

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

GARMIN LTD. and
GARMIN CORPORATION,

Plaintiffs,

OPINION AND ORDER

v.

06-C-0062-C

TOMTOM, INC.,

Defendant,

TOMTOM, INC. and
BALDIVI B.V.,

Counterplaintiffs,

v.

GARMIN LTD.,
GARMIN CORPORATION, and
GARMIN INTERNATIONAL, INC.

Counterdefendants.

Plaintiffs Garmin Ltd. and Garmin Corporation and defendant TomTom, Inc. are competitors in the manufacturing and selling of global positioning systems. After plaintiffs initiated this suit for patent infringement, defendant TomTom, along with Dutch company Baldivi B.V., asserted several counterclaims against plaintiffs as well as Garmin International, Inc. Both sides own the rights to multiple patents relating to navigation devices, both are alleging that the other side has infringed its patents, both are alleging that the other's patents are invalid and both have moved for summary judgment on these grounds. (For the remainder of the opinion, I will refer to Garmin Ltd., Garmin Corporation and Garmin International collectively as "Garmin" and to TomTom, Inc. and Baldivi B.V. collectively as "TomTom.")

Both sides' motions will be denied in part and granted in part. With respect to the five patents being asserted by Garmin, I find as a matter of law that TomTom's products do not infringe claim 1 of the '485 patent, claim 9 of the '615 patent or claims 1, 7, 8 and 9 of the '873 patent. I conclude that the remainder of Garmin's asserted claims are invalid because they were anticipated by prior art: claim 15 of the '956 patent, claim 10 of the '873 patent and claims 9- 11 of the '330 patent. Summary judgment will be granted to Garmin on each of the claims asserted by TomTom because I conclude as a matter of law that Garmin's products do not infringe the asserted claims.

Three other motions are before the court. First, TomTom has filed a motion to

amend its answer, which will be denied as unnecessary. TomTom seeks to amend its answer to include a defense of inequitable conduct with respect to the '330 patent. Because I conclude that the claims Garmin asserted under the '330 patent were anticipated by prior art, I need not consider whether there might be other reasons for invalidating those claims. Second, Garmin has filed a motion to strike particular pieces of evidence submitted by TomTom. The motion is largely moot as well because it was unnecessary to consider the validity of most of the disputed evidence in order to resolve the parties' motions for summary judgment. In situations in which it was necessary to address one of the objections, I have done so in the context of the opinion, so I will deny the motion as unnecessary. Finally, I will grant TomTom's unopposed motion to supplement several of its proposed findings of fact with citations that were omitted from the original filings.

I address briefly several other preliminary matters. First, for the purpose of readability, I have structured the opinion by patent, with a separate statement of undisputed facts for each one. Further, to limit the size of an already lengthy opinion, I have not included facts that are not related to issues in dispute. For example, in many situations, the party claiming infringement set forth evidence and argument relating to all of the elements of a patent, but the other side responded with respect to one element only. In those situations, I have construed the failure to respond as a concession that the other elements are present and have limited discussion of the facts accordingly. All facts are taken from the

parties' proposed findings of fact and portions of the record cited in those proposed findings. I did not consider evidence that was cited in a brief but not included in the proposed findings of fact unless it was otherwise clear that the fact was undisputed. Procedure to be Followed on Motions for Summary Judgment, I.B.4.

Second, both sides raised infringement and validity arguments with respect to each of the patents. Generally, I addressed a patent's validity only after concluding that an accused device infringed. Fonar Corp. v. Johnson & Johnson, 821 F.2d 627 (Fed. Cir. 1987) (vacating finding related to validity when it was unnecessary to decide issue because accused products did not infringe); Unette Corp. Unit Pack Co., 785 F.2d 1026, 1029 (Fed. Cir. 1986) (when there is no infringement, question of validity is moot).

Third, both sides often asserted arguments for the first time in a reply brief. Needless to say, I have disregarded all such arguments. Fuji Photo Film Co. v. Jazz Photo Corp., 394 F.3d 1368, 1375 n. 4 (Fed. Cir. 2005).

GARMIN'S PATENTS

I. U.S. PATENT NO. 6,188,956

Invention: A GPS device that selects which roads to display on a screen

Asserted claim:¹ 15

Accused devices:² TomTom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One (infringement under 35 U.S.C. § 271(a)); TomTom Navigator 5, TomTom Navigator 6 (infringement under 35 U.S.C. § 271(b) and (c))

UNDISPUTED FACTS

A. The Claims

Claim 15 of the ‘956 patent discloses:

¹ Claim 15 is the only claim in the ‘956 patent that Garmin asserts in its motion for summary judgment. Although TomTom argues in its summary judgment motion that claims 5, 6, 9 and 19 are invalid, I can find nothing in the record suggesting that Garmin is alleging that TomTom has infringed any claim other than claim 15. TomTom follows this same practice with respect to some of Garmin’s other patents as well. Garmin has not labeled its motion as one for *partial* summary judgment, so I must assume that it has included all of the claims it intends to assert. If Garmin is not asserting infringement of a particular claim, there is no case or controversy involving validity. Carroll Touch, Inc. v. Electro Mechanical Systems, Inc., 15 F.3d 1573, 1581 n.8 (Fed. Cir. 1993). A challenge to a claim’s invalidity is not an independent cause of action but a *defense* to a claim for infringement. Determining a claim’s validity without a corresponding claim for infringement would be akin to considering a request for a declaratory judgment that the limitations period had run for a cause of action that had never been filed. Accordingly, I have limited my consideration of Garmin’s patent claims to those asserted in its summary judgment motion.

² With respect to this patent and the other patents at issue in this case, a reference to the “accused devices” within a particular section of the opinion means those products listed as accused devices in the beginning of each section.

A navigation device for navigating a vehicle on a thoroughfare, in a first direction, said device comprising:

a memory containing cartographic data indicative of a plurality of thoroughfares, including said thoroughfare upon which said vehicle is being navigated, and wherein each said thoroughfare has an associated name stored in memory;

a processor connected to said memory;

a display, connected to said processor, for displaying said cartographic data, wherein said display displays the name of selected thoroughfares that are oriented in a direction other than the direction said vehicle is being navigated.

B. Operation of the Accused Devices

The accused devices contain the limitations disclosed in all but the last subpart of claim 15. The accused devices will label the name of a road when the following conditions are satisfied: (a) the road is connected to the one being navigated; (b) a section of the road is “sufficiently horizontal” in the current screen; (c) the road does not overlap a previous name; and (d) the road does not overlap an instruction area arrow. The Navigator 5 and Navigator 6 are exceptions to this rule because they are software products and do not include a display.

The Navigator 5 and Navigator 6 are intended to be installed and used on a PDA. TomTom sells the Navigator 5 and Navigator 6 software to consumers with instructions to combine the software with a PDA or mobile phone. When these products are used with a

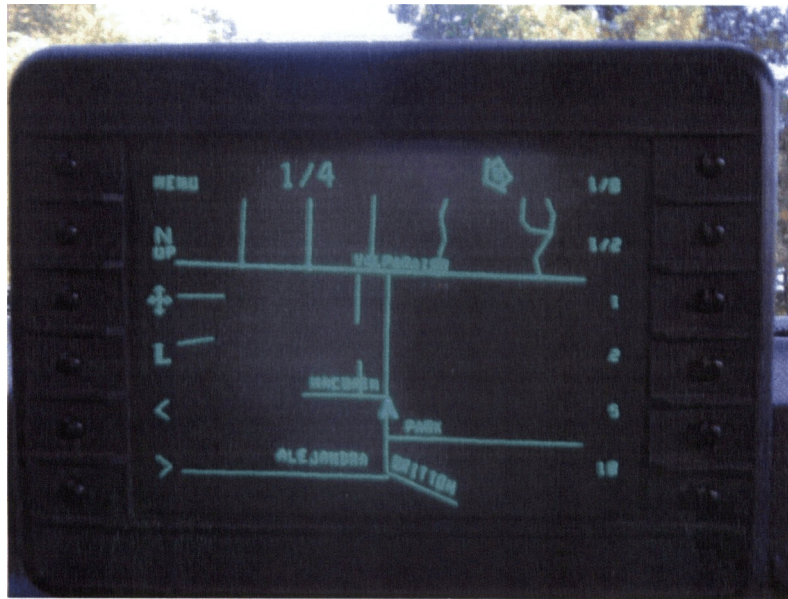
PDA, they operate in the same manner as the other accused devices.

C. Prior Art

The Etak Navigator is an electronic navigation device for use in vehicles. It was available for sale in the United States beginning in 1985; the application for the '956 patent was filed in 1998. The Etak Navigator displays the names of roads that are oriented in a direction other than the direction of the road on which the vehicle is traveling:



Fig. 14 [TOM 0066406].



The arrow indicates the vehicle and the direction in which it is headed. (Garmin argues in its motion to strike that the screen shots are not admissible, but I do not find its arguments persuasive. In any event, the developer of the Etak Navigator system provided deposition testimony that was consistent with the information in the screen shots. Garmin has not objected to the admissibility of that testimony.)

OPINION

A. Infringement under 35 U.S.C. § 271(a)

With respect to most of the accused products, Garmin argues that TomTom is liable for infringement under 35 U.S.C. § 271(a), which prohibits the unauthorized making or selling of a patented invention. (Garmin does not say explicitly that it is relying on §271(a), but I have inferred this from its arguments. In general, neither side was diligent in identifying the statutory provision that supported a claim of infringement or invalidity. Where it was not clear, I applied the provision that followed logically from the structure of the argument presented in the briefs. To the extent that the parties intended to rely on other provisions, they have waived their opportunity to do so by failing to adequately articulate their claim.) Garmin must show that the accused devices include each element of the claimed portion of the patent, either literally or under the doctrine of equivalents. Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1330 (Fed Cir. 2001).

It is undisputed that the accused devices include each of the limitations of claim 15, with the exception of one in the claim's last subpart: "wherein said display displays the name of selected thoroughfares that are oriented in a direction other than the direction said vehicle is being navigated." Thus, this dispute is about the way in which the devices choose to label displayed roads.

TomTom advances several arguments why its products are not covered by this element. First, it argues generally that its devices "do not use the concept of road alignment to determine whether to display a road name." TomTom's Br., dkt. #102, at 5. Presumably, TomTom means to argue that its devices do not display road names on the basis of the way the road is "oriented," as required by claim 15, but this is clearly wrong. The undisputed facts show that defendant's devices display the names of roads that include a section that is "sufficiently horizontal" to the road being navigated. This is displaying the road's name on the basis of its orientation.

TomTom emphasizes that its devices will display a road's name only if a particular *section* of the road is sufficiently horizontal to the road being navigated and that the *reason* for the display rule is only to insure that the name of the road will be displayed so as not to require the user to tilt his or her head. Neither of these arguments has force. The first argument presupposes that a "thoroughfare" cannot be "oriented" in a particular direction unless *every section* of the road is oriented in that same direction. Under this view, the

invention disclosed in claim 15 would not display a road's name without considering the direction of the entire road, no matter how long the road was and even if the road continued well beyond the area encompassed by the display. Further, the claimed device would be unable to determine the direction of any road that changed course along any portion because that would mean the "road" had multiple, conflicting directions. This is an absurd result that is not required by the language of claim 15. Rather, because claim 15 discloses "a display," it follows that the devices disclosed in claim 15 consider the section of the road that is included in the display. In any event, common sense requires a conclusion that a device that displays a road's name because of any portion of the road's orientation has used "the road's" orientation to make a selection.

