should be construed “consistently with its  
 8 appearance in other places in the same claim or in other claims of the same patent.”  
 9 Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed. Cir. 2001); accord  
 10 Microprocessor Enhancement Corp. v. Texas Instruments Inc., 520 F.3d 1367, 1375 (Fed.  
 11 Cir. 2008); see also Paragon Sols., LLC v. Timex Corp., 566 F.3d 1075, 1087 (Fed. Cir.  
 12 2009) (“We apply a presumption that the same terms appearing in different portions of the  
 13 claims should be given the same meaning.” (internal quotation marks omitted)). Moreover,  
 14 “[a] claim construction that gives meaning to all the terms of the claim is preferred over  
 15 one that does not do so.” Vederi, 744 F.3d 1383.

16 A court must also read claims “in view of the specification, of which they are a part.”  
 17 Markman, 52 F.3d at 979; see 35 U.S.C. § 112(b) (“The specification shall conclude with  
 18 one or more claims particularly pointing out and distinctly claiming the subject matter  
 19 which the inventor or a joint inventor regards as the invention.”). “‘Apart from the claim  
 20 language itself, the specification is the single best guide to the meaning of a claim term.’”  
 21 Vederi, 744 F.3d at 1382. For example, “a claim construction that excludes [a] preferred  
 22 embodiment [described in the specification] ‘is rarely, if ever, correct and would require  
 23 highly persuasive evidentiary support.’” Adams Respiratory Therapeutics, Inc. v. Perrigo  
 24 Co., 616 F.3d 1283, 1290 (Fed. Cir. 2010).

25 But “[t]he written description part of the specification does not delimit the right to  
 26 exclude. That is the function and purpose of claims.” Markman v. Westview Instruments,  
 27 Inc., 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc). “[A] claim construction must not import  
 28 limitations from the specification into the claims.” Douglas Dynamics, LLC v. Buyers



1 Products Co., 717 F.3d 1336, 1342 (Fed. Cir. 2013). Therefore, “it is improper to read  
 2 limitations from a preferred embodiment described in the specification—even if it is the  
 3 only embodiment—into the claims absent a clear indication in the intrinsic record that the  
 4 patentee intended the claims to be so limited.” Dealertrack, Inc. v. Huber, 674 F.3d 1315,  
 5 1327 (Fed. Cir. 2012); see also Kara Tech. Inc. v. Stamps.com Inc., 582 F.3d 1341, 1348  
 6 (Fed. Cir. 2009) (“The patentee is entitled to the full scope of his claims, and we will not  
 7 limit him to his preferred embodiment or import a limitation from the specification into the  
 8 claims.”).

9 In most situations, analysis of the intrinsic evidence will resolve claim construction  
 10 disputes. See Vitronics, 90 F.3d at 1583; Teva, 135 S. Ct. at 841. However, “[w]here the  
 11 intrinsic record is ambiguous, and when necessary,” district courts may “rely on extrinsic  
 12 evidence, which ‘consists of all evidence external to the patent and prosecution history,  
 13 including expert and inventor testimony, dictionaries, and learned treatises.’” Power  
 14 Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc., 711 F.3d 1348, 1360 (Fed. Cir.  
 15 2013) (quoting Phillips, 415 F.3d at 1317). A court must evaluate all extrinsic evidence in  
 16 light of the intrinsic evidence. Phillips, 415 F.3d at 1319. A court should not rely on  
 17 extrinsic evidence in construing claims to vary or contradict the meaning of claims  
 18 discernable from examination of the intrinsic evidence. See Tempo Lighting, Inc. v. Tivoli,  
 19 LLC, 742 F.3d 973, 977 (Fed. Cir. 2014); Dow Chem. Co. v. Sumitomo Chem. Co., Ltd.,  
 20 257 F.3d 1364, 1373 (Fed. Cir. 2001); see also Vederi, 744 F.3d at 1382 (“[E]xtrinsic  
 21 evidence may be less reliable than the intrinsic evidence.”). In cases where subsidiary facts  
 22 contained in the extrinsic evidence “are in dispute, courts will need to make subsidiary  
 23 factual findings about that extrinsic evidence.” Teva, 135 S. Ct. at 841.

