United States District Court,
W.D. Wisconsin.

VEHICLE IP, LLC,
Plaintiff.
v.
GENERAL MOTORS CORPORATION, Onstar Corporation, Cellco Partnership, and Networks in Motion, Inc,
Defendants.

No. 07-cv-345-bbc

Feb. 29, 2008.

Background: Holder of patent in a system and method for providing directions using a communication network brought infringement action against automobile manufacturer, navigational component manufacturer, and others, alleging that they infringed on holder's patent by making, using, selling, and offering for sale turn-by-turn navigation devices. Parties cross-moved for summary judgment.

Holdings: The District Court, Barbara B. Crabb, J., held that:
(1) mobile and automobile technologies did not literally infringe on patent,
(2) and technologies did not infringe under doctrine of equivalents.

Ordered accordingly.

6,535,743. Not Infringed.

Andrew Clarkowski, Michael J. Modl, Axley Brynelson, Madison, WI, Michael James Kane, Fish & Richardson P.C., Minneapolis, MN, for Plaintiff.

Lewis W. Beilin, Reinhart Boerner Van Deuren S.C., Catherine Cetrangolo, Boardman, Suhr, Curry & Field, Madison, WI, Paul J. Stockhausen, Scott W. Hansen, Reinhart Boerner Van Deuren S.C., Milwaukee, WI, Jonathan Retsky, Howrey LLP, Chicago, IL, Alex Yap, David T. Yang, E. Dale Buxton II, Martin M. Noonen, Vincent J. Belusko, Morrison & Foerster, Los Angeles, CA, for Defendants.

OPINION AND ORDER

BARBARA B. CRABB**, District Judge.**

In this civil action for monetary and injunctive reli ef, plaintiff Vehicle IP, LLC contends that defendants

General Motors Corporation, OnStar Corporation, Cellco Partnership and Networks In Motion, Inc. have infringed plaintiff's United States Patent No. 6,535,743 (the '743 patent) by making, using, selling and offering for sale turn-by-turn navigation devices. Defendants assert several affirmative defenses and counterclaims in which they contend that the '743 patent is unenforceable and invalid. Jurisdiction is present. 28 U.S.C. s.s. 1331 and 1338(a).

Presently before the court are (1) plaintiff's motion for partial summary judgment on its claim that defendants are infringing claims 1 and 23 of the ' 743 patent; (2) the motion of defendants Network In Motion and Cellco for summary judgment on plaintiff's claim of infringement of the '743 patent; and (3) the motion of defendants General Motors and OnStar for summary judgment on plaintiff's claims of infringement and willful infringement of the '743 patent and on GM and OnStar's own counterclaim of invalidity of the '743 patent.

Although the parties raise several issues, the core o f the dispute between the parties is whether defendants' accused devices involve the downloading of direction segments "comprising a command and a *notification region* defined by a plurality of *notification* coordinates." '743 pat., col. 31, lns. 26-28 (emphasis added). I conclude that because under a proper construction of the claim language defendants' turn-by-turn navigation devices do not involve a mobile device downloading from a server "a notification region defined by a plurality of notification coordinates," plaintiff has failed to show that defendants' turn-by-turn navigation devices infringe the claims of the '743 patent either literally or under the doctrine of equivalents. In addition, because GM and OnStar no longer face uncertainty about the legality of their accused products, I will exercise my discretion to dismiss their counterclaims of invalidity and unenforceability.

From the parties' proposed finding of fact and the re cord, I find the following facts to be material and undisputed.

UNDISPUTED FACTS

A. *The Parties*

Plaintiff Vehicle IP, LLC is a Delaware intellectual property management company and is wholly owned by Vehicle Safety & Compliance, LLC, which is a transportation technology company that develops technological solutions for the trucking and automotive sectors. Plaintiff owns a broad international patent portfolio, which includes the '743 patent.

Defendant Cellco Partnership, d/b/a Verizon Wireless, sells cell phones, PDAs and mobile devices equipped with VZ Navigator software supplied by defendant Networks In Motion, Inc. The VZ Navigator provides turn-by-turn directions over the Verizon Wireless cellular network. Defendant General Motors Corporation and defendant OnStar Corporation sell a turn-by-turn navigation OnStar System.