Defendant's second argument is even less persuasive. Claim 15 says nothing about the reason for using a road's orientation to determine whether to display the road's name. Thus, it is irrelevant whether defendant's devices use their "sufficiently horizontal" rule for driver convenience or because TomTom believed that displaying names of vertical roads brought bad luck. In any case, the reason behind the rule does not provide a ground for claiming noninfringement.

TomTom argues next that, unlike the invention disclosed in claim 15, its products do not *prohibit* the naming of roads that are oriented in the same direction. However, as Garmin points out, I rejected this interpretation of claim 15 in the claim construction

opinion and order, dkt. #65, at 53-54. Claim 15 discloses the road names that it *will* display; the claim is silent with respect to the names that it *will not* display. It is a basic tenet of logic that one cannot infer the exclusion of one thing from the inclusion of another.

It is true that the device in claim 15 “displays the name of selected thoroughfares,” which suggests that some roads are not selected for display. But the term “selected” in claim 15 modifies “thoroughfares that are oriented in a” different direction, meaning only that not all such roads’ names are displayed, not that the display is limited to those road names.

It is also true that the purpose of the invention is to limit the names of roads displayed to those “that are most likely of interest without cluttering the display.” Abstract. And certainly, the patent says that it “prefer[s],” id., or “favors,” col. 5, lns. 25-29, 40-44, the naming of roads that are oriented in a different direction. But the patent does not bar other road names from being displayed, even if the disclosed device would be most useful if that were the case.

TomTom advances other arguments, but none is persuasive. For example, TomTom emphasizes that its products use a different algorithm from that used in plaintiff’s devices. But this argument is a nonstarter because claim 15 is not a patent for an algorithm and TomTom offers no basis for reading one into it. I conclude as a matter of law that the accused devices, with the exception of the Navigator 5 and the Navigator 6, infringe claim 15 of the ‘956 patent under 35 U.S.C. § 271(a).

B. Infringement under 35 U.S.C. § 271(b) and (c)

Garmin contends that TomTom is liable for “indirect infringement,” with respect to the TomTom Navigator 5 and the TomTom Navigator 6, which are software products, because they meet every limitation of claim 15 when combined with a PDA or a mobile phone. It is undisputed that TomTom sells its software products with instructions to combine them with a PDA or mobile phone.

Garmin cites 35 U.S.C. § 271(b) and (c), but these provisions do not use the term “indirect infringement.” Rather, § 271(b) prohibits anyone from “actively induc[ing]” infringement and § 271(c) prohibits “contributory” infringement, which is selling a “component” of a patented device when the seller knows that the component is especially designed “for use in an infringement” of the patent. Section 271(b) requires “proof of actual intent to cause the acts which constitute the infringement.” Hewlett-Packard Co. v. Bausch & Lomb Inc. 909 F.2d 1464, 1469 (Fed Cir. 1990). Section 271(c) requires “a showing that the alleged contributory infringer knew that the combination for which his component was especially designed was both patented and infringing.” Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 488-89 (1964).

Garmin does not develop its argument of infringement under § 271(b) and (c) beyond stating that TomTom is “inducing and contributing to direct infringement” because the products are sold with instructions to combine the software with a PDA or mobile phone.

Garmin's Br., dkt. #74, at 10 (Garmin does not refer to this document as a brief but rather uniquely as "Suggestions in Support of [Garmin's] Motion for Summary Judgment." Although I appreciate the deferential tack, I will cite this document as a "brief" for purposes of clarity and simplicity.) However, the case law is clear that a party may induce infringement by providing instructions to use a device in a manner that would infringe the patent. E.g., Mentor H/S, Inc v. Medical Device Alliance, Inc., 244 F.3d 1365, 1379 (Fed. Cir. 2001); Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc., 145 F.3d 1303, 1312 (Fed Cir. 1998). Further, because TomTom's response brief is silent on the issue of indirect infringement, it appears that TomTom has conceded that its Navigator 5 and 6 violate § 271(b) if its other products violate § 271(a). Third Wave Technologies, Inc. v. Stratogene Corp., 405 F. Supp. 2d 991, 1009 (W.D. Wis. 2005) (upholding jury verdict finding infringement when defendant supplied kits with manuals encouraging infringing uses); Vesture Corp. v. Thermal Solutions, Inc., 284 F. Supp. 2d 290, 317 (M.D.N.C. 2003) (finding inducement to infringe under § 271(b) when plaintiff alleged that defendant "provides user manuals that specifically instruct the user how to perform infringing methods" and defendant did not dispute that fact). Accordingly, I conclude that TomTom is liable for infringement under § 271(b) with respect to its Navigator 5 and Navigator 6 software products.

B. Validity

Under 35 U.S.C. § 102(b), a patent is not valid if the invention it discloses was either “described in a printed publication” or “in public use” more than one year before the patent application. A party challenging the validity of a patent has the burden to show this by clear and convincing evidence. Monsanto Co. v. Scruggs, 459 F.3d 1328, 1336 -37 (Fed. Cir. 2006).

The parties’ arguments relating to the validity of claim 15 focus on the same subpart I addressed in determining validity. The question is whether the Etak Navigator anticipated a device that “displays the name of selected thoroughfares that are oriented in the direction other than the direction said vehicle is being navigated.” To support its claim of invalidity, TomTom submitted several screen shots from the Etak Navigator, displaying the names of roads that are perpendicular to the road on which the vehicle is traveling.

In response, Garmin argues only that the Etak Navigator “does not factor thoroughfare alignment into its priority algorithm for selectively labeling thoroughfares.” Garmin’s Br., dkt. #95 at 41. However, as I noted with respect to defendant’s noninfringement arguments, claim 15 places no limitations on the type of algorithm that the device must use. In fact, claim 15 does not even say that it will display road names *because* they are “oriented in the direction other than the direction other than the direction said vehicle is being navigated.” It says only that it displays names of selected roads that *are*

oriented that way.

Garmin's argument would be much stronger if claim 15 included a limitation that the device would not display a road's name unless the road was oriented in a different direction or, in other words, if it *prohibited* the labeling of other types of roads. If the patented device displayed *only* those roads that are oriented in a different direction, it would follow that the disclosed invention must have a method for determining how the road was oriented before labeling it. However, as plaintiff argued and I agreed with respect to the issue of infringement, claim 15 includes no such limitation. Thus, it makes no difference why the device labels those roads, so long as they are labeled.

The screen shots provided by TomTom show the display of names of roads that are perpendicular to the road being navigated, or in the language of the claim, "the name of selected thoroughfares that are oriented in a direction other than the direction said vehicle is being navigated." It is telling that, in arguing that the prior art did not anticipate claim 15, Garmin does not point to any language in claim 15 that is not covered by the Etak Navigator. Further, although plaintiff says in its brief that it is reserving any arguments that other elements of claim 15 were not anticipated, Garmin *has* waived these arguments by failing to respond to defendant's arguments with respect to these other claims. A party opposing a motion for summary judgment must show its whole hand; it may not simply tell a court that other reasons for denying the motion are lurking somewhere in the record.

Hammel v. Eau Galle Cheese Factory, 407 F.3d 852, 859 (7th Cir. 2005) (“Summary judgment is not a dress rehearsal or practice run; it ‘is the put up or shut up moment in a lawsuit, when a party must show what evidence it has that would convince a trier of fact to accept its version of the events.’”) (quoting Schacht v. Wisconsin Dept. of Corrections, 175 F.3d 497, 504 (7th Cir.1999); DeSilva v. DiLeonardi, 181 F.3d 865, 867 (7th Cir.1999) (“a brief must make all arguments accessible to the judges, rather than ask them to play archaeologist with the record”). I conclude as a matter of law that claim 15 of the ‘956 patent is invalid because it was anticipated by the Etak Navigator.

II. U.S. PATENT NO. 6,222,485

Invention: A GPS device that orients the display based in part on the current direction of travel

Asserted claim: 1

Accused devices: TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One (infringement under 35 U.S.C. § 271(a)); TomTom Navigator 5, TomTom Navigator 6 (infringement under 35 U.S.C. § 271(b) and (c))

UNDISPUTED FACTS

A. The Claim

Claim 1 discloses:

An electronic navigation device for a vehicle, said device comprising:

a processor;

a memory in communication with said processor, said memory having cartographic data, wherein said cartographic data includes one or more thoroughfares; and

a display, wherein said display displays said cartographic data, wherein said processor retrieves from said memory, data corresponding to one or more thoroughfares and determines a desired orientation for display of said cartographic data based upon a current location of said vehicle, a direction of travel of said vehicle, and a direction of at least one of said one or more thoroughfares corresponding to said current vehicle location, wherein said direction of said at least one of said one or more thoroughfares is determined from said retrieved cartographic data.

B. Operation of the Accused Devices

The accused devices contain the limitations disclosed in all but the last subpart of claim 1. The accused devices receive the current vehicle location, current vehicle heading and current vehicle speed from the GPS signal each second. Upon receiving the current vehicle location from the GPS signal, the products estimate a future location of the vehicle and the orientation of the road at that location. Using the direction of the road at this estimated position, the current vehicle heading and the current vehicle speed, the accused devices generate a heading for the display, such as “East.” However, the accused devices do not display this future orientation immediately, but wait until the moment that the device

has predicted the vehicle would reach that location. In other words, the direction of the road is calculated ahead of the vehicle, in the hope that the vehicle will be at that projected location at the time the device orients the screen. However, the accused devices do not determine whether the predicted location later matches the actual current location. In orienting the display, the devices rely solely on the estimate.

OPINION

The primary dispute with respect to infringement of the ‘485 patent focuses on the last subpart of claim 1, which discloses a processor that determines the orientation of the display on the basis of “a direction of at least one of said one or more thoroughfares corresponding to said current vehicle location.” (Before claim construction, the parties proposed a further construction of this clause, but I do not find the gloss they put on it to be particularly helpful in resolving this dispute, so I will consider the claim language directly.) Thus, this element relates to the point of the road the device uses to determine how to orient the display.

The threshold question concerns the phrase “current vehicle location” and an issue of claim construction that somehow was omitted from the parties’ claim construction briefs, despite the inclusion in those briefs of numerous disputed terms that are not raised or relied on in either side’s motion for summary judgment. The question is this: does the phrase

“corresponding to said current vehicle location” modify “thoroughfare” only or both “thoroughfare” and “direction”? TomTom argues that “current vehicle location” modifies “direction” *and* “thoroughfare,” meaning that the direction of the road is determined at the vehicle’s current location rather than at some other point on the road. Garmin argues that “current vehicle location” modifies “thoroughfare” only, meaning that the direction of the road could be determined at any point on the road that the vehicle is on or near.

Neither side suggests how the claim language itself resolves this dispute. Although the phrase “current vehicle location” is closest in the clause to “thoroughfare,” the sentence is written in a way that would allow a reader to infer reasonably that the phrase modifies “direction” as well. “Direction” is separated from “current vehicle location” by prepositional phrases only, some of which appear redundant and serve no purpose but to make the claim more confusing.

Further, the clause makes more sense if “current vehicle location” modifies “direction.” The direction of the road has to be determined at *some* particular point. As discussed in the context of the ‘956 patent, in many circumstances, the direction of the road as a whole cannot be determined because it changes from one point to another. Thus, if the direction is not determined at the vehicle’s current location, the claim simply leaves that question open, which makes little sense given the question’s importance.

Any ambiguity in the claim language is resolved by examining the rest of the patent.