24 “[D]istrict courts are not (and should not be) required to construe every limitation  
 25 present in a patent’s asserted claims.” O2 Micro, 521 F.3d at 1362. In certain situations,  
 26 it is appropriate for a court to determine that a claim term needs no construction and its  
 27 plain and ordinary meaning applies. See id.; Phillips, 415 F.3d at 1314. But “[a]  
 28 determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary

meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.” O2 Micro, 521 F.3d at 1361. If the parties dispute the scope of a certain claim term, it is the court’s duty to resolve the dispute. Id. at 1362; accord Eon Corp. IP Holdings v. Silver Spring Networks, 815 F.3d 1314, 1318 (Fed. Cir. 2016).

## II. Analysis of the Disputed Terms<sup>2</sup>

### A. “fixed radio port” and “fixed port”

Plaintiff proposes that the term “fixed port” be construed as “a stationary device at which signals can enter or exit a communication network.” (Doc. No. 123 at 6.) Plaintiff proposes that the term “fixed radio ports” be construed as “stationary devices that each transmit and receive radio frequency signals to provide access to a communication network.” (Id. at 11.) Defendants propose that the terms “fixed radio port” and “fixed port” both be construed as “stationary radio communication device[s] that communicate[s] with the mobile unit/device only via a movable intermediary device and do[es] not perform call handling function (e.g., handoff).” (Doc. No. 120 at 8.)

The parties agree that the terms “fixed port” and “fixed radio port” refer to a stationary communication device that transmits and receives signals in a communication network. (See Doc. No. 120 at 9-11; Doc. No. 123 at 7.) The parties dispute whether the terms also contain the additional limitations of: 1) that the fixed port/fixed radio port “communicate with the mobile unit/device only via a movable intermediary device”; and 2) that it “not perform call handling functions (e.g., handoff).” (Doc. No. 120 at 9.) Defendants argue that the Court’s constructions for these two terms should include these additional limitations. (Id.)

The Court first addresses Defendants’ argument that the invention requires that the

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<sup>2</sup> The parties agree that the disputed claim terms should be construed consistently across the patents-in-suit. (Doc. No. 120; Doc. No. 123 at 1 n.1.) See SightSound Techs., LLC v. Apple Inc., 809 F.3d 1307, 1316 (Fed. Cir. 2015) (“Where multiple patents ‘derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents.’”).



1 fixed port/fixed radio port communicate with the mobile unit/device only via a movable  
2 intermediary device. The language of the independent claims at issue does not contain the  
3 specific requirement that the fixed port/fixed radio port communicate with the mobile unit  
4 only via a movable intermediate device. See '904 Patent at 12:65-13:11, 13:60-14:11; '701  
5 Patent at 11:54-64; '023 Patent at 12:8-16. In arguing for the inclusion of this limitation,  
6 Defendants rely on the following language from the specification: "the mobile unit does  
7 not receive communications from the fixed radio port but only from the movable base  
8 station." '904 Patent at 3:49-51. But here the specification is referring to "a specific  
9 embodiment of the invention." Id. at 3:40. "[I]t is improper to read limitations from a  
10 preferred embodiment described in the specification—even if it is the only embodiment—  
11 into the claims absent a clear indication in the intrinsic record that the patentee intended  
12 the claims to be so limited." Dealertrack, 674 F.3d at 1327. Here, there is not a clear  
13 indication that the patentee intended the claims to be so limited.

14 Defendants cite to the following further language in the specification: "The system  
15 in accordance with the invention differs from the prior art primarily in that the base stations  
16 30, 40 are moving with the traffic and communicate with the gateway office 60 via fixed  
17 radio ports 50." '904 Patent at 5:10-14; see also id. at 3:30-33 ("The movable base station  
18 further communicates by radio signals with a plurality of fixed antennas spaced along the  
19 path of travel of the mobile base station."); id. at 4:21-26 ("Disposed between the moving  
20 base stations moving along the rails 35, 45 are a plurality of fixed radio ports 50 which are  
21 connected by means of a fiber optic ring 55 or a similar signal transmitting device to a  
22 telephone office connected to the wire line telephone network and referred to as a gateway  
23 office."). But, here, even though the specification is describing the overall system  
24 according to the invention, the specification merely states that the moving base stations  
25 communicate with the fixed radio ports. That the moving base stations, which also  
26 communicate with the mobile devices, communicate with the fixed radio ports does not  
27 necessarily preclude the fixed radio ports from also communicating with the mobile  
28 devices.