B. *The* '743 Patent

The '743 patent discloses a system and method for providing directions using a communication network. The '743 patent contains 56 claims. Plaintiff has alleged that defendants' products specifically infringe claims 1, 4, 6, 7, 11, 13, 15, 17, 21, 23, 25, 30, 32, 33, 35, 38, 39, 43, 45, 46, 48, 55 and 56 of the '743 patent. Claims 1, 13, 23, 35, 45, 55 and 56 are independent claims and the remaining asserted claims are dependent. The ' 743 patent's independent claims, excluding claim 23, contain the following claim limitation language:

[D]irections comprise a plurality of seg ments, each segment separated from an adjacent segment by a separator signal and comprising a command and a notification region defined by a plurality of notification coordinates[.]

Independent claim 23 contains language almost identic al to that quoted above:

[T]he directions comprising a plurality of segments, wherein each segment includes a command and a notification region defined by a plurality of notification coordinates[.]

The specification of the '743 patent discloses a system and method that provides "step-by-step directions from an origination location to a destination location." '743 pat., col. 16, lns. 67-69. The system and method disclosed by the '743 patent begins when a person uses a mobile unit to transmit an origination location and a destination location to a service center. '743 pat., col.17, lns. 1-7. The service center then determines directions from the origination location to the destination location, taking into account factors such as traffic conditions and weather conditions. '743 pat., col. 17, lns. 13-15. Next, the service center communicates those directions back to the mobile unit. '743 pat., col. 17, lns. 18-19. In general, the directions will provide a particular path or route of travel between the origination and destination locations. '743 pat., col.17, lns. 24-25.

The directions determined at the service center and communicated to the mobile unit contain commands and a series of coordinates, including "notification coordinates." '743 pat., col. 17, lns. 23-27. According to the specification, "notification coordinates" indicate near proximity to an upcoming driving event such as a turn or an exit. '743 pat., col. 17, lns. 27-28. Additionally, a plurality of "notification coordinates" define a "notification region," which is a location in proximity to the location of the next step of the directions. '743 pat., col.17, lns. 31-34 and col. 31, lns. 27-28. As an example of the way notification regions are used in providing step-by-step directions, the specification says that

a notification region defined by the notification coordinates may be established one hundred feet in advance of the location of the next driving event, such as a turn or an exit. Upon entering the notification region, mobile unit **12** issues the next direction command to alert the operator of the upcoming driving event.

'743 pat., col. 18, lns. 18-23.

The invention taught by the '743 patent has several technical advantages over previously developed communication systems and methods. One is the ability to provide users with step-by-step directions by having a server or service center determine the proper commands and notification regions defined by notification coordinates for each direction segment and then having the server or service center transmit that information to the mobile unit. *See, e.g.,* '743 pat., col. 2, lns. 35-39; col. 31, lns. 20-28; col. 32, lns. 34-39. Another advantage is alerting the user automatically to an upcoming driving event when the location of the mobile unit substantially corresponds to "the notification coordinates downloaded from the service center" so that the driver can be alerted to the upcoming maneuver, such as a turn, before reaching the actual maneuver point, such as the intersection where the turn is to occur, is reached. '743 pat., col. 18, lns. 13-23.

C. *Prosecution History of the* '743 Patent

The '743 patent was issued on March 18, 2003 and assigned to Minorplanet Systems USA, Inc. It was the result of a patent application filed on July 29, 1998, by six employees of HighwayMaster Communications.

During the initial stages of the prosecution of the '743 patent, an examiner at the Patent and Trademark Office rejected all the patent's claims as anticipated or obvious in view of prior art. The patent applicants responded to the rejection by amending the '743 patent's claim language to claim direction segments comprising a command and "a notification region defined by a plurality of notification coordinates." Despite the amended language the examiner rejected the '743 patent's claims once again as anticipated or obvious based on prior art.

During the prosecution of the '743 patent, the applicants differentiated their invention from Behr et al., U.S. Patent No. 5,543,789 (the Behr '789 patent) by explaining that the Behr '789 patent was "limited to a system that communicates direction information rigidly and inseparable tied to the traversal of fixed street intersection," whereas the applicants' invention used "a 'notification region' [ ] not restrictively defined by relation to an arbitrary landmark, such as the intersections in [the Behr '789 patent]." The examiner accepted the applicants' explanation and agreed that the Behr ' 789 patent did not teach "a notification region defined by a plurality of notification coordinates."