Abbott Laboratories v. Andrx Pharmaceuticals, Inc., 452 F.3d 1331, 1336 (Fed. Cir. 2006) (“Where claim terms are ambiguous or disputed, then we turn to the specification as the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.”) (internal quotations omitted). In numerous instances, the specification makes clear that the direction of the road “correspond[s] to” the vehicle’s current location. Col. 2, Ins. 14-27 (processor uses “adjacent points” to vehicle’s current location to determine road’s direction); col. 4, Ins. 10-15 (describing fig. 5, processor “calculates the direction of the thoroughfare corresponding to the calculated coordinates” of vehicle’s current location). See also col. 5, Ins. 5-10, 21-24. Garmin cites one part of the specification that shows that the processor uses the vehicle’s current location to determine the closest road when the vehicle is not on one that is recognized by the device, Garmin’s Br., dkt. #125, at 21 n.9 (citing col. 2, Ins. 28-31), but this does not advance Garmin’s position. TomTom does not argue that the vehicle’s current position is not used to determine the closest road, but rather that it is used to determine both the closest road *and* the direction of that road. Garmin’s citation does not contradict that interpretation.

The remaining question is whether the accused devices contain this element or its equivalent. TomTom says that they do not because they do not determine the direction of the road at the vehicle’s current location, but instead at a predicted *future* location. Garmin

does not deny that defendant's products use a future location, but argue that the products still "orient" the display "based on" the vehicle's current location because the predicted location is stored and used to orient the display at the time the vehicle *should be* at the predicted point. The problem with this argument is that it disregards the fact that the prediction is only an estimate. Defendant's products do not use the *actual* current location of the vehicle; that location is never determined by defendant's products for the purpose of determining the direction of the road. Although, as defendant's expert testified, the hope is that the prediction would be as accurate as possible, it is still just a prediction. Because defendant's products orient the display on the basis of a predicted location rather than the current location, I conclude as a matter of law that these products do not literally infringe the '485 patent.

Further, I cannot conclude that a genuine dispute exists with respect to whether this difference is a substantial one. Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 149 F.3d 1309, 1315 (Fed.Cir.1998) (device infringes under doctrine of equivalents in situations in which it "differs from the claimed limitation only insubstantially"). Garmin offers no evidence and little argument to support a conclusion of infringement under the doctrine of equivalents. It simply states that the device in claim 1 and defendant's products are equivalent because both employ "a screen oriented to the road being navigated." This is true, but plaintiff develops no argument why the court should accept a comparison at such

a high level of generality. Specifically, plaintiff has not shown that the device in claim 1 and defendant's products use the same method to obtain the same result. Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc., 467 F.3d 1370, 1379 (Fed. Cir. 2006) ("An accused device that performs substantially the same function in substantially the same way to obtain the same result as the patented invention may infringe under [the] doctrine [of equivalents].") (quoting Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608 (1950)).

The evidence appears to be to the contrary. Although the device in claim 1 uses the vehicle's current location to determine the direction of the road after retrieving particular coordinates in the processor's memory, TomTom's products use a predicted location. This is undoubtedly a different "way" to orient the map. As the party bearing the burden to prove that the doctrine of equivalents should apply, Garmin is required to show why and how the difference is not substantial. Fed. R. Civ. P. 56; Applied Medical Resources Corp. v. U.S. Surgical Corp., 448 F.3d 1324, 1333 (Fed. Cir. 2006) ("the party asserting infringement . . . ultimately bears the burden of proof"); Celotex Corp. v. Catrett, 477 U.S. 317, 322-323 (1986) (summary judgment must be granted in favor of moving party when party bearing burden of proof "fails to make a showing sufficient to establish the existence of an element essential to that party's case"). Although neither side has adduced specific evidence as to the results produced by TomTom's devices, again, a lack of evidence on this

point means that Garmin's claim fails.

I conclude that defendant's motion for summary judgment must be granted with respect to Garmin's claim that defendant's products infringe the '485 patent. It is therefore unnecessary to consider TomTom's defense that claim 1 was anticipated by prior art.

III. U.S. PATENT NO. 6, 687,615

Invention: A GPS device that calculates a new route when the original route is unavailable, with a preference for avoiding a particular portion of the original route

Asserted claim: 9

Accused devices: TomTom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One (infringement under 35 U.S.C. § 271(a)); TomTom Navigator 5, TomTom Navigator 6 (infringement under 35 U.S.C. § 271(b) and (c))

UNDISPUTED FACTS

A. The Claim

Claim 9 of the '615 patent discloses:

A navigation aid method for performing a detour route calculation,

comprising:

dynamically receiving data relating to a portion of a particular thoroughfare in a route;

calculating a new route to a desired destination with a preference for avoiding the particular portion of the thoroughfare in the route; and

wherein calculating a new route to a desired destination includes calculating a second new route different from a first new route, wherein the first new route is a first detour route, and calculating the second new route includes calculating the second new route with a preference for avoiding a particular portion of a thoroughfare in the first detour route and the particular portion of the thoroughfare in the route.

B. Operation of the Accused Devices

The accused devices calculate a new route using an “all-or-nothing” approach. When a user selects a portion of a thoroughfare that it wants to avoid, there is no possibility that the devices will calculate a new route that includes that road.

OPINION

With respect to Garmin’s claim for infringement of the ‘615 patent, the focus again is on one element of the last subpart of a claim, in this case claim 9. The question is whether TomTom’s products, when calculating a new route, have a “preference for avoiding” a particular portion of a road in the original route.

The operation of TomTom’s products is undisputed with respect to this element.

TomTom's products *prohibit* the calculation of a new route that includes the portion of the road from the original route. Garmin argues that a device that *always* avoids a street necessarily possesses a *preference for* avoiding it. In other words the question is whether an absolute constraint is no more than a very strong preference.

Garmin cites no authority for the argument that it is, which is suggestive considering that on most points Garmin has cited multiple cases even when they provide no more than modest support. In my view, it is inaccurate to characterize an absolute prohibition as no more than a strong preference to avoid. The two are categorically different. To "prefer" one thing over another is simply to give something "priority or precedence" or to consider it "more desirable or as having more value." American Heritage Dictionary 1383 (4th ed. 2000). No matter how strong, a "preference" connotes a possibility for another choice, making the term incompatible with a prohibition, which allows no exceptions. This is consistent with the August 24 opinion and order, in which I construed a "preference for avoiding" as a "possibility of avoiding." Dkt. #65, at 15. "Sometimes" or even "usually" is not the same as "always." Adopting Garmin's argument would give claim 9 a broader scope than its language allows.

With respect to the doctrine of equivalents, Garmin again develops virtually no argument. It simply lists the elements of claim 9 and state that differences between the element and TomTom's products are "insubstantial." This not sufficient to show that there

is a genuine issue of material fact. I conclude as a matter of law that TomTom's products do not infringe the '615 patent, either literally or under the doctrine of equivalents. It is therefore unnecessary to consider TomTom's defenses that claim 9 was both anticipated and rendered obvious by prior art. Summary judgment in favor of TomTom is appropriate on this claim.

IV. U.S. PATENT NO. 6,999,873

Invention: A GPS device that calculates a new route when original route is unavailable; the user inputs the portion of the original route that should be avoided

Asserted claims: 1 (independent claim), 7-9 (dependent claims), 10 (independent claim)

Accused devices: Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One (infringement under 35 U.S.C. § 271(a)); TomTom Navigator 5, TomTom Navigator 6 (infringement under 35 U.S.C. § 271(b) and (c))

UNDISPUTED FACTS

A. The Claims

Claim 1 of the '873 patent discloses:

An electronic navigational aid device with detour route calculation capabilities,

comprising:

a processor;

a memory adapted to communicate with the processor, the memory having cartographic data and a desired destination, the cartographic data including data indicative of thoroughfares of a plurality of types;

a display connected to the processor and capable of displaying the cartographic data; wherein the device is adapted to process the device's location and travel along a route;

wherein the device is adapted to calculate a new route to the desired destination with a preference for avoiding a particular portion of a thoroughfare or one or more different thoroughfares in a previous route; and wherein the device is adapted to select a distance to avoid in a current route from among a number of user input options in a detour route menu.

Claim 7 discloses:

The device of claim 1, wherein the device includes a portable electronic navigational aid device.

Claim 8 discloses:

The device of claim 7, wherein the portable electronic navigational aid device includes a personal digital assistant (PDA).

Claim 9 discloses:

The device of claim 7 which is dependent from claim 1, wherein the portable electronic navigational aid device includes a wireless communications device.

Claim 10 discloses:

An electronic navigational aid device with route calculation capabilities, comprising:

a processor;

a memory in communication with the processor, the memory having cartographic data, the cartographic data including data indicative of thoroughfares of a plurality of types; wherein the device is adapted to calculate a route to navigate to a desired destination;

a display in communication with the processor and capable of displaying the cartographic data, the route, and the device's position;

and wherein the device is adapted to calculate a new route including determining a distance to avoid from a number of integral distances.

B. Operation of the Accused Devices

The accused devices include a feature called the "Avoid Roadblock" option. Using this feature, the user can select from a group of preset distances to avoid a particular preset distance along a route.

C. Prior Art

The Visteon NavMate 2.0 navigation system includes a computer with a CD-ROM drive, an external GPS antenna to be mounted on the roof of the vehicle and a display unit to be mounted. It receives power from the vehicle when the ignition is on and from an internal battery when the ignition is off.

Visteon began selling, offering for sale, and disclosing to the public the NavMate 2.0 navigation system in 1999; the application for the ‘615 patent was filed on December 21, 2001. (Although Garmin attempts to dispute TomTom’s proposed finding of fact showing when the NavMate went on sale, the dispute is not a genuine one. The documents TomTom cites show sales beginning in 1999 and Garmin cites no evidence contradicting this.)

OPINION

A. Infringement of Claims 1, 7-9

Claims 1, 7, 8 and 9 of the ‘873 patent included the same “preference for avoiding” element from the ‘615 patent. Because I have already concluded as a matter of law that TomTom does not infringe that element either literally or under the doctrine of equivalents, I conclude that TomTom does not infringe these claims.

B. Infringement of Claim 10

With respect to claim 10, TomTom cites little evidence regarding the way its products operate. Instead, it argues, as it is entitled to do, Celotex, 417 U.S. at 323, that Garmin have failed to meet its burden of proof with respect to the claim limitations that (1) the “device is adapted” to “determine” the distance to avoid (TomTom argues that Garmin’s evidence shows only that the *user* determines the distance to avoid); and (2) the device

calculates a distance from “a number of integral distances,” as opposed to just one.

I agree with TomTom that Garmin does not cite any evidence showing that the accused devices determine a distance to avoid without user input or that they allow a user to choose multiple distances to be determined. I agree with Garmin, however, that neither of these alleged deficiencies is relevant because neither is required by claim 10. “Determining a distance to avoid” does not mean that the device itself must choose the distance, as TomTom asserts. Such an interpretation would conflict with the basic purpose of the invention, which is to give drivers greater control in avoiding portions of a road that they know is obstructed. Col. 2, lns. 46-48 (“the present invention offer[s] an improved navigational route planning device which provides a user with more dynamic route calculation capabilities”). Further, the specification makes clear that “determining a distance to avoid” can “includ[e] a user selecting a distance to avoid in a current route from among a number of options in a detour route menu” or “a user inputting a distance.” Col. 11, lns. 17-19, 22-23; Fig. 7. Because the accused devices allow a user to select a distance that is then calculated by the device, this limitation is met by the accused devices.

TomTom’s second argument has little merit. Claim 10 does not require that the device allow calculation of multiple “distances to avoid,” as TomTom suggests. Rather, the claim language is unambiguous that *a* distance is determined *from* multiple options. Because it is undisputed that the accused devices provide multiple distances from which the user may

choose one to avoid, this limitation is met. I conclude as a matter of law that the accused devices infringe claim 10 of the '873 patent.

B. Anticipation

Garmin does not deny that the NavMate includes all the elements of claim 10 of the '873, save one: that the product be an electronic navigation "device" as opposed to a "system," which is what Garmin says the NavMate is.