Further, the specification expressly describes an embodiment where fixed ports directly communicate with mobile units. The specification provides: “[F]ixed base stations 70 would accommodate communications with mobile units traveling at a speed of less than 30 miles per hour . . . .” ’904 Patent at 4:48-51; see also id. at 5:67-6:1, 11:1-4, fig. 1. “[A] claim construction that excludes [a] preferred embodiment [described in the specification] ‘is rarely, if ever, correct and would require highly persuasive evidentiary support.’” Adams Respiratory Therapeutics, 616 F.3d at 1290. Defendants argue that the “fixed base stations 70” described in the specification are different from the claimed fixed ports/fixed radio ports. (Doc. No. 120 at 10-11.) But in the summary of the invention, the specification uses the terms “fixed base station[s]” and “fixed radio ports” interchangeably. Compare ’904 Patent at 3:18-21 (“These and other problems of the prior art are overcome in accordance with this invention by means of a moving base station which is interposed<sup>3</sup> between a moving mobile telephone unit and a fixed base station.”) with id. at 3:30-32 (“In accordance with this invention, the fixed radio ports are synchronized and the interface between the moving base station and the fixed radio ports is a time division multiplex . . . .”). Indeed, in Defendants’ own proposed constructions, Defendants propose that the term “base station” be construed as “a fixed port” – albeit incorporating Defendants’ proposed construction for term “fixed port.” (Doc. No. 120 at 13.) Accordingly, the Court declines to include this limitation in its constructions for the terms “fixed port” and “fixed radio port.”

Turning to Defendants’ request to include the limitation that the fixed port/fixed radio port not provide call-handling functions, the Court notes that the language of the

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<sup>3</sup> In their response brief, Defendants argue that the plain meaning of “interpose” is essentially to “get in the way of.” (Doc. No. 126 at 6.) The Court disagrees. The word “interpose” means “to place between or in an intermediate position.” Webster’s Third New International Dictionary 1182 (1981). This plain meaning of the word “interpose” makes sense in the context of the invention as the system according to the invention generally places a movable base station between the mobile units and the fixed base stations, allowing the movable base station to potentially act as an intermediary communication device between the mobile units and the fixed base stations. See ’904 Patent at 3:18-34, fig 1.

independent claims at issue also does not contain this specific requirement. See '904 Patent at 12:65-13:11, 13:60-14:11; '701 Patent at 11:54-64; '023 Patent at 12:8-16. In support of their argument, Defendants rely on following language in the specification: "The system in accordance with the invention differs from the prior art primarily in that the base stations 30, 40 are moving with the traffic and communicate with the gateway office 60 via fixed radio ports 50. Furthermore, the various call-handling functions, including handoff, are performed by the moving base station." '904 Patent at 5:10-16. Generally, a court should not import limitations from the specification into the claims absent a clear indication that the patentee intended that the claims should be so limited. See Dealertrack, 674 F.3d at 1327; Hill-Rom Servs., Inc. v. Stryker Corp., 755 F.3d 1367, 1372 (Fed. Cir. 2014). Here, there is no such clear indication. In the above cited portion of the specification, even though the specification is describing the system according to the invention, the specification merely states that the call-handling functions are performed by the moving base station. The specification does not state that the call-handling function must only be performed by the moving base station or that the fixed port can never perform any of the call-handling functions. To the contrary, elsewhere the specification explains: "The fixed base stations 70 perform the function of a standard prior art fixed base station", and describes the functions of a standard prior art base station as including "functions associated with call setup, call supervision, and call termination." '904 Patent at 4:65-5:2, 5:67-6:1; see also id. at 10:67-11:1. "[A] claim construction that excludes [a] preferred embodiment [described in the specification] 'is rarely, if ever, correct and would require highly persuasive evidentiary support.'" Adams Respiratory Therapeutics, 616 F.3d at 1290. Accordingly, the Court declines to include in its constructions the limitation that the fixed port/fixed radio port does not perform call-handling functions.

In sum, the Court adopts Plaintiff's proposed constructions for these two terms and

1 rejects Defendants' proposed construction.<sup>4</sup> The Court construes the term "fixed port" as  
 2 "a stationary device at which signals can enter or exit a communication network." The  
 3 Court construes the term "fixed radio ports" as "stationary devices that each transmit and  
 4 receive radio frequency signals to provide access to a communication network."