D. *Defendants Networks In Motion's and Cellco's VZ Navigator*

Defendants Cellco and Networks In Motion collaborated to create the VZ Navigator. It is a client-server software platform for computer-assisted navigation that provides turn-by-turn directions on GPS enabled cell phones, PDAs and mobile devices that operate on the Verizon Wireless cellular network. The VZ Navigator is one of many Networks In Motion products that are based on Networks In Motion's AtlasBook Navigator reference design. Other Networks In Motion server-based navigation devices based on the AtlasBook Navigator reference design include: AAA Mobile; Alltel Axcess Mobile Guide; Atlas Book Navigator; Gearworks Field Force Manager; NavBuilder; Nordisk NMT Navigator; Rand McNally Street Finder Wireless; Telus Navigator; Trimble Outdoors; and U.S. Cellular Your Navigator. The determination of infringement concerning all Networks In Motion server-based navigation devices based on the AtlasBook Navigator reference design rises and falls with the determination of infringement concerning the VZ Navigator.

To obtain turn-by-turn directions, a user of the VZ Navigator enters a starting address and destination address into his or her cell phone. The addresses are then transmitted over a wireless network to a server that computes the directions for a certain route of travel and sends those directions back to the cell phone. The directions contain a "maneuver point," which is the point at which a given action should take place, such as an intersection where he user is to turn. In addition, the directions contain "maneuver commands" that consist of three parts: (1) the action; (2) the direction; and (3) an optional qualifier. The action describes what maneuver the user should make, such as a basic turn or merge. The direction is either right or left and the qualifier, if present, modifies the action as, for example, 'slight' modifies the word 'turn' in the phrase "slight turn."

The directions transmitted back to the cell phone also contain a "max-instruction-distance," which is "[t]he maximum distance to instruct the user to make a maneuver [that] prevents the user from being told to turn before the user passes all intermediate streets." Stated another way, the "max-instruction-distance" is a numeric value "that is used to suppress the announcement of guidance instructions that would otherwise confuse the user." The "max-instruction-distance" is determined using the maneuver point. Additionally, the cell phone independently and continuously calculates a numeric value called the "warning distance," using a pre-programmed equation that takes into account the actual speed of travel. For example, the faster the user is traveling, the greater the distance away from the maneuver point the user will be notified about the

upcoming action. The values representing the "max-instruction-distance" and the "warning distance" and the coordinates defining the maneuver point are converted to points on a polyline representing the current segment of directions the user is traversing.

In determining when to notify the user of an upcoming maneuver, the processor in the cell phone compares the "warning distance" it calculated to the "max-instruction-distance" obtained from the server and chooses the distance closer to the maneuver point as the "actual notification distance." When the cell phone reaches the actual notification distance, the user is notified of the upcoming maneuver.

E. *GM's and OnStar's Turn-By-Turn Navigation System*

Together GM and OnStar offer a turn-by-turn navigation service through their OnStar System, which is factory-installed in some GM vehicles. The OnStar System permits a driver to receive turn-by-turn directions from an origination point to a destination. The OnStar System automatically provides announcements to the driver at the appropriate time during the driving route. To use the OnStar System the user presses a blue OnStar button located on the vehicle's rear-view mirror. Pressing the button signals the vehicle's Vehicle Communications Platform to initiate a call to the system call center. The user is then connected to an operator at the call center. The Vehicle Communications Platform transmits the GPS location of the vehicle to the operator and the user provides the operator his or her desired destination. The operator enters the destination information into the server, a travel route is determined and information concerning the travel route is transmitted back to the vehicle's Vehicle Communications Platform, where the route is stored.

The travel route information stored in the platform contains specific information concerning each maneuver in the route, including the longitude and latitude coordinates of each maneuver point. For each maneuver the user may receive three audible announcements, which are as follows:

(1) A "confirmation" instruction is played after the previous maneuver has been completed. For example, "continue on Priest Drive for 2 miles; then turn left onto Broadway Road."

(2) A "preparation" instruction is played a medium amount of time before the maneuver point. For example, "in 1 mile turn left onto Broadway Road."

(3) An "immediate" instruction is played a short amount of time before the maneuver point. For example, "turn left onto Broadway Road."

Determining when and where each audible announcement will be played to the user depends on the geographic location of the maneuver point, the vehicle's current speed and the announcement parameters.