To begin with, Garmin offers no definition of "device" within the context of the '873 patent. It provides only a conclusory allegation that the NavMate is not one because it "is an aggregation of multiple, separate components that must be installed as a system within a vehicle." Garmin's Add. PFOF, dkt. #96, at ¶251. However, the meaning of "device" cannot be limited to exclude "separate components" because the '873 patent discloses embodiments with multiple components as well. Col. 5, lns. 48-50 ("It will be understood that the antenna and receiver, designated by reference numeral 450, are combined schematically for illustration, but that the antenna and receiver may be separately located components.")

It is true that the manual for the NavMate refers to the product consistently as a "system" rather than a "device," but as TomTom points out, this does little to help Garmin because the '873 patent explains repeatedly that the disclosed invention includes "systems."

Abstract, col. 2, lns. 41-48, col. 3, lns. 48-49, col. 13, lns. 15-25. Because the inventors did not exclude a “system” from the meaning of “device,” I see no reason to do so here. I conclude as a matter of law that the NavMate anticipated claim 10 of the ‘873 patent.

V. U.S. PATENT NO. 6,901,330

Invention: A GPS device that provides voice guidance when the user requests it

Asserted claims: 9 (dependent from claim 1, which is not asserted), 10-11 (dependent from claim 1)

Accused devices: TomTom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One (infringement under 35 U.S.C. § 271(a)); TomTom Navigator 5, TomTom Navigator 6 (infringement under 35 U.S.C. § 271(b) and (c) (Claim 10 is asserted against the Navigator 5 and Navigator 6 only)

UNDISPUTED FACTS

A. The Claims

Claim 1 of the ‘330 patent discloses:

An electronic navigational aid device with voice guidance, comprising:
a processor;

a memory adapted to communicate to the processor, the memory being adapted to store cartographic data and a route to a desired destination;

wherein the device is adapted to process travel along the route, wherein the device is adapted to recognize when the device is approaching a decision point in the route, and wherein the device is adapted to provide voice guidance for the decision point and to recognize a user-requested prompt for voice guidance.

Claim 9 discloses:

The device of claim 1, wherein the electronic navigational aid device with voice guidance comprises a portable electronic navigational aid device.

Claim 10 discloses:

The device of claim 9, wherein the portable electronic navigational aid device includes a personal digital assistant (PDA).

Claim 11 discloses:

The device of claim 9, wherein the portable electronic navigational aid device includes a wireless communication device.

A. Operation of the Accused Devices

Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider and TomTom One contain each of the elements in claim 9.

When combined with a PDA, TomTom Navigator 5 and TomTom Navigator 6

include each of the elements of claim 10.

TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider and TomTom One contain each of the elements in claims 11.

B. Prior Art

1. Yilin Zhao textbook

In 1997, Yilin Zhao published what he referred to as "the first book to provide a detailed description of both the principles and practices of modern vehicle location and navigation systems in a single source." "[C]ombin[ing] information scattered among many different engineering fields into a single volume," the book covers some of the building blocks of a navigation system and explains how each of these separate modules are developed and integrated. Zhao discusses a range of electronic navigational aid devices, varying from "simple systems that detect the location of a vehicle or mobile device with human intervention," to "complex systems that navigate the vehicle automatically through the road network, assisted by real-time traffic information provided over a wireless communications network."

a. User requested voice guidance

With respect to voice guidance, Zhao explains that "[t]he most popular method in

current navigation systems is to provide one or a series of voice announcements to warn the driver of the approaching maneuver.” He provides several examples of voice guidance: messages having information including the distance to a maneuver point, the location of a maneuver point, and the action that must be taken at a maneuver point. Some of these include: “Drive 5 miles to Main Street,” “Right turn half a mile ahead, bear right” and “Turn right at the traffic light onto Main Street.” In the context of that discussion, Zhao further explains a “Verbal Guidance” switch. If the driver presses that switch, a message containing turning information for the next maneuver is announced.

b. Personal Digital Assistants and other portable devices

Zhao dedicates a section of his book to addressing speech recognition technology and its use in “provid[ing] hands-free control of location and navigation systems.” Zhao writes that with the performance capacity of digital signal processing (DSP) chips doubling every 3 years,

there has been a trend to port speech recognition technology to specialized DSPs for products such as personal digital assistant (PDA) and other hand-held or mobile platforms. Because there are so many speech recognition products available, one might consider integrating these products into various vehicle location and navigation systems.

Further, “GPS/PDA, and various other technologies (terrestrial radio-based) might soon become available on a much larger scale for hand-held devices.” Zhao cites an article by

another expert who predicts that hand-held portable systems will be “the navigation systems of the future.”

Finally, Zhao notes that “early versions of portable systems have already reached the market, with limited functionality.”

c.. Wireless communication

Zhao describes wireless communication with "mobile devices" and "wireless portable information devices": "Vehicle communications require a seamless, wireless infrastructure for voice and data that can reliably and efficiently deliver real-time traffic and other information." He summarizes technology advancements toward "more advanced hand-held location and navigation systems" and then states that "[a]s wireless communications technologies rapidly advance, various new wireless networks may become integrated with [Automatic Vehicle Location] AVL systems."

In chapter 8 of his book, Zhao discusses the integration of navigation systems with wireless communications such as cellular technology, radio data networks, paging systems and satellite communications.

2. Visteon's NavMate System

The NavMate System enables a user to “repeat voice prompts at any time by pressing

the VOICE soft key.” Examples of these responses include: "In about 0.3 miles, right turn ahead," "In about 2.3 miles, freeway exit on the right, followed by slight left turn," "In about 1.7 miles, freeway exit on the right, followed by slight left turn."

OPINION

A. Infringement

TomTom makes virtually no attempt to deny that its products infringe the ‘330 patent. Although Garmin offers evidence and argument to support its claim that the accused devices meet each element of claims 9, 10 and 11, TomTom’s argument with respect to noninfringement is not really about infringement at all. Instead, TomTom says that Garmin’s arguments in favor of infringement support a finding of invalidity. TomTom argues repeatedly throughout its briefs that Garmin’s failure to adequately refute a fact or argument is a concession of that point. I agree, and apply the rule equally to TomTom. Accordingly, I conclude that TomTom has conceded infringement, with one small exception.

With respect to claim 10, TomTom argues in its brief that the Navigator 5 and Navigator 6 do not infringe because they “may be used with organizers that do not provide voice guidance.” TomTom’s Br., dkt. #102, at 44 (citing TomTom’s Add. PFOF, dkt. #104, ¶ 213). However, the proposed finding of fact on which TomTom relies cites no evidence to support the allegation. Thus, there is no genuine dispute and I conclude that the

Navigator 5 and Navigator 6 infringe claim 10. Procedure, I.B.2 (“Each factual proposition must be followed by a reference to evidence supporting the proposed fact.”). I turn to TomTom’s arguments regarding invalidity.

B. Anticipation

TomTom cites two references in the prior art that it believes anticipate claims 9, 10 and 11 of the ‘330 patent: Yilin Zhao’s textbook and Visteon’s NavMate GPS device. Although Garmin’s claim for infringement was limited to claims 9, 10 and 11, because those claims are dependent from claim 1, Garmin may defeat a claim that prior art anticipated the dependent claims if any of the elements of claim 1 were not anticipated. With respect to both references, Garmin points to the fifth subpart of claim 1, which discloses a device that “recognize[s] a user-requested prompt for voice guidance.” I construed “voice guidance” to mean “spoken words that give accurate directions about how to navigate at a particular position.” Dkt. #65, at 26.

1. Zhao textbook

a. Claim 1

Although Garmin acknowledges that the Yilin Zhao book discloses the concept of voice guidance generally, it argues that Zhao does not disclose a *user requested* system of voice

guidance. It is undisputed that Zhao discloses a device that (1) provides accurate voice guidance and (2) includes a “Verbal Guidance” switch, which, if pressed by the user, causes the device to announce “turning information for the next maneuver.” Garmin’s argument appears to be that, despite these disclosures, Zhao does not “link” the two. In other words, Zhao does not teach his readers that pressing the “Verbal Guidance” switch will trigger accurate guidance tied to the vehicle’s current location rather than a repeat of the guidance previously given.

I agree with TomTom that, read in context, the Zhao reference is clear that the Verbal Guidance switch does not simply trigger the device to announce previous instructions. The quotation in the preceding paragraph shows that the device announces turning information “for the next maneuver.” Because this statement is made in the context of a larger discussion of providing accurate voice guidance information, there can be no doubt that Zhao teaches a “user-request prompt for voice guidance.” Helifix Ltd. v. Blok-Lok, Ltd., 208 F.3d 1339, 1347 (Fed. Cir. 2000) (publication that “does not expressly disclose in words” claim elements “might nevertheless be anticipating if a person of ordinary skill in the art would understand” that publication disclosed those elements).

b. Claims 9-10

Garmin identifies additional potential differences that apply individually to claims

9, 10 and 11. With respect to claim 9, the question is whether Zhao teaches a “portable” electronic navigation device. Again, the underlying facts are not in dispute. Zhao includes references to portable navigation devices, but the parties dispute whether these references are sufficiently concrete to qualify as anticipatory. Surprisingly, neither side cites any authority that might help define how specific a reference must be.

To adequately describe an invention, the prior art must allow one of ordinary skill in the art to “make the claimed invention without undue experimentation.” In re Elsner, 381 F.3d 1125, 1128 (Fed. Cir. 2004). In other words, the test is “whether one skilled in the art to which the invention pertains could take the description of the invention in the printed publication and combine it with his own knowledge of the particular art and from this combination be put in possession of the invention on which a patent is sought.” Id.

In the context of claim 9, this test is not very difficult to meet. Claim 9 does not disclose the technology that would be needed to make a portable navigation device; it simply discloses the idea of having such a device. Zhao discusses portable navigation devices in various instances in his textbook. It is not clear why it is relevant whether Zhao discussed devices that were then in existence or could be made in the future. He disclosed the idea of having this invention, which is all that seems to matter for the purpose of claim 9. In any event, Zhao also discloses portable devices that were in use at the time. Although these devices may have had “limited functionality,” Garmin does not explain why that matters.

A person reading Zhao more than one year before Garmin filed its application for the ‘330 patent would have known he could use the technology described in Zhao on a portable device. Claim 9 discloses a portable device; there is no additional limitation that the device must be perfect. Accordingly, I conclude as a matter of law that Zhao anticipated claim 9, rendering it invalid.

This conclusion applies also with respect to claim 10, which discloses use of an electronic navigation device with a “personal digital assistant.” Zhao discloses multiple references to PDAs. He notes that: (1) “one might consider integrating” products such as personal digital assistants into navigation devices; (2) navigation devices using personal digital assistants “have already reached the market, with limited functionality”; (3) “GPS/PDA . . . might soon become available on a much larger scale for hand-held devices.”

Again, Zhao both discloses the idea of combining a PDA with an electronic navigation device and discusses examples of such devices that are already in existence. This was sufficient to enable someone with ordinary skill in the art to make the claimed invention. I conclude the Zhao anticipated this claim as well.

c. Claim 11

Claim 11 adds the limitation of a “wireless communication device.” It is undisputed that Zhao discloses the use of navigation devices with “mobile devices” and “wireless

portable information devices,” such as paging systems, radio data networks and satellite communications. Garmin seeks to avoid the effect of Zhao’s disclosure of such devices by arguing for the first time that the meaning of “wireless communication device” in claim 11 is limited to devices that are “necessarily local to the user.” Garmin’s Br., dkt. #95, at 62. It points to an example of a cellular phone, discussed in Figures 4A and 4B.