5 B. "base station" and "base station [radio] interface circuit"

6 Plaintiff proposes that the term "base station" be given its plain meaning and be  
 7 construed as "a fixed device a mobile radio transceiver (transmitter/receiver) talks to, to  
 8 talk to a person or to get to the landline phone network, public or private." (Doc. No. 123  
 9 at 12.) Defendants propose that this term be construed as "a fixed port." (Doc. No. 120 at  
 10 13.) Plaintiff proposes that the term "base station [radio] interface circuit" be construed as  
 11 "a [radio transceiver] circuit in a base station that can transmit and receive cellular signals."  
 12 (Doc. No. 123 at 13.) Defendants propose that this term be construed as "radio interface  
 13 circuit of a fixed port." (Doc. No. 120 at 13.)

14 In support of their proposed constructions, Defendants argue that the claims at issue  
 15 use the term "base station" in the same way that the terms "fixed port" and "fixed radio  
 16 port" are used. (Doc. No. 120 at 13.) The Court agrees with Defendants that the claims at  
 17 times appear to use the terms "fixed port" and "fixed base station" interchangeably. See,  
 18 e.g., '701 Patent at 11:15-25, 11:54-64. Further, the specification uses the terms "fixed  
 19 base station[s]" and "fixed radio ports" interchangeably. Compare '904 Patent at 3:18-21  
 20 ("These and other problems of the prior art are overcome in accordance with this invention  
 21 by means of a moving base station which is interposed between a moving mobile telephone  
 22 unit and a fixed base station.") with id. at 3:30-32 ("In accordance with this invention, the  
 23 \_\_\_\_\_

24 <sup>4</sup> In addition, the Court rejects Defendants' contention that Plaintiff's proposed construction  
 25 describes the admitted prior art. (Doc. No. 126 at 4-5.) As Defendants themselves explain, in the  
 26 described prior art systems, the mobile units only communicate with fixed base stations. (Id. at 5.)  
 27 Under Plaintiff's proposed constructions for these terms, in the claimed system, the mobile unit can  
 28 communicate with either a fixed base station or a movable base station. That the claimed system allows  
 for the mobile unit to have the ability to communicate with either a fixed base station or a movable base  
 station renders the claimed system different from the prior art systems described in the specification.  
See '904 Patent at 1:22-2:61.

1 fixed radio ports are synchronized and the interface between the moving base station and  
 2 the fixed radio ports is a time division multiplex . . . .”). “[The] implication [that different  
 3 terms have different meanings] is overcome where, as here, the evidence indicates that the  
 4 patentee used the two terms interchangeably.” Baran v. Med. Device Techs., Inc., 616 F.3d  
 5 1309, 1316 (Fed. Cir. 2010). But for the reasons given in the preceding section, the Court  
 6 declines to adopt Defendants’ proposed constructions for these terms because they  
 7 improperly seek to include the limitations that 1) the claimed base station communicate  
 8 with the mobile unit/device only via a movable intermediary device; and 2) that it not  
 9 perform call handling functions (e.g., handoff). The Court has explained that based on the  
 10 language contained in the intrinsic record, it is improper to import these limitations from  
 11 the specification into the claims. See supra; Dealertrack, 674 F.3d at 1327.

12 Plaintiff’s proposed construction gives the term “base station” its plain meaning and  
 13 is consistent with the description of that term in the specification. See ’904 Patent at 4:63-  
 14 5:10, 5:67-6:1. (See Doc. No. 123-9, Lindsey Decl. Ex. 8 at 128.) Indeed, Defendants  
 15 state in their brief that the term “base station” has a common and well-known meaning and  
 16 is generally understood to be “the entity in the cellular network that receives the radio  
 17 signals from mobile units, *e.g.* cell phones, and provides the interface between those signals  
 18 and the wired telephone network and performs call handling, such as handoff.” (Doc. No.  
 19 120 at 14.) Accordingly, the Court adopts Plaintiff’s proposed constructions for these  
 20 terms. The Court construes the term “base station” as “a fixed device a mobile radio  
 21 transceiver (transmitter/receiver) talks to, to talk to a person or to get to the landline phone  
 22 network, public or private.” The Court construes the term “base station [radio] interface  
 23 circuit” as “a [radio transceiver] circuit in a base station that can transmit and receive  
 24 cellular signals.”