The announcement parameters for a maneuver are included in the travel route information sent by the server. The parameters provide a distance and time offset or threshold for each of the three audible announcements. For example, the three default distance offsets are (1) Confirmation at 32,767 meters; (2) Preparation at 600 meters; and (3) Immediate at 75 meters. The vehicle's platform uses the announcement parameters along with the maneuver point and current vehicle speed to determine when to provide the correct instruction announcement by calculating whether the vehicle will reach either a distance or time offset first. If the vehicle will reach the distance offset first, then the pertinent instruction that corresponds with that distance offset will be set to play when the vehicle reaches that offset. However, if the vehicle will

reach the time offset first, then the pertinent instruction that corresponds with that time offset will be set to play when the vehicle reaches that offset. For each maneuver the server also transmits shape points, which define the details of the road curvature concerning a specific maneuver.

OPINION

A. *Summary Judgment Standard*

Under Federal Rule of Civil Procedure 56 summary judgment is appropriate "when there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law." Goldstein v. Fidelity & Guaranty Ins. Underwriters, Inc., 86 F.3d 749, 750 (7th Cir.1996) (citing Fed.R.Civ.P. 56); *see also* Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). The district judge's function in a summary judgment motion "is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." Anderson, 477 U.S. at 249, 106 S.Ct. 2505. Additionally, "it is the substantive law's identification of which facts are critical and which facts are irrelevant that governs." Id. at 248, 106 S.Ct. 2505. Furthermore, all reasonable inferences from undisputed facts should be drawn in favor of the nonmoving party. Baron v. City of Highland Park, 195 F.3d 333, 338 (7th Cir.1999).

However, the nonmoving party cannot simply rest upon the pleadings once the moving party has made a properly supported motion for summary judgment; instead the nonmoving party must submit evidence to "set forth specific facts showing that there is a genuine issue for trial." Fed.R.Civ.P. 56(e). Essentially, it becomes the nonmoving party's burden to demonstrate that there is a genuine issue of material fact, that is, that "there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party." Anderson, 477 U.S. at 249, 106 S.Ct. 2505.

B. *Patent Infringement Analysis*

[1] [2] [3] Patent infringement analysis involves two steps. First, the patent claims must be interpreted or construed to determine their meaning and scope. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed.Cir.1995). Second, the properly construed claims are compared to the process or device accused of infringing. Id. To establish infringement, plaintiff must prove that each claim element is present in the accused product, either literally or by equivalence. Dawn Equipment Co. v. Kentucky Farms Inc., 140 F.3d 1009, 1015 (Fed.Cir.1998). Conversely, defendants can prevail by demonstrating that at least one element of the asserted claim is absent in their devices.

1. *Claim construction*

[4] [5] [6] [7] The first step of this analysis, claim construction, is a matter of law exclusivelyfor the court. Markman, 52 F.3d at 970-71. "Claim construction must adhere carefully to the precise language of the claims that the patent [examiner] has allowed." Ardisam, Inc. v. Ameristep, Inc., 336 F.Supp.2d 867, 879 (W.D.Wis.2004) (*citing* Autogiro Co. of America v. United States, 181 Ct.Cl. 55, 384 F.2d 391, 396 (1967)). Examination of the claims' language is where the well established process for claim construction begins. The language is given its ordinary meaning as it would be understood by one of ordinary skill in the relevant art, given its context and the other patent claims. Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342 (Fed.Cir.2001). Moreover, district courts must remain aware that "[t]he patent applicant may not have used words consistent with the dictionary definition because an applicant can act as his or her own lexicographer or may disavow or disclaim aspects of a definition 'by using words or expression of manifest

exclusion or restriction, representing a clear disavowal of claim scope.' " Ardisam, 336 F.Supp.2d at 879-80 (*quoting* Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1331 (Fed.Cir.2004)).

[8] [9] This initial construction is then considered in light of the specification to determine whether the inventor expressed a different meaning for the language, whether the preferred embodiment is consistent with the initial interpretation and whether the inventor specifically disclaimed certain subject matter. Rexnord, 274 F.3d at 1342-43. The specification contains a written description of the invention that is meant to help explain the invention and possibly define claim terms, Markman, 52 F.3d at 979, but as a general rule, "limitations from the specification are not to be read into the claims." Golight, 355 F.3d at 1331. Finally, the interpretation is examined for consistency with the patent's prosecution history and any disclaimers made therein. Rexnord, at 1343.

a. Claim construction of "notification region" and "notification coordinates"

Each of the '743 patent's independent claims requires that each segment of directions provided by the server include "a notification region defined by a plurality of notification coordinates." To begin with, the claim language supports a conclusion that "plurality" is used in accordance with its ordinary meaning, as requiring a minimum of two of something. Bilstad v. Wakalopulos, 386 F.3d 1116, 1121-1122 (Fed.Cir.2004). Therefore, a "notification region" must be defined by two or more "notification coordinates."