As Garmin has pointed out countless times in other contexts, limitations in the specification may not be read into the claim itself. Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 345 F.3d 1318, 1327 (Fed. Cir. 2003). Stated another way, “claims will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.” Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1117 (Fed. Cir. 2004) (internal quotations omitted). Thus, Garmin may not restrict the construction of a term simply by referring to one use of it in the specification. During claim construction, Garmin agreed to define “wireless communication device” without any reference to whether the device was “local to the user.” The construction provided by both sides was “a device that communicates with another device without a wired connection.” Dkt. #61, Exh. #6, at 4. I see no reason to further restrict a definition that satisfied all parties until one side realized that its interests would no longer be served by it. Accordingly, I conclude as a matter of law that Zhao anticipated claim 11 of the ‘330 patent when he disclosed using navigation devices

with mobile devices and wireless portable information systems.

Because I have concluded that the three asserted claims under the ‘330 patent are invalid under Zhao, it is unnecessary to decide whether the claims were anticipated by the NavMate system. It is also unnecessary to consider TomTom's untimely motion to amend its answer to include the defense of inequitable conduct. That proposed defense relates to the ‘330 patent only. Because each of the asserted claims under that patent are invalid, any additional defenses are moot.

TOMTOM’S PATENTS

I. STANDING

In its answer to the counterclaim, Garmin raised an “affirmative defense” that TomTom lacks standing to sue. However, Garmin did not raise this issue in its motion for summary judgment, which was limited to arguments relating to noninfringement and invalidity. It was left to TomTom to argue (in the very last section of its motion for summary judgment, dkt. #80, at 67-70) that Garmin “cannot prove” that TomTom lacks standing. In its response, Garmin does not argue that TomTom actually lacks standing, only that its “affirmative defense” should not be dismissed because there is a “significant factual issue” with respect to the ownership of the ‘042, ‘412 and ‘538 patents. Garmin does not suggest that the court should refrain from deciding the merits until the standing issue is

resolved.

The parties' treatment of this issue raises numerous problems. First, standing is not an affirmative defense and Garmin does not have to prove that TomTom lacks it. Standing is a question of subject matter jurisdiction, which means the party bringing the claim has the burden to prove that it has standing to do so. Discovery House, Inc. v. Consolidated City of Indianapolis, 319 F.3d 277, 279 (7th Cir. 2003). More important, because standing is jurisdictional, it is not an issue that can be argued in the alternative in the event that Garmin's arguments on the merits of TomTom's claims are unsuccessful. Rather, it is a threshold question that must be answered in the affirmative before a court may consider a claim's merits. Vermont Agency of Natural Resources v. United States ex rel. Stevens, 529 U.S. 765, 778 (2000) ("Questions of jurisdiction, of course, should be given priority—since if there is no jurisdiction there is no authority to sit in judgment of anything else."). In other words, I must determine whether TomTom has standing to bring its claims before I can determine whether Garmin infringed the patents identified in those claims.

These are well established principles of which counsel are undoubtedly aware. I fault counsel for both sides for burying this issue in the back of a brief rather than giving it priority as they are required to do. Garmin should have brought a motion to dismiss long ago if it believed that TomTom did not have standing to sue. If TomTom does not have standing, this court lacked authority to issue an opinion construing the meaning of the '042,

‘412 and ‘538 patents.

I am persuaded, however, that there is no genuine dispute on the question whether TomTom has standing to sue. Under 35 U.S.C. § 271, “patentees” are granted the right to sue for infringement. A “patentee” is defined in 35 U.S.C. § 100(d) as “not only the patentee to whom the patent was issued but also the successors in title to the patentee.”

TomTom has proposed as a fact that “Baldivi B.V. is the owner by assignment” of the ‘412 patent, the ‘042 patent and the ‘538 patent and that Baldivi has granted TomTom, Inc. an exclusive license under those patents. TomTom’s PFOF ¶¶ 6, 19-21, 33-35 and 47-48, dkt. #75 (citing Exhs. 20 and 22 attached to aff. of Melody Habecker, dkt. #86). Garmin does not dispute these proposed findings with any evidence, but only cites several of its own proposed findings, none of which has any relation to the question of patent ownership. Garmin’s Resp. to TomTom’s PFOF ¶¶ 6, 19-21, 33-35 and 47-48, dkt. #98 (citing Garmin’s Add. PFOF ¶¶ 227-231, dkt. #96, that address the validity of the ‘615 patent and the ‘873 patent). Further, elsewhere in its proposed findings of fact, Garmin alleges affirmatively that Baldivi owns each of the patents at issue. Garmin’s PFOF, dkt. #75, at ¶¶ 20, 22, 26. Accordingly, I find that it is undisputed that Baldivi is the assignee of the ‘042, ‘412 and ‘538 patents and that TomTom, Inc. is the exclusive licensee, meaning that both have standing to sue for infringement of those patents. Speedplay, Inc. v. Bebop, Inc., 211 F.3d 1245, 1249-50 (Fed. Cir. 2000) (party has standing to sue for infringement “if it

owns the patent, either by issuance or by assignment”); Prima Tek II, L.L.C. v. A-Roo Co., 222 F.3d 1372, 1377 (Fed. Cir. 2000) (“an exclusive, territorial license is equivalent to an assignment and may therefore confer standing upon the licensee to sue for patent infringement”).

Garmin repackages its standing argument rather ridiculously in another “affirmative defense” in which it argues that “there remain questions as to whether [TomTom] properly stated a claim upon which relief may be granted” because TomTom may not be the true owners of the patents it is asserting. Garmin’s Br., dkt # 97, at 35. It makes no sense to say that there is a factual dispute with respect to whether a party has stated a claim upon which relief may be granted. A determination of a failure to state a claim is made on the basis of the complaint alone; it is not a question contingent on further factual development. In any event, the substance of this argument overlaps in full with Garmin’s standing argument, so I need not address it further.

Similarly, Garmin asserts another “affirmative defense” that TomTom may have failed to name an indispensable party under Fed. R. Civ. P. 19, but Garmin relies on the same factually unsupported argument on which it relied in the context of standing. Thus, I cannot conclude that Rule 19 is applicable in this case.

II. U.S. PATENT NO. 5,291,412

Invention: A GPS device that allows the user, after a deviation, to prohibit a return to the original route

Asserted claims: 1 (independent claim); 3,5,8,9,11,12 (dependent from claim 1); 13 (independent claim); 14 (dependent from claim 13)

Accused devices: StreetPilot III, StreetPilot 2610, StreetPilot 2620, StreetPilot 2650, StreetPilot 2660, StreetPilot 2720, StreetPilot 2730, StreetPilot 2820, StreetPilot 7200, StreetPilot 7500, StreetPilot c310, StreetPilot c320, StreetPilot c330, StreetPilotc340, StreetPilot c510, StreetPilot c530, StreetPilot c550, StreetPilot i2, StreetPilot i3, StreetPilot i5, nüvi 300, nüvi 310, nüvi 350, nüvi 360. nüvi 610, nüvi 660, Quest, Quest 2, cfQue 1620, GPS 18, iQue 3000, iQue 3200, iQue 3600, iQueM3, iQueM4, iQueM5, GPSMAP 60, GPSMAP 60C, GPSMAP 60CS, GPSMAP 76C, GPSMAP 76CS, GPSMAP 60Cx, GPSMAP 60 Csx, GPSMAP 76Cx, GPSMAP 76CSx, GPSMAP 276C, GPSMAP 376C, GPSMAP 378, GPSMAP 478, eTrex Venture Cx, eTrex Legend C, eTrex Legend Cx, eTrex Vista C, eTrex Vista Cx, Rino 520, Rino 530, Mobile, Mobile 20, and zumo 550, GPS V

UNDISPUTED FACTS

A. Claims

Claim 1 of the '412 patent discloses:

A navigation system, which comprises:

means for storing map data;

means for determining a present location of a vehicle with reference to said map data;

means for commanding computation of a route to be traveled by said vehicle;
means for computing, in accordance with said map data, an original optimal route from a starting point to a destination;

said means for computing being also effective for computing, in accordance with said map data, a new optimal route from said present location of said vehicle to said destination;

means for displaying route guidance information generated by said means for computing;

means for detecting whether said vehicle has deviated from one of said original and said new optimal routes; and

means for directing said means for computing to select one of allowing U-turns and preventing U-turns in following one of said original and said new optimal routes from said present location.

Claim 3 discloses:

A navigation system as in claim 1, wherein said means for storing includes an IC card.

Claim 5 discloses:

A navigation system as in claim 1, wherein said means for determining includes a

GPS satellite system.

Claim 8 discloses:

A navigation system as in claim 1, wherein said means for determining includes a GPS satellite system.

Claim 9 discloses:

A navigation system as in claim 1, wherein said means for computing includes a microcomputer.

Claim 11 discloses:

A navigation system as in claim 1, wherein said means for displaying includes an LCD.

Claim 12 discloses:

A navigation system as in claim 1, wherein said means for directing includes at least one touch screen switch.

Claim 13 discloses:

A method of navigating a vehicle, which comprises the steps of:

storing map data;

determining a present location of said vehicle with reference to said map data;

computing, in accordance with said map data, an original optimal route from a starting point of said vehicle to a destination;

computing further, in accordance with said map data, a new optimal route from said present location of said vehicle to said destination;

displaying route guidance information generated by said means for computing;

detecting, with reference to one of said original and said new optimal routes and said present location, whether said vehicle has deviated from said one of said original and said new optimal routes; and

said step of displaying selectively allowing and prohibiting the display of said route guidance information that returns said vehicle to an original optimal route.

Claim 14 discloses:

A method according to claim 13, wherein the step of displaying includes selectively allowing and prohibiting display of said route guidance information leading to U-turns in following said new optimal route from said present location.

B. Operation of the Accused Devices

1. Changing the U-turn selection

The accused devices present the user with an avoidance screen he may use to select to avoid routes with particular characteristics, including U-turns. If the user checks the box corresponding to U-turns, the devices will avoid U-turns in route calculations. If the user leaves that box unchecked, the devices will not avoid U-turns and will include U-turns in calculated routes if doing so would be efficient.

Once the user makes the U-turn selection, it will be applied to all route calculations

thereafter until the user changes his selection. If a user deviates from a route, thus requiring the calculation of a new route, the devices will apply the user's last registered selection for allowing or avoiding U-turns when calculating the new route.

The user may change his U-turn selection at any time and the accused devices will apply this selection to route calculations thereafter until the user changes his or her selection again. When a user changes the U-turn selection while on a route, the user may have the selection incorporated into the route by recalculating the route.

2. Avoiding U-turns

The accused devices use a costing methodology in calculating routes, under which possible route segments are assigned costs according to the preferences selected by the user. The accused devices allow the user to choose whether they should calculate the route that will guide the user to the destination in the fastest time (but not necessarily in the shortest distance) or by the shortest distance (but not necessarily in the fastest time), taking into account other preferences selected. The accused devices calculate the optimal route by selecting the route with the lowest costs as determined by the selected preferences, meaning a route with the shortest time or distance from the starting point to the destination.

If the user has chosen to avoid U-turns, the accused devices will not display a route that includes a U-turn unless no efficient alternatives exist. In practice, this means that the

products will not display U-turns even when the route will include significant additional time or distance.

OPINION

With respect to the asserted infringement of claim 1, the dispute surrounds the final subpart of the claim, specifically the clause, “to select one of allowing U-turns and preventing U-turns in following one of said original and said new optimal routes from said present location.” In the claim construction opinion and order, I construed the clause by dropping the word “said”: “to select one of allowing U-turns and preventing U-turns in following one of the original and the new optimal routes from the present location.” Dkt. #65, at 61.