25 C. “adapted to” and “configured to”

26 Plaintiff proposes that the term “adapted to” be given its plain meaning and be  
 27 construed as “adjusted to a specified use or situation.” (Doc. No. 123 at 17.) Plaintiff  
 28 proposes that the term “configured to” be given its plain meaning be construed as “shaped,

1 fashioned, or constructed to.” (Id. at 17.) Defendants argue that the terms “adapted to”  
2 and “configured to” should be construed as “constructed to move by a conveying device to  
3 track the movement of a mobile unit,” or at the very least be construed as “constructed to.”  
4 (Doc. No. 120 at 16.)

5 In their proposed constructions for these terms, Defendants request that the Court  
6 include in its constructions a limitation requiring that the claimed apparatus/movable base  
7 station/transmitter be as “constructed to move by a conveying device to track the movement  
8 of a mobile unit.” (Id.) Many of the claims at issue contain language supporting the  
9 inclusion of a limitation requiring that the claimed apparatus/movable base  
10 station/transmitter be constructed to move in accordance with the movement of the mobile  
11 unit. See, e.g., ’904 Patent at 12:65-66 (“An apparatus adapted to move in accordance with  
12 a movement of a mobile unit . . . .”); ’543 Patent at 12:62-12:66 (“[A] first transmitter  
13 configured to transmit . . . while the apparatus is moving . . . in the same direction as the  
14 mobile device.”); ’191 Patent at 11:51-55 (“the first transmitter configured to transmit . . .  
15 the first data to the mobile device while the mobile device, the first receiver, and the first  
16 transmitter are moving in the same direction . . . along the path”). Furthermore, the  
17 language in the specification supports the inclusion of a limitation requiring that the  
18 claimed apparatus/movable base station/transmitter be constructed to move with traffic:  
19 “In accordance with this invention, a movable base station moves with the traffic at a rate  
20 of speed which is comparable to the speed of the traffic and communicates with a moving  
21 mobile telephone unit via standard mobile radio transmission.” ’904 Patent at 3:21-25; see  
22 id. at 5:10-13 (“In accordance with this invention, a movable base station moves with the  
23 traffic at a rate of speed which is comparable to the speed of the traffic . . .”). Generally, a  
24 court should not import limitations from the specification into the claims absent a clear  
25 indication that the patentee intended that the claims should be so limited. See Dealertrack,  
26 674 F.3d at 1327; Hill-Rom Servs., 755 F.3d at 1372. But, here, the specification is  
27 describing the system as a whole according to the invention and not simply a preferred  
28



embodiment.<sup>5</sup> The Federal Circuit has explained: “When a patentee describes the features of the present invention as a whole, he alerts the reader that this description limits the scope of the invention.” Pacing Techs., LLC v. Garmin Int’l, Inc., 778 F.3d 1021, 1025 (Fed. Cir. 2015) (internal quotation marks omitted)); accord Regents of Univ. of Minnesota v. AGA Med. Corp., 717 F.3d 929, 936 (Fed. Cir. 2013). Accordingly, the Court agrees with Defendants that this language in the specification constitutes a disclaimer, and the claims should be limited by that disclaimer. But the Court declines to include the specific requirement that the claimed apparatus/movable base station/transmitter be constructed/adapted move to track the mobile device. Rather the Court will include in its construction that the claimed apparatus/movable base station/transmitter be constructed/adapted to move with the traffic at a rate of speed which is comparable to the speed of the traffic to better correspond with the language contained in the disclaimer.<sup>6</sup>

But the Court declines to include in its constructions a limitation requiring that the claimed apparatus/movable base station/transmitter move by a conveying device. In support of their argument that this particular limitation should be included, Defendants rely on the description of a preferred embodiment of the invention contained in the specification: “The moving base stations 30 may be moved by means of a rail 35, or other suitable conveying device which may include an automotive vehicle travelling on the roadway, in the same direction as the traffic flow on the roadway 10, as indicated by the arrow 12.” ’904 Patent at 4:6-10. “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims

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<sup>5</sup> The Court rejects Plaintiff’s contention that this portion of the specification is merely describing a preferred embodiment. (Doc. No. 127 at 6.) The sentence at issue uses the phrase “[i]n accordance with this invention” and does not use the word “embodiment.” ’904 Patent at 3:21-22. Indeed, the word “embodiment” is not contained anywhere in the paragraph containing the referenced sentence. See id. at 3:18-34.