[10] The claim language further shows that the term "coordinate" is being used in accordance with its ordinary meaning, which is any of a set of numbers that provides the position of a point. The '743 patent's specification refers to "geographical coordinates." An ordinary example of "geographical coordinates" consists of a longitudinal coordinate and a latitudinal coordinate that together provide the position of a point on a map. *E.g.,* '743 pat., col. 17, lns. 1 and 7. Therefore, in terms of the '743 patent, "notification coordinates" are any of a set of numbers used to locate the position of a point in a direction segment.

The specification of the '743 patent also discloses that notification coordinates "indicate a near proximity to an upcoming driving event, such as a turn or exit." '743 pat., col. 17, lns. 26-28. All independent claims of the '743 patent disclose "a notification region defined by a plurality of notification coordinates." *E.g.,* '743 pat., col. 31, lns. 27-28. Moreover, a purpose behind the invention disclosed by the '743 patent is to establish a location preceding an upcoming maneuver where the user can be alerted to the upcoming maneuver before the user reaches the actual maneuver point. '743 pat., col. 18, lns. 18-23. For example, the invention could establish a notification region defined by a plurality of notification coordinates one hundred feet in advance of the intersection at which a user is supposed to turn right. When the location of the user's mobile unit substantially corresponds to the notification coordinates, the user would be alerted to the turn to be made at the upcoming intersection. Combining what the '743 patent discloses with the invention's purpose supports interpreting notification coordinates as a set of numbers that provide the position of a point in near proximity to an upcoming driving event and can be used in conjunction with other notification coordinates to create a notification region, which is a location near an upcoming driving event where a user will be alerted to the upcoming driving event.

Plaintiff argues that a person of ordinary skill in the art would understand from the '743 patent that the coordinates for a maneuver point in a direction segment can be considered notification coordinates provided by the server. This is not a persuasive argument. Notification coordinates indicate "near proximity" to an upcoming driving event. It makes no sense to read the point at which the upcoming driving event actually occurs as a notification coordinate. Notifying a user to "turn right" at the precise moment the user is

supposed to perform the turn would defeat a purpose of the invention, which is to provide a user with an alert or "notification" of an upcoming driving event. Considering the point at which the driving event actually occurs to be one of the notification coordinates would be inaccurate in light of the purpose of the invention and what the claims and specification of '743 patent actual discloses.

The prosecution history of the '743 patent provides further support for not considering a maneuver point a notification coordinate. Cordis Corp. v. Medtronic Ave, Inc., 511 F.3d 1157, 1177-1178 (Fed.Cir.2008) (reasoning that prosecution history can help to inform meaning of claim language by demonstrating how inventor understood invention). In an attempt to rebut the patent examiner's determination that the claims of what is now the '743 patent were anticipated or obvious in view of the prior art, the patent applicants amended the original claim language to require that direction segments contain "a notification region defined by a plurality of notification coordinates." When the patent examiner denied the applicants' patent application once again, on the ground that the prior art taught "notification regions defined by a plurality of notification coordinates," the applicants explained that "a 'notification region' is not restrictively defined by relation to an arbitrary landmark, such as the intersections in [the Behr ' 789 patent]." The applicants made it clear that a notification region could not be defined by the intersection where the upcoming driving event was to occur. Furthermore, they said, what made their navigational invention distinct from the plethora of other navigational systems in the field was the use of notification regions that were not rigidly or inseparably tied to landmarks, such as intersections at which the upcoming driving event would actually occur. The applicants' explanations of distinctions from prior art made during the prosecution of the '743 patent show that permitting the maneuver point in a direction segment to be one of the notification coordinates that define the notification region would restrictively define the notification region by relating it to an arbitrary landmark, such as an intersection. This explanation of the claim language in the prosecution history supports the conclusion that a maneuver point cannot be one of the notification coordinates defining a notification region.

In light of the claim language, the specification and prosecution history of the '743 patent, I construe the disputed claim as follows:

a "notification region" is a location defined by two or more coordinates that provide the position of points in near proximity to, but not including, the position of an upcoming maneuver point.