It is undisputed that the accused devices include a U-turn selector. However, Garmin argues that its products do not infringe claim 1 because (1) the invention disclosed in claim 1 *must* apply to a *particular* route; and (2) the accused devices *cannot* apply to a particular route but only “universally.” The essence of this argument is that TomTom’s claimed device requires a selection after each deviation from a route while the accused devices do not permit this.

To the extent that there is any difference between the invention disclosed in claim 1 and the accused devices, I disagree with Garmin that the difference is a substantial one. In making its first argument, Garmin attempts to rely on the claim’s use of the word “one,” but

it is little more than a repackaging of an argument it advanced during claim construction: that the user of the claim 1 device may not turn on the U-turn selector until after a deviation. In rejecting that argument, I wrote:

Although it may be true that the system *implements* the user's selection of preventing or allowing U-turns only after the vehicle deviates from the optimal route, neither the claim language nor the specification restricts the timing of the user's *selection* to post-deviation. In fact, the specification suggests that the user may select her U-turn preference upon turning on the device (see, e.g., col. 4, lns. 15-18).

Dkt. # 65, at 60. Garmin does not ask for a reconsideration of that conclusion, much less explain why it may have been wrong.

It is true that one of the embodiments described in the specification gives the user *the option* of prohibiting or allowing U-turns each time the user deviates from the original route and requests that a new route be calculated. Figs. 5B and 5C. And although claim 1 is not written in the clearest of terms, I agree with Garmin to the extent it means to argue that a fair reading of claim 1 requires that the user have the option to change the U-turn preference after each deviation. After all, that is the entire point of the invention, as discussed numerous times throughout the patent. Abstract (“ driver may choose whether or not to permit U-turns on the new route”); Col. 1, lns. 58-62 (“A further object of the present invention is to provide a system that allows a driver of a vehicle to choose whether or not to return to the original optimal route when a new optimal route is computed after the vehicle deviates from the original route. ”)

This conclusion does not necessarily help Garmin, however, because its products allow the same thing. Although Garmin argues that its products “provide no opportunity for a driver to make a U-turn preference selection with respect to any particular route determination,” Garmin’s Br., dkt. #74, at 42, this is not an accurate assessment of its products. It is undisputed that the user of the accused devices is not stuck with the U-turn preference he selects initially. Rather, the user can change the U-turn preference later.

It may be that, after a deviation, the accused devices may recalculate the route before the user has an opportunity to change the U-turn preference, at least if the deviation is unintentional. Garmin’s Resp. to TomTom’s Add. PFOF, dkt. #115, at ¶ 100. Further, under the preferred embodiment of the ‘412 patent, the user will be asked to make a U-turn preference *before* the route is recalculated. Figs. 5B, 5C. However, as I noted above, claim 1 itself does not include a timing limitation. Thus, it makes no difference *when* the user makes the selection so long as the selection can be made. It is undisputed that the user of the accused devices may change the U-turn preference after a deviation and recalculate the route again to take account of the new preference. Thus, the accused devices meet this element because they allow the user to indicate a U-turn preference with respect to the original route or a new route.

Garmin argues that only the *first* recalculated route (that is, the one calculated immediately after a deviation) qualifies as a “new optimal route” within the meaning of the

‘412 patent. Garmin does not develop this argument and I can find no support for it in either the patent or the claim construction opinion. I construed the term “optimal route” to mean “a course of travel such that the amount of time or distance from a starting point to a destination is least or requires the fewest number of turns.” Dkt. #65, at 57-58. The parties did not seek a construction for “new optimal route,” but I construed the structure for computing a new optimal route as follows: “optimal route computer 40 with associated software instructions to perform the following steps: 1) read in the present location and 2) compute a new optimal route that either avoids or eliminates U-turns or that allows U-turns.” Id. at 60. Again, there is no time limitation and no suggestion that there can be only one new optimal route. The element itself does not refer to “the” new optimal route or “the first new optimal route calculated after a deviation” but rather to “original and new optimal routes.” Thus, a second recalculated route may qualify as “a new optimal route” and Garmin’s products allow the user to select a U-turn preference with response to both “original and new optimal routes.”

Nevertheless, I conclude that Garmin is entitled to summary judgment on this claim because of a difference it argues most strongly with respect to claims 13 and 14, but which is also present in claim 1. Claim 1 discloses a device that enables the user to select between allowing and “*preventing*” U-turns in a route. Claims 13 and 14 similarly disclose a device that allows or “*prohibit[s]*” the display of said route guidance information that returns said

vehicle to an original optimal route.”

The key question is whether Garmin’s products “prevent” or “prohibit” U-turns from being chosen or displayed. They do not. Rather, it is undisputed that, even if the user has selected a preference to avoid U-turns, Garmin’s products will display routes that include U-turns in some instances. When a user makes a selection to avoid U-turns, the accused devices increase the “cost” of displaying a U-turn by changing the route calculation algorithm. In other words, the accused devices have a preference for avoiding U-turns but do not bar them absolutely. If the route including a U-turn would be significantly more efficient, the accused devices will display that route.

TomTom makes a half-hearted argument that “prevent” and “prohibit” do not denote an absolute constraint, so that claims 1, 13 and 14 may allow U-turns in some instances, despite a choice to prevent or prohibit them. This argument contradicts the ordinary meaning of these terms. “Prohibit” is usually defined to mean “prevent.” Webster’s New World College Dictionary 1147 (4th ed. 2001); American Heritage Dictionary 1401 (4th ed. 2000); Random House Webster’s College Dictionary 1054 (1999); Merriam-Webster’s Collegiate Dictionary 932 (10th ed. 1995). “Prevent” means “to keep from happening.” American Heritage Dictionary 1139 (4th ed. 2000); Random House Webster’s College Dictionary 1046 (1999); Merriam-Webster online; Merriam-Webster’s Collegiate Dictionary 924 (10th ed. 1997). These definitions do not suggest exceptions. (TomTom

comes up with one definition in American Heritage that “prevent” means “[t]o present an obstacle,” but it overlooks the the dictionary ‘s definition of this use as “archaic,” not a current understanding of the term. Even if it were a current definition, it is not clear how TomTom’s method of determining U-turns could be characterized as “presenting an obstacle,” so this definition does not shed any light on the dispute.)

The patent itself does not provide specialized definitions for these terms. TomTom does not suggest that a person of ordinary skill in the art would understand the words to have anything other than their ordinary meaning. Thus, if a device “prevents” or “prohibits” a route including U-turns, it means such routes are never displayed. If the drafter of the ‘412 patent had wanted to make the selection conditional, he could have used qualifying language but he did not.

From this conclusion, it follows that the accused devices do not literally infringe any of the asserted claims in the ‘412 patent, which all include the “preventing” or “prohibiting” limitation. As I have already concluded with respect to the ‘615 patent, an absolute constraint cannot be described as simply a very strong preference. “Always” cannot mean “sometimes.”

As an alternative argument, TomTom relies on the patent law maxim that a product still infringes a patent even if it only sometimes embodies a claim. Hewlett-Packard Co. v. Mustek Systems, Inc., 340 F.3d 1314, 1326 (Fed. Cir. 2003); Hilgraeve Corp. v. Symantec

Corp., 265 F.3d 1336, 1343 (Fed. Cir. 2001); Bell Communications Research, Inc. v. Vitalink Communications Corp., 55 F.3d 615 (Fed. Cir.1995). Because Garmin’s products *usually* will not display a U-turn if the user has chosen a preference for avoiding it, TomTom says that those products usually embody the claim.

TomTom misunderstands the meaning of this point of law. The test is not whether, as TomTom suggests, the accused products sometimes come to the same *particular result* as an invention disclosed in a claim. If that were the case, any device that almost always displayed routes with U-turns but at least sometimes did not would literally infringe the patent. Rather, the test is whether the accused device sometimes embodies “the claim.” Although the accused devices sometimes do not display routes with U-turns, they *never* actually prohibit the display, as claims 1, 13 and 14 require.

It is a closer question whether the accused devices infringe the ‘412 patent under the doctrine of equivalents. Neither side’s argument on this point is particularly compelling because neither side fully addresses the “function-way-result” equivalency test. Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co., 520 U.S. 17, 40 (1997). Garmin says that an “‘absolute constraint’” on U-turns cannot be considered an equivalent to ‘always considering’ U-turns without entirely vitiating the requirement that the device must absolutely prevent or prohibit U-turns.” Garmin’s Br., dkt. #97, at 20. Garmin cites a number of cases that it summarizes as standing for the proposition that “an opposite or an

antithesis cannot be an equivalent as a matter of law.” Id. at 21.

Garmin has mischaracterized the dispute. The question is not whether the products “consider” U-turns (the ‘412 patent has no restrictions on this) but whether they ultimately choose a route with a U-turn for display. Thus, the issue essentially mirrors the one raised by the ‘615 patent, which is whether a *preference* for avoiding is the equivalent of a *prohibition*. Although these two things are not literally the same, neither would it be accurate to characterize one as the “opposite” or “antithesis” of the other. Thus, the point of law on which Garmin relies does not necessarily advance its position.

Unfortunately, TomTom is no more helpful. TomTom says that the products are equivalent because “in all but the rarest and most extreme instances . . . the assignment of high costs accomplishes the desired result of not having U-turns present in the presented optimal route.” TomTom’s Br, dkt. #117, at 6. As an initial matter, TomTom has not adduced evidence that the accused devices produce the same results “in all but the rarest and most extreme instances.” Rather, the facts show only that the accused devices will not show U-turns when no “efficient” alternative exists. The closest TomTom comes to defining “efficient” is that the products will not display U-turns even when it means that the chosen route will be significantly longer in time or distance. This is a far cry from the characterization in TomTom’s brief.

Even if I assume, however, that the accused devices usually do not display U-turns

when the user chooses to avoid them, this would not be sufficient in itself to find equivalency. Although substantially similar results may be one part of an evaluation under the doctrine of equivalents, they are not the whole part. Warner-Jenkinson, 520 U.S. at 39 (test is whether accused device has equivalent function, works in equivalent way *and* has equivalent result). TomTom does not explain how the accused devices are equivalent to the '412 patent in the *way* they work and the evidence appears to be to the contrary. Garmin's products conduct a cost-benefit analysis that the invention disclosed in the '412 patent does not, that is, Garmin's products make a determination whether they will disregard the user's preference on the basis of a determination that it would be more efficient to do so. In any event, it was TomTom's burden to show that Garmin's products are sufficiently similar to the invention disclosed in the '412 patent to allow a reasonable jury to find infringement. Because TomTom has failed to do that, it has failed to show infringement as a matter of law. Further, because the limitation was present in all of the asserted claims, I must grant Garmin's motion for summary judgment with respect to the '412 patent. It is therefore unnecessary to consider Garmin's defense that claims 1, 3, 5, 8-9 and 11-12 are invalid under 35 U.S.C. § 112.