<sup>6</sup> Indeed, Plaintiff itself asserts that one of ordinary skill in the art would understand from the specification passage at issue that the movable base station “moves with traffic.” (Doc. No. 127 at 6.)

1 to be so limited.” Dealertrack, 674 F.3d at 1327. Here, there is not a clear indication that  
 2 the patentee intended the claims to be limited in the manner proposed by Defendants. The  
 3 referenced portion of the specification uses the permissive word “may” in stating that the  
 4 “[t]he moving base stations 30 may be moved by means of a rail 35, or other suitable  
 5 conveying device.” ’904 Patent at 4:6-8. Accordingly, the Court declines to include a  
 6 limitation requiring that the moving base stations move by a conveying device in its  
 7 construction of these two terms.<sup>7</sup> In sum, the Court construes the terms “adapted to” and  
 8 “configured to” as “constructed to move with the traffic at a rate of speed which is  
 9 comparable to the speed of the traffic.”

10 D. “processor adapted to maximize an amount of transferred information”

11 Defendants argue that the claim term “processor adapted to maximize an amount of  
 12 transferred information” should be construed as a means-plus-function claim under 35  
 13 U.S.C. § 112, para. 6. (Doc. No. 120 at 21-22.) Defendants further argue that the claim  
 14 term when construed as a means-plus-function claim is indefinite. (Id. at 23-24.)

15 The claim term at issue does not use the word “means.” ’904 Patent at 13:8-11. The  
 16 Federal Circuit has explained that when a claim fails to use the specific word “means,” it  
 17 creates a rebuttable presumption that the claim is a not a means-plus-function claim and §  
 18 112, para. 6 does not apply. See Williamson v. Citrix Online, LLC, 792 F.3d 1339, 1348-  
 19 49 (Fed. Cir. 2015) (en banc). In order to overcome this presumption, the challenger must  
 20 demonstrate that “the claim term fails to ‘recite sufficiently definite structure’ or else  
 21 recites ‘function without reciting sufficient structure for performing that function.’” Id. at  
 22 1349.

23 Defendants argue that the claim term at issue fails to recite a sufficiently definite  
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25 <sup>7</sup> Defendants argue that the claims should be limited to this embodiment because it is the only  
 26 embodiment disclosed in the specification. (Doc. No. 126 at 8.) But even assuming this is true,  
 27 Dealertracker clearly explains that “it is improper to read limitations from a preferred embodiment  
 28 described in the specification—even if it is the only embodiment—into the claims absent a clear  
 indication in the intrinsic record that the patentee intended the claims to be so limited.” 674 F.3d at  
 1327. Here, there is not such a clear indication.

1 structure because it merely discloses a generic processor without specifically describing  
 2 the algorithm or programming necessary to perform the claimed function. (Doc. No. 120  
 3 at 22.) In Williamson, the Federal Circuit explained that “[g]eneric terms such as  
 4 ‘mechanism,’ ‘element,’ ‘device,’ and other nonce words that reflect nothing more than  
 5 verbal constructs may be used in a claim in a manner that is tantamount to using the word  
 6 ‘means’ because they ‘typically do not connote sufficiently definite structure’ and therefore  
 7 may invoke § 112, para. 6.” 792 F.3d at 1350. But the term “processor” is not such a  
 8 “nonce” word. The term “‘processor’ connotes structure.” Syncpoint Imaging, LLC v.  
 9 Nintendo of Am. Inc., No. 215CV00247JRGRSP, 2016 WL 55118, at \*20 (E.D. Tex. Jan.  
 10 5, 2016) (citing the definition for the word “processor” contained in the IBM Dictionary of  
 11 Computing). (See also Doc. No. 123-9, Lindsay Decl. Ex. 8 at 821 (definition of the word  
 12 “processor” contained in Newton’s Telecom Dictionary).) Further, the language in the  
 13 claim at issue sufficiently provides the objectives and operations of the claimed processor.  
 14 See ’904 Patent at 13:8-11 (“a processor adapted to maximize an amount of transferred  
 15 information to the mobile unit by evaluating a quality of each of the plurality of signals  
 16 transmitted from the plurality of fixed radio ports”); see also id. at 6:31-32 (“The claimed  
 17 processor 130 may be a standard microprocessor . . . .”). One could understand the  
 18 structural arrangements of the claimed processor from the recited objectives and  
 19 operations. Accordingly, Defendants have failed to rebut the presumption against invoking  
 20 § 112, para. 6.<sup>8</sup>