2. *Infringement*

[11] The second step of the infringement analysis requires comparing the now properly construed claims of the patent-in-suit to the accused devices. Markman, 52 F.3d at 976. " 'Summary judgment on the issue of infringement is proper when no reasonable jury could find that every limitation recited in a properly construed claim either is or is not found in the accused device either literally or under the doctrine of equivalents.' " U.S. Philips Corp. v. Iwasaki Elec. Co., 505 F.3d 1371, 1374-1375 (Fed.Cir.2007) (PC Connector Solutions LLC v. SmartDisk Corp., 406 F.3d 1359, 1364 (Fed.Cir.2005)).

a. Literal infringement of the '743 patent.

Claims 1, 13, 23, 35, 45, 55 and 56 of the '743 patent are independent. All contain the limitation that each segment of directions determined at the server and transmitted to the mobile unit contains "a notification region defined by a plurality of notification coordinates." Proper construction of such claim language means that each segment must contain a "notification region" that is a location defined by two or more coordinates that provide the position of points in near proximity to, but not including, the position of an upcoming

maneuver point. There is no dispute that in using the VZ Navigator a server transmits to a mobile unit the coordinates for the upcoming maneuver point as well as the numeric value representing a "max-instruction-distance." The question is whether the coordinates for the upcoming maneuver point and the "max-instruction-distance" are notification coordinates that define a notification region. Cellco and Networks In Motion deny that they are. They maintain that the VZ Navigator server does not transmit notification coordinates defining a notification region.

[12] The proper claim construction of "a notification region defined by a plurality of notification coordinates" supports defendants' argument. First, the VZ Navigator server does not produce two or more coordinates that provide the location of points. The "max-instruction-distance" is a single numeric value, not a coordinate. For something to be a coordinate it must have a partner so that together the coordinates can provide the location of a point. The game of Battleship provides a good example of this. One player must call out two coordinates like 'B' and '5' to provide the other with the location of the point that he is targeting in an attempt to sink his opponent's battleship. If one player merely called out 'B,' the other would have no way of knowing the targeted point. A "max-instruction-distance," which is a mere numeric value like 200 feet, cannot be a coordinate without a partner.

Second, even assuming that the "max-instruction-distance" could be considered a notification coordinate, the server does not provide a plurality of notification coordinates. The only other coordinates provided by the VZ Navigator server are the maneuver point coordinates, which cannot be notification coordinates. In summary, the maneuver coordinates that provide the position of the actual maneuver point cannot be notification coordinates. So interpreted, the claim language would defeat a purpose of the invention by providing a user with an alert or "notification" of an upcoming driving event at the actual point at which the maneuver must occur. Moreover, in the prosecution history, the applicants explained that notification regions cannot be defined by arbitrary landmarks, such as the intersection where the upcoming driving event will occur. Without a plurality of notification coordinates there can be no notification region as required in the '743 patent. Because the server does not transmit and the mobile unit does not download a notification region defined by notification coordinates, the VZ Navigator does not literally infringe on that element of the '743 patent. No reasonable jury could reach a different conclusion.

Concerning the OnStar System, it is undisputed that a server transmits to a vehicle the longitudinal and latitudinal coordinates of a maneuver point along with announcement parameters containing distance and time offsets such as 75 meters and 30 seconds. As with the VZ Navigator, plaintiff argues that the maneuver point coordinates and distance offsets are notification coordinates defining a notification region. GM and OnStar disagree. They argue that the OnStar System does not involve the transmittal of notification coordinates defining a notification region.

Once again the proper construction of "a notification region defined by a plurality of notification coordinates" supports defendants' argument, and not plaintiff's. First, just as the VZ Navigator's "max-instruction-distance" is a numeric value and not a coordinate, the same is true with respect to the OnStar System's distance offsets. A distance offset is not a coordinate, but a single number that represents a distance in meters from the maneuver point. A distance offset has no partner that would make it a coordinate. Accordingly, a distance offset cannot be a coordinate.