III. U.S. PATENT NO. 5,550,538

Invention: A GPS device that guides the vehicle back to route after a deviation

Asserted claims: 1 (independent claim); 2 (dependent from claim 1)

Accused devices: StreetPilot III, StreetPilot 2610, StreetPilot 2620, StreetPilot 2650, StreetPilot 2660, StreetPilot 2720, StreetPilot 2730, StreetPilot 2820, StreetPilot 7200, StreetPilot 7500, StreetPilot c310, StreetPilot c320, StreetPilot c330, StreetPilotc340, StreetPilot c510, StreetPilot c530, StreetPilot c550, StreetPilot i2, StreetPilot i3, StreetPilot i5, nüvi 300, nüvi 310, nüvi 350, nüvi 360, nüvi 610, nüvi 660, Quest, Quest 2, cfQue 1620, GPS 18, iQue 3000, iQue 3200, iQue 3600, iQueM3, iQueM4, iQueM5, GPSMAP 60, GPSMAP 60C, GPSMAP 60CS, GPSMAP 76C, GPSMAP 76CS, GPSMAP 60Cx, GPSMAP 60 Csx, GPSMAP 76Cx, GPSMAP 76CSx, GPSMAP 276C, GPSMAP 376C, GPSMAP 378, GPSMAP 478, eTrex Venture Cx, eTrex Legend C, eTrex Legend Cx, eTrex Vista C, eTrex Vista Cx, Rino 520, Rino 530, Mobile, Mobile 20, and zumo 550, GPS V³

UNDISPUTED FACTS

A. Claims

Claim 1 of the '538 patent discloses:

³There is some dispute whether the GPS V includes the partial route recalculation feature that the other products include. However, I need not resolve this dispute in light of the conclusion that this feature does not infringe the '538 patent.

A navigation system comprising:

means for detecting a present position of a vehicle;

first computing means for computing an optimal route for said vehicle from a starting point to a destination;

first means for selecting a first plurality of marked points on said optimal route;

said first plurality of marked points being used for determining a restoration point between said destination and a deviation point;

off-route detection means for detecting a deviation of said vehicle from optimal route;

said deviation occurring at said deviation point;

second means for selecting one of said first plurality of marked points disposed between a point at which said deviation occurs and said destination, as a restoration point when said off-route detection means detects said deviation;

said second means for selecting including second computing means for computing an optimal restoration route from a plurality of restoration routes each extending from said present position to one of said first plurality of marked points disposed between a deviation point and said destination; and

said optimal restoration route extending from said present position to said restoration point on said optimal route.

Claim 2 discloses:

A navigation system according to claim 1, wherein said first means for selecting selects said first plurality of marked points from a set consisting essentially of intersections on said optimal route.

B. Operation of the Accused Devices

The accused devices provide an automatic off-route recalculation feature that detects a vehicle's deviation from an original route and automatically calculates a new route. In calculating a new route, the accused devices consider the distance on the original route between the deviation point and the destination.

If the distance on the original route between the deviation point and the destination is less than 10 miles, the accused devices calculate a new route from the vehicle's present position to the destination. When the distance between the deviation point and the destination is greater than 10 miles, the device will attempt a "partial route recalculation." A partial route recalculation attempts to generate a route that returns the vehicle to the previous route. In attempting a partial route recalculation, the device selects a point on the original route at least 10 miles from the deviation point. This "10 mile point" is a reference point used as a "temporary destination" in calculating a new route extending from the vehicle's present position to the "10 mile point."

To decide whether the potential route is acceptable, two conditions must be met. First, the potential new route must not be significantly longer than (more than 120% of) the distance on the original route from the deviation point to the "10 mile point." Second, the vehicle must be restored to the original route at some location before the "10 mile point." If both the conditions are satisfied, the potential new route is selected, and the device

displays navigational guidance for this new route.

If either condition is not met, the device will select a "40 mile point" at a point on the original route located at least 40 miles from the deviation point and calculate a potential new route from the present position to the "40 mile point." The products evaluate this potential route using the same criteria as the one using a "10 mile point": the route may not be more than 120% of the distance between the deviation point and the "40 mile point" and the vehicle must be restored to the route before the "40 mile point." If the conditions are still not satisfied, the device forgoes any further attempts to calculate a partial route recalculation and instead calculates a new route from the present position to the destination.

The "10 mile point" and the "40 mile point" are explicitly prohibited from being the point in which the vehicle joins the original route. In calculating the potential new route to the "10 mile point" or "40 mile point" the device does not make any determination as to the point at which the vehicle joins the original route so long as this point is prior to the "10 mile point" or "40 mile point." The "10 mile point" and the "40 mile point" are not necessarily intersections.

OPINION

Both claim 1 and claim 2 require that "a restoration point" be "determin[ed]" from "a plurality of marked points." I agree with Garmin that its products do not meet this

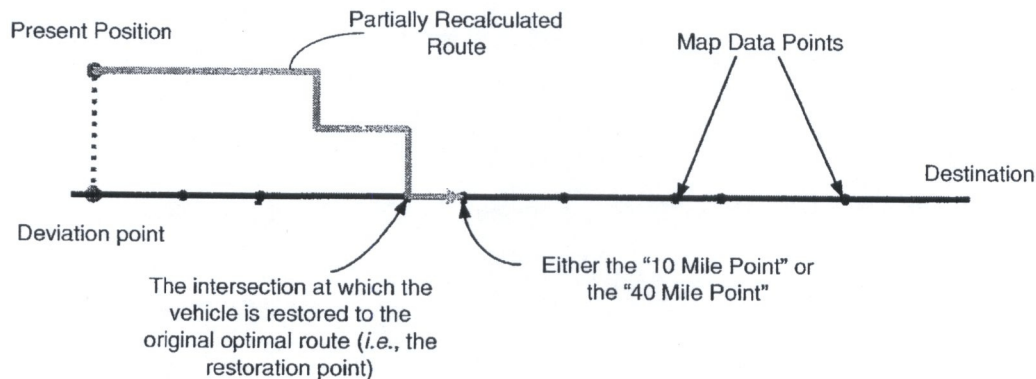
requirement and therefore do not infringe these claims.

In the August 24 opinion and order, I construed “restoration point” as “an intersection at which the vehicle is restored to said optimal route.” Dkt. #65, at 66. Although I did not construe the phrase “marked points,” the claim itself explains that they are points selected by the device for determining the restoration point.

Of course, the accused devices have restoration points. Any device that leads a vehicle back to an original route necessarily has a point at which the vehicle is returned to that route. In addition, similarly to the invention disclosed in the ‘538 patent, those products select points on the optimal route that are used in calculating a restoration route, or a route that returns the vehicle to the optimal route. Depending on several factors, Garmin’s products may choose a point on the optimal route that is either ten miles or forty miles from the point at which the vehicle deviated from the optimal route and calculate a potential route to that point. However, the accused products do not use those points to “determine” the point at which the vehicle will rejoin the optimal route, so they do not qualify as either “marked points” or as a “restoration point.”

TomTom argues vigorously that the “10 mile” and “40 mile” points *are* marked points used to determine the restoration point, but this conflicts with both the claim construction opinion and common sense. As shown by the diagram below, the “10 mile” and “40 mile” points are not points at which the vehicle is “restored” to the optimal route,

but rather *another* point between the restoration point and the destination point:



TomTom advances a hopeless argument that a restoration point “need not be the first intersection at which the vehicle is restored to the optimal route.” TomTom’s Br., dkt. #102 at 64 (emphasis in original). Fixing on the use of the word “an” (rather than “the”) in the court’s construction of “restoration point,” TomTom asserts that there may be multiple restoration points along the optimal route. In other words, although the ten and forty mile points are not the “first” restoration point, they are subsequent restoration points because they are (1) on the optimal route and (2) “a point to which the optimal restoration route . . . extends from the vehicle’s present location.” Id.

This argument borders on the absurd, despite the many pages TomTom devotes to it. First, TomTom places far too much emphasis on the word “an” in the claim construction opinion and order. There was no argument presented in the claim construction briefs and

no discussion in the opinion regarding the definite article that should be used, so it is not reasonable to inject significant meaning into the choice. “An” was used rather than “the,” not to suggest that each route can have multiple restoration points, but simply as a recognition that the restoration point will likely change from route to route.

Second, TomTom’s definition of “restoration point” robs the term of almost any meaning. Under that definition, *every* point on the optimal route is a restoration point, so long as it is between the destination and the point at which the vehicle is rejoined with the optimal route. However, the ‘538 patent is clear throughout that there is one, not an infinite number of restoration points. E.g., Figs. 3, 7; col. 1, l. 46; col. 5, lns. 12, 19-20, 31, 33, 35, 54, 56. In contrast, the only reference in the patent to “restoration points” is in claim 8, which discloses “potential” restoration points, not points that are actually chosen.

TomTom emphasizes that the ‘538 patent never defines a restoration point as the “first” point at which a vehicle is restored to the route. This is hardly surprising because such a definition would be redundant. “Restore” means to “return” or “bring back,” American Heritage Dictionary 1486 (4th ed. 2000); Merriam-Webster online, which means it happens only once. One does not “return” from the same trip multiple times. Similarly, the vehicle is “restored” to the optimal route at the point at which it initially rejoins the route; it cannot be “restored” continually along the rest of the route.

Thus, it is clear that the accused devices do not use marked points to determine a

restoration point as does the '538 patent, but is the difference a substantial one? Again, the burden is on TomTom to show equivalency. It attempts to do so under the function-way-result test, but its showing is not persuasive. Much of TomTom's argument on equivalency relies on the same fallacy that the ten and forty mile points are restoration points, which I need not discuss further.

In addressing the "way" component of the doctrine of equivalents, TomTom offers two sentences that Garmin's products are not substantially different because its restoration route also joins the optimal route at *some* point. Of course this is true, but the same could be said for *any* device that leads a vehicle back to the original route after a deviation. Accepting TomTom's argument would mean that all such navigation devices would infringe the '538 patent.

The doctrine of equivalents cannot be viewed at such a high level of generality. It is true that both the invention disclosed in the patent and Garmin's products have the same basic purpose: to map a course back to the optimal route after a deviation. But unlike the patented device, Garmin's products do not determine a restoration route by picking a restoration point. Instead, they use a point that is either ten or forty miles from the deviation point, which is never the restoration point. In fact, the point at which the vehicle rejoins the optimal route does not factor into the calculation. It is difficult to see how a device that calculates a restoration route using an entirely different method can be deemed

an equivalent of the invention disclosed in the '538 patent. TomTom does not address this issue.

With respect to the results of the devices, TomTom says that all of them “provid[e] navigation guidance to a user more quickly after he deviates from a calculated route.” TomTom’s Br., dkt. #102, at 69. In my view, this is not an argument about substantially similar results but simply a repackaging of an argument that the products have the same function as the patented device. With respect to results, the important question is: do the accused devices calculate a restoration route that is not substantially different from the route that would be generated by the patented device? TomTom is silent on this point. I conclude accordingly that it has failed to show that there is a genuine issue of material fact with respect to whether Garmin has infringed the '538 patent. It is therefore unnecessary to consider Garmin’s defense that claims 5-7 are invalid under 35 U.S.C. § 112.

IV. U.S. PATENT NO. 5,922,042

Invention: A GPS device that saves information before a power down for use when the vehicle is restarted

Asserted claims: 1 (independent claim); 2-6 (dependent from claim 1); 11 (independent claim); 12-16, 22-23, 25-26 (dependent from claim 11); 27 (independent claim); 28-32 (dependent from claim 27)

Accused devices: StreetPilot III, StreetPilot 2610, StreetPilot 2620, StreetPilot 2650, StreetPilot 2660, StreetPilot 2720, StreetPilot 2730, StreetPilot 2820, StreetPilot 7200, StreetPilot 7500, StreetPilot c3 10, StreetPilot c320, StreetPilot c330, StreetPilot c340, StreetPilotc510, StreetPilot c.530, StreetPilot c550, StreetPilot i2, StreetPilot i3, StreetPilot i5, nüvi 300, nüvi 310, nüvi 350, nüvi 360. nüvi 610, nüvi 660, Quest, Quest 2, GPS V, cfQue 1620, GPS 18, iQue 3000, iQue 3200, iQue 3600, iQueM3, iQueM4, iQueM5, GPSMAP 60, GPSMAP 60C, GPSMAP 60CS, GPSMAP 76C, GPSMAP 76CS, GPSMAP 60Cx, GPSMAP 60Csx, GPSMAP 76Cx, GPSMAP 76CSx, GPSMAP 276C, GPSMAP 376C, GPSMAP 378, GPSMAP478, eTrex Venture Cx, eTrex Legend C, eTrex Legend Cx, eTrex Vista C, eTrex Vista Cx, Rino 520, Rino 530, Mobile 20, and zamo 550, Rino 110, Rino 120, Rino 130, GPS 60 and eMap products

UNDISPUTED FACTS

A. Claims

Claim 1 of the '042 patent discloses:

In a navigation system for a vehicle, a method of providing route guidance to

a user, the method comprising:

outputting information to the user for navigation of the vehicle;

detecting an impending power-down of the navigation system; and

in response to detecting the impending power-down, deciding before the power down occurs, whether to resume said outputting following a next power up of the navigation system based on a current position of the vehicle.