21 Indeed, several district courts post-Williamson have concluded that the term

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 24 <sup>8</sup> Defendants’ reliance on the Federal Circuit’s decisions in Williamson and Aristocrat Techs.  
 25 Australia Pty Ltd. v. Int’l Game Tech., 521 F.3d 1328 (Fed. Cir. 2008) to support their argument that the  
 26 claim is indefinite is misplaced because the claims at issue in those cases, unlike the claim at issue here,  
 27 were means-plus-function claims. See Williamson, 792 F.3d at 1351; Aristocrat, 512 F.3d at 1332.  
 28 “[W]here a claim is not drafted in means-plus-function format, the reasoning in the Aristocrat line of  
 cases does not automatically apply, and an algorithm is therefore not necessarily required.” Syncpoint  
Imaging, 2016 WL 55118, at \*18 (emphasis removed) (quoting Apple Inc. v. Motorola, Inc., 757 F.3d  
 1286, 1298 (Fed. Cir. 2014)).

1 “processor” sufficiently connotes a definite structure to a person of ordinary skill in the art,  
 2 and, therefore, found that § 112, para. 6 did not apply to a claim or claims that used the  
 3 term “processor.” See, e.g., Syncpoint Imaging, 2016 WL 55118, at \*18-21; Advanced  
 4 Mktg. Sys., LLC v. CVS Pharmacy, Inc., No. 6:15-CV-134-JRG-KNM, 2016 WL  
 5 1741396, at \*20 (E.D. Tex. May 3, 2016); Smartflash LLC v. Apple Inc., No. 6:13-CV-  
 6 447-JRG-KNM, 2015 WL 4208754, at \*3 (E.D. Tex. July 7, 2015); Finjan, Inc., v.  
 7 Proofpoint, Inc., No. 13-CV-05808-HSG, 2015 WL 7770208, at \*10-11 (N.D. Cal. Dec. 3,  
 8 2015); Nomadix, Inc. v. Hosp. Core Servs. LLC, No. CV1408256DDPVBKX, 2016 WL  
 9 344461, at \*5-8 (C.D. Cal. Jan. 27, 2016); see also Williamson, 792 F.3d at 1348 (“[T]he  
 10 essential inquiry is . . . whether the words of the claim are understood by persons of  
 11 ordinary skill in the art to have a sufficiently definite meaning as the name for structure.”).<sup>9</sup>  
 12 Accordingly, the Court rejects Defendants’ contention that claim at issue or its dependent  
 13 claims are means-plus-function claims.<sup>10</sup>

14 E. “corresponding”

15 Plaintiff proposes that the term “transmit radio signals to a mobile device  
 16 corresponding to the received fixed port signals” be given its plain meaning and be  
 17 construed as “transmit radio frequency signals to a mobile device, where the radio  
 18 frequency signal[s] correspond to the received fixed port signals.” (Doc. No. 123 at 19.)  
 19 Defendants propose that the term be construed as “transmit radio signals at the same  
 20 frequency as the received fixed port signals.” (Doc. No. 120 at 24.) Plaintiff proposes that  
 21 the term “transmit radio frequency signals corresponding to the mobile device signals” be  
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 24 <sup>9</sup> The Court finds the reasoning and analysis set forth in these district court cases persuasive and  
 25 not the reasoning set forth in the district court decision cited by the Defendants – Sarif Biomedical LLC  
v. Brainlab, Inc., No. CV 13-846-LPS, 2015 WL 5072085, at \*1 (D. Del. Aug. 26, 2015).

26 <sup>10</sup> Defendants also argue that the claim term “a processor adapted to establish a communication link  
 27 between the plurality of mobile units” should, for the same reasons, be found to be a means-plus-  
 28 function claim that is indefinite under 35 U.S.C. § 112, para. 6. (Doc. No. 120 at 24.) For the same  
 reasons previously given, the Court rejects Defendants’ contention that the term “processor” is a nonce  
 word, and that the claim at issue or its dependent claims are means-plus-function claims.