Furthermore, even if I were to assume that a distance offset could be considered a notification coordinate, a plurality of notification coordinates is still absent. The only other coordinates provided by the OnStar System server are the coordinates for the maneuver point, which as discussed earlier cannot be notification

coordinates. Without a plurality of notification coordinates there can be no notification region as required in the '743 patent. The undisputed facts show that the OnStar System's server does not transmit and the vehicle does not download a notification region defined by notification coordinates. Therefore, the OnStar System does not literally infringe that element of the disputed claims of '743 patent. No reasonable jury could find otherwise.

b. Infringement of the '743 patent **under the doctrine of equivalents**

[13] [14] [15] The question of infringement under the doctrine of equivalents is a fact question. U.S. Philips, 505 F.3d at 1375. However, district courts have an obligation to grant summary judgment if they find from the evidence that no reasonable jury could find two elements to be equivalent. Id. (citations omitted). Under the doctrine of equivalents analysis, the "all elements" rule requires that equivalence be addressed limitation by limitation as opposed to viewing the invention as a whole. DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc., 469 F.3d 1005, 1017 (Fed.Cir.2006). Accordingly, " 'if a theory of equivalence would entirely vitiate a particular claim element, partial or complete judgment should be rendered by the court.' " Id. (Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 39 n. 8, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997)).

[16] [17] Furthermore, the purpose behind the doctrine of equivalents is to allow the patent's claims to include insubstantial alterations. Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 733, 122 S.Ct. 1831, 152 L.Ed.2d 944 (2002). Stated another way, the doctrine of equivalents allows a patent's claims to be infringed by devices that "perform [ ] substantially the same function in substantially the same way to obtain the same result." Graver Tank & Mfg. Co. v. Linde Air Prod. Co., 339 U.S. 605, 608, 70 S.Ct. 854, 94 L.Ed. 1097 (1950) (internal quotes and citation omitted).

[18] Plaintiff contends that regardless whether a "max-instruction-distance" and distance offset are technically notification coordinates, they produce substantially the same function as notification coordinates by providing limits for a location that alerts a user concerning an upcoming driving event. However, even assuming this is true, the function is not performed in "substantially the same way."

Both the VZ Navigator and the OnStar System use numeric distances provided by a server to perform calculations at the mobile unit or vehicle to determine when to alert a user to an upcoming maneuver. In determining the appropriate location to alert a user the calculations take into consideration the speed of the vehicle or mobile unit as well as the location of the maneuver point. Additionally, these calculation are done by a processor in the mobile unit or vehicle, not by the server. These calculations produce announcement points or, to use the terminology of the '743 patent, notification coordinates that are used to alert the user to an upcoming maneuver.

The manner in which the VZ Navigator and the OnStar System provide notification coordinates is not substantially similar to the way in which the ' 743 patent discloses the provision of notification coordinates. The ' 743 patent discloses a system and method in which the notification coordinates are determined by a server or service center, not by the mobile unit, and the server or service center then transmits the predetermined notification coordinates to the mobile unit. Moreover, in the '743 patent, the mobile unit does not do any of its own calculations but merely determines when it has entered a notification region. From the undisputed facts, no reasonable jury could find that the way defendants' navigation devices disclose production of notification coordinates at the mobile unit using calculations accounting for vehicle speed and the position of the maneuver point is substantially the same way the '743 patent claims disclose production

of notification coordinates. Therefore, plaintiff has failed to show that defendants' navigation devices infringe the asserted claims of the '743 patent under the doctrine of equivalents. No reasonable jury could find otherwise.

C. *Invalidity*

1. *Defendants Cellco's and Networks In Motion's invalidity defense*

Because defendants Cellco's and Networks In Motion's motion for summary judgment will be granted on plaintiff's claim of infringement, their request for summary judgment on their affirmative defense of invalidity will be denied as moot.

2. *Defendants GM's and OnStar's invalidity and unenforceability counterclaim*

[19] Like defendants Cellco and Networks In Motion, defendants GM and OnStar requested summary judgment concerning the invalidity of the '743 patent. However, GM's and OnStar's request that the '743 patent be declared invalid was raised as a counterclaim. GM and OnStar asserted another declaratory judgment counterclaim in which they asked the court to declare the '743 patent unenforceable as a result of inequitable conduct in the prosecution of the patent. The Court of Appeals for the Federal Circuit has established that a district court has discretion to dismiss invalidity and unenforceability counterclaims upon a grant of summary judgment of non-infringement. Phonometrics, Inc. v. Northern Telecom Inc., 133 F.3d 1459, 1468 (Fed.Cir.1998); Cardinal Chemical Co. v. Morton Int'l, Inc., 508 U.S. 83, 95, 113 S.Ct. 1967, 124 L.Ed.2d 1 (1993) (in addressing motion for declaratory judgment district court has discretion in determining whether to exercise jurisdiction even when established). It is appropriate for a district court to address only the infringement issue when non-infringement is clear and invalidity and unenforceability are not plainly evident. Id. (*citing* Leesona Corp. v. United States, 208 Ct.Cl. 871, 530 F.2d 896, 906 n. 9 (1976)).