Claim 11 discloses:

An apparatus for providing route guidance to a user of a navigation system for a vehicle, the apparatus comprising:

means for detecting an impending powering down of the vehicle; and

means for determining, in response to detecting the impending powering down of the vehicle and before a next powering down of the navigation system, whether to resume a route guidance routine in response to a next powering up of the vehicle based on a current position of the vehicle and a user-selected destination.

Claim 12 discloses:

An apparatus according to claim 11, wherein the route guidance routine comprises a routine for providing information to the user for assisting the user in navigating the vehicle to the user-selected destination along a current route of the vehicle computed by the navigation system.

Claim 13 discloses:

An apparatus according to claim 11, wherein the means for determining comprises means for deciding whether to resume the guidance routine based on a distance along the current route from the current position of the vehicle to the user-selected destination.

Claim 14 discloses:

An apparatus according to claim 12, further comprising means for storing the current route and the destination in a memory before the next powering down of the navigation system, if the means for determining determines to resume the guidance routine in response to the next powering up of the vehicle.

Claim 15 discloses:

An apparatus according to claim 14, wherein the means for determining further comprises means for storing a flag in the memory, the flag corresponding to an output of the means for determining, the apparatus further comprising means for checking a status of the flag in response to the next powering up of the navigation system to determine whether to resume outputting information to the user for assisting the user in navigating the vehicle.

Claim 16 discloses:

An apparatus according to claim 14, further comprising means for recalling, in response to the next powering up of the navigation system, the user-selected destination and the current route of the vehicle from the memory and resuming the route guidance routine, if the status of the flag indicates a decision was made to resume the route guidance routine.

Claim 22 discloses:

A method according to claim 2 [which is dependent from claim 1], wherein said deciding further comprises deciding whether to resume said outputting based on a selected route, the current position of the vehicle, and the selected destination.

Claim 23 discloses:

A method according to claim 2, wherein said deciding further comprises deciding whether to resume said outputting based on a direct distance between the current position of the vehicle and the selected destination.

Claim 24 discloses:

A method according to claim 8, wherein said deciding comprises deciding whether to resume the route guidance routine based on a direct distance from the current position of the automobile to the selected destination.

Claim 25 discloses:

An apparatus according to claim 12, wherein the means for determining comprises means for deciding whether to resume the guidance routine based on a distance from the current position of the vehicle to the user-selected destination.

Claim 26 discloses:

An apparatus according to claim 25, wherein the means for determining comprises means for deciding whether to resume the guidance routine based on a direct distance from the current position of the vehicle to the selected destination.

Claim 27 discloses:

In an automobile navigation system, a method of assisting a driver of an automobile in navigating, the method comprising:

outputting route guidance information based on a computed route;

detecting an impending power-down of the navigation system; and

in response to detecting the impending power-down, deciding before the power-down occurs, whether to resume said outputting in response to a next power-up of the navigation system, based on a distance between a current position of the automobile and a user-selected destination.

Claim 28 discloses:

A method according to claim 27, wherein said deciding comprises deciding whether to resume said outputting based on a direct distance from the current position of the automobile to the user-selected destination.

Claim 29 discloses:

A method according to claim 27, wherein said deciding comprises deciding whether to resume said outputting based on a distance from the current position of the automobile to the user-selected destination along the computed route.

Claim 30 discloses:

A method according to claim 27, further comprising storing the computed route and the user-selected destination in a memory before the power-down of the navigation system occurs, provided it was decided to resume said outputting.

Claim 31 discloses:

A method according to claim 27, further comprising storing a flag in the memory, the flag indicating a result of said deciding, the method further comprising checking a status of the flag in response to the next power-up of the navigation system to determine whether to resume said outputting.

Claim 32 discloses:

A method according to claim 27, further comprising:

if it is decided to resume said outputting, then in response to the next power-up of the navigation system: recalling the user-selected destination and the computed route of the automobile from the memory;

and resuming said outputting.

B. Operation of the Accused Devices

The accused devices store a route in non-volatile memory as soon as the route is calculated. The products maintain the route in non-volatile memory until the products are within a certain distance of the destination or until a new route is calculated to replace it. If either of these events occurs, the route is deleted from non-volatile memory. If neither

occurs before powering down, the route remains in non-volatile memory.

The accused devices determine whether to resume route guidance after powering up by accessing their non-volatile memory to determine whether a route is present and then determining whether the device is within a minimum predetermined distance of the destination.

OPINION

Each of the asserted independent claims 1, 11 and 27 includes a requirement that the device “decide[s]” whether to save route guidance information for the next power-up “in response to detecting the impending power-down” and “before the power down occurs.” (Claim 11 uses the slightly different phrase “before a next powering-down of the navigation system,” but the parties do not suggest that any differences in wording are relevant to this case.) These limitations are the basis for the dispute with respect to infringement of the ‘042 patent.

There is no dispute that the accused devices save information before the vehicle powers down and that this information may be used upon restarting the vehicle. However, according to Garmin, its devices do not make the decision whether to “resume” that information upon restarting the vehicle either “before the power down occurs” or “in response to detecting the impending power down.”

According to TomTom, the “before the power down occurs” limitation is literally present in the accused devices. It concedes that the devices do not literally meet a second but related element, which is that the decision must be made “in response to detecting the impending power down.” Instead, TomTom says, the accused devices make the decision “in anticipation of” powering down, which is the equivalent.

The threshold question is whether it is *before* or *after* powering down that the accused devices decide to resume the route guidance information upon restarting. Garmin says the decision is made after powering down; TomTom says it is before. The crux of the dispute is what constitutes a “deci[sion]” to “resume” route guidance information upon powering up.

Certainly, it is undisputed that the accused devices make the decision to *save or delete* information before powering down. The accused devices save all route information as a matter of course until the vehicle reaches a certain distance from the destination or a new route is chosen. However, a decision whether to save information is not the same thing as a decision to “resume” use of it later, at least if the device does not automatically resume guidance upon start up of all information not deleted.

Further, it is undisputed that the accused devices do not automatically display any saved information upon powering up. Rather, upon powering up, the devices determine whether a route is still in the non-volatile memory and, if so, whether the vehicle’s last saved

position was within a certain distance of the destination. Although TomTom attempts to dispute these facts, the evidence it cites shows only that the accused devices make a determination to save or delete information before powering down. They cite nothing that suggests that any saved information is automatically redisplayed upon powering up.

However, even if I agreed with TomTom that all saved information in the accused devices is always redisplayed upon powering up, I could not conclude that the accused devices' method of saving and deleting map guidance information is the same as or equivalent to the patented device's requirement of "deciding," "in response to detecting the impending power down," whether to "resume" information after powering up. Neither the decision to save nor the decision to delete information in the accused devices is related to "detecting an impending power down." The decision to save is made as a matter of course; it is not triggered by *any* particular event, much less a powering down. The decision to delete is triggered when the vehicle approaches the destination point or when a new route is calculated. When the accused devices detect an impending power down, there is no "deciding" to save or delete route guidance information, as is required by the '042 patent. A "decision" denotes a consideration of at least two options, but the accused devices do not consider whether to save or delete information during a power down. They do nothing and consider nothing because those decisions have been made already.

Further, I cannot accept TomTom's argument that the accused devices' operation is

the equivalent of the operation of the patented device because doing so would expand the '042 patent to encompass far more than is claimed. TomTom's equivalency argument requires the acceptance of two premises: (1) the accused devices save information in "anticipation of" powering down; (2) saving information "in anticipation of" powering down is the equivalent of saving information "in response to a detection of powering down."

I need not consider Garmin's first premise because its second is untenable, at least if one defines "in anticipation of" the way that TomTom proposes. I agree with Garmin that accepting this premise would render meaningless the claim limitation "in response to detecting an impending power down." TomTom's argument is that the accused devices decide whether to save information "in anticipation of" powering down because the reason they save information is so that it can be used after the vehicle powers down and starts again.

It cannot be argued plausibly that when the devices decide to delete information because the vehicle is near its destination or a new route is chosen, they are also "deciding," in anticipation of powering down, not to resume guidance information upon powering up. The two events are simply too remote from each other. A contrary conclusion would mean that the '042 patent encompasses *any* device that deletes guidance information while it is running. This is because, under TomTom's view, any decision to delete information before powering down is a decision "in anticipation of" powering down. Similarly, accepting TomTom's argument would require a conclusion that the patented device covers any device

that fails to delete information before a power down.

I cannot accept this interpretation because it would eliminate the claim limitation that the decision be made in response to an impending power down. Under TomTom's interpretation, the entire clause "in response to detecting an impending power down" could be eliminated from claims 1, 11 and 27 and the claim would have exactly the same scope. Those claims already require that a decision be made "before the power down occurs," but under TomTom's view, any decision to delete or save information "before" powering down is also made "in anticipation of" powering down.

As both sides repeat many times throughout their briefs, there is no infringement under the doctrine of equivalents if the asserted application of a patent would eliminate one of the elements of the claim. Warner-Jenkinson, 520 U.S. at 29. In other words, the patentee cannot argue successfully that a particular element is simply irrelevant to the claim. Forest Labs., Inc. v. Abbott Labs., 239 F.3d 1305, 1313 (Fed. Cir. 2001). That, in essence, is what TomTom has done here. Further, it has not suggested that any "subtlety of language or complexity of the technology, nor any subsequent change in the state of the art, such as later-developed technology, obfuscated the significance of this limitation at the time of its incorporation." Sage Products, Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1425-26, 1429-30 (Fed. Cir.1997).

Accordingly, I conclude that Garmin's motion for summary judgment must be

granted with respect to TomTom's claim for infringement of the '042 patent. It is unnecessary to consider Garmin's defense that a number of the claims of the '042 patent are anticipated by prior art.

ORDER

IT IS ORDERED that

1. The motion to strike filed by Garmin Ltd., Garmin International and Garmin Corporation is DENIED as unnecessary.

2. TomTom, Inc.'s motion for leave to file an amended answer is DENIED as unnecessary.

3. The motion to file supplemental proposed findings of fact filed by TomTom, Inc. and Baldivi B.V. is GRANTED.

4. Summary judgment is GRANTED to TomTom, Inc. on Garmin's claims that:

(a) the Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One, TomTom Navigator 5, and TomTom Navigator 6 infringed claim 15 of U.S. Patent No. 6,188,956 because that claim is invalid under 35 U.S.C. § 102(b), as anticipated by the prior art;

(b) the TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One, TomTom Navigator 5, and TomTom Navigator 6 infringed

claim 1 of U.S. Patent No. 6,222,485 because those devices do not infringe that claim;

(c) the Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One, TomTom Navigator 5 and TomTom Navigator 6 infringed claim 9 of U.S. Patent No. 6, 687,615 because those devices do not infringe that