1 given its plain meaning and be construed as “transmit radio frequency signals that  
2 correspond to the mobile device signals.” (Doc. No. 123 at 20.) Defendants propose that  
3 this term be construed as “transmit radio signals at the same frequency as the mobile device  
4 signals.” (Doc. No. 120 at 24.)

5 In their proposed constructions for these two terms, Defendants request that the  
6 Court include a limitation requiring that the radio signals be transmitted “at the same  
7 frequency” as the received fixed port signals/mobile device signals. The language of the  
8 claims at issue does not specifically require that the moving base station transmit a radio  
9 signal at the same frequency as the signal it receives. See ’701 Patent at 11:23-25, 11:62-  
10 64; ’023 Patent at 11:35-37, 12:14-16. Defendants argue that the claim terms should be  
11 construed to possess this limitation because the specification discloses that having both  
12 parts of a wireless link in the same frequency band is a critical feature of the disclosed  
13 system. (Doc. No. 120 at 25.) In support of this argument, Defendants rely on the  
14 following language from the specification of the ’904 patent: “The interface between the  
15 movable base station and the fixed radio port is preferably transparent to the overall system  
16 in spectrum use.” ’904 Patent at 6:55-57. But here the specification uses permissive rather  
17 than mandatory language in stating that the interface is “preferably” transparent to the  
18 overall system in spectrum use. Accordingly, the Court declines to include this limitation  
19 in its construction of these two claim terms. See Dealertrack, 674 F.3d at 1327 (“[I]t is  
20 improper to read limitations from a preferred embodiment described in the specification—  
21 even if it is the only embodiment—into the claims absent a clear indication in the intrinsic  
22 record that the patentee intended the claims to be so limited.”).

23 The Court accepts Plaintiff’s proposed constructions and rejects Defendants’  
24 proposed constructions. The Court construes the term “transmit radio signals to a mobile  
25 device corresponding to the received fixed port signals” as “transmit radio frequency  
26 signals to a mobile device, where the radio frequency signals correspond to the received  
27 fixed port signals.” Further, the Court construes the term “transmit radio frequency signals  
28 corresponding to the mobile device signals” as “transmit radio frequency signals that

1 correspond to the mobile device signals.”

2 F. Additional Terms

3 In the parties’ joint claim construction worksheets and charts, Defendants provided  
 4 proposed constructions for the term “align and combine . . . signals.” (Doc. No. 119-1 at  
 5 A2-2.) But Defendants failed to provide any argument or analysis in support of their  
 6 proposed construction in their opening claim construction brief or at the claim construction  
 7 hearing.<sup>11</sup> (See Doc. No. 120.) Further, in the parties’ joint claim construction worksheets  
 8 and charts, Plaintiff provided a proposed construction for the term “mobile unit.” (Doc.  
 9 No. 119-1 at A-1–A-2.) Defendants stated in the worksheets and charts that the term  
 10 “mobile unit” did not need to be construed. (Id.) In its opening claim construction brief,  
 11 Plaintiff states that it no longer requests construction of the term “mobile unit.” (Doc. No.  
 12 123 at 15 n.5.) In addition, the parties’ joint claim construction worksheets and charts  
 13 contained several other proposed constructions for which the parties failed to provide any  
 14 argument or analysis in support of the proposed constructions in their briefing or at the  
 15 hearing. (See Doc. No. 119-1.) The Court declines to construe these additional terms.  
 16 See, e.g., Paice LLC v. Hyundai Motor Co., No. CIV. WDQ-12-0499, 2014 WL 3725652,  
 17 at \*5 n.18 (D. Md. July 24, 2014) (declining to construe certain claim terms where plaintiff  
 18 did not request construction of those terms and defendant fail to provide any support in  
 19 their brief for their proposed constructions for those terms); see also O2 Micro, 521 F.3d  
 20 at 1362. (“[D]istrict courts are not (and should not be) required to construe every limitation  
 21 present in a patent’s asserted claims.”).

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28 <sup>11</sup> In their response brief, Defendants state that the term “align and combine . . . signals” can take  
 Carucel’s proposed construction if it needs to be construed at all. (Doc. No. 126 at 10.)




**Conclusion**

For the reasons above, the Court adopts the constructions set forth above.

**IT IS SO ORDERED.**

DATED: September 16, 2016

  
MARILYN L. HUFF, District Judge  
UNITED STATES DISTRICT COURT