[20] My discretionary power to dismiss GM's and OnStar's invalidity and unenforceability counterclaims as issues that no longer need to be addressed is separate from determining whether I retain subject matter jurisdiction over such counterclaims, which remains a murky issue. *Compare* Fort James Corp. v. Solo Cup Co., 412 F.3d 1340, 1348 (Fed.Cir.2005) (holding that district court erred in determining that jury verdict of non-infringement divested district court of jurisdiction to hear unenforceability counterclaim) *with* Benitec Australia, Ltd. v. Nucleonics, Inc., 495 F.3d 1340, 1347 (Fed.Cir.2007) (holding that district court correctly determined that it had been divested of jurisdiction to hear defendant's counterclaims for invalidity and unenforceability when plaintiff had voluntarily dismissed its infringement claims without prejudice before trial). Thus, although it is unclear when a district court is divested of jurisdiction over declaratory counterclaims, I need not address that issue. Discretionary dismissal is appropriate because defendants GM's and OnStar's turn-by-turn navigation OnStar System clearly does not infringe on the '743 patent and the invalidity and unenforceability of the '743 patent are not plainly evident. Instead, a finding of invalidity or unenforceability would require combining several pieces of prior art, some of which were already considered by the patent examiner during prosecution of the '743 patent, and getting into disputed facts surrounding navigational products sold in the early 1990's. Moreover, defendants GM and OnStar have conceded that their claim construction of the disputed claims, which I used as part of my claim construction, "preserves the validity of the ['743 patent's] claims." (Defs.' Br., dkt. # 89, at 13.)

Moreover, defendants GM and OnStar have not given the court any reason to believe that they are at risk of a future infringement suit concerning the ' 743 patent. Because defendants' motion for summary judgment

will be granted on the core issue of non-infringement on clear grounds and because defendants' counterclaims of invalidity and unenforceability are less certain, I exercise my discretionary power and dismiss GM's and OnStar's invalidity and unenforceability counterclaims without prejudice. It would be an unnecessary expenditure of judicial and party resources to explore these issues at this stage.

ORDER

IT IS ORDERED that

1. Plaintiff Vehicle IP, LLC's motion for partial summary judgment (dkt.# 80) is DENIED.

2. Defendants Cellco Partnership's and Networks In Motion, Inc.'s motion for summary judgment of non-infringement and invalidity (dkt.# 67) is DENIED concerning defendants' invalidity defense and GRANTED concerning defendants' non-infringement defense to plaintiff's claim that:

Defendants Cellco and Networks In Motion's VZ Navigator and all other Networks In Motion's products based on the AtlasBook reference design, which includes AAA Mobile; Alltel Axcess MobileGuide; Atlas Book Navigator; Gearworks Field Force Manager; NavBuilder; Nordisk NMT Navigator; Rand McNally Street Finder Wireless; Telus Navigator; Trimble Outdoors; and U.S. Cellular Your Navigator, infringe claims 1, 4, 6, 7, 11, 13, 15, 17, 21, 23, 25, 30, 32, 33, 35, 38, 39, 43, 45, 46, 48, 55 and 56 of the '743 patent.

3. Defendants General Motors Corporation's and OnStar Corporation's motion for summary judgment of non-infringement, invalidity and absence of willful infringement (dkt.# 87) is DENIED concerning defendants' invalidity defense and GRANTED concerning defendants' non-infringement defense to plaintiff's claim that:

Defendants General Motors Corporation and OnStar Corporation's turn-by-turn navigation OnStar System infringes claim 1, 4, 6, 7, 11, 13, 15, 17, 21, 23, 25, 30, 32, 33, 35, 38, 39, 43, 45, 46, 48, 55 and 56 of the '743 patent.

4. General Motors Corporation's and OnStar Corporation's counterclaims asserting invalidity and unenforceability as a result of inequitable conduct are DISMISSED without prejudice.

FURTHER, IT IS ORDERED that judgment be entered in favor of defendants General Motors Corporation, OnStar Corporation, Cellco Partnership and Networks In Motion, Inc. with respect to plaintiff Vehicle IP, Inc.'s claims for infringement of the '743 patent.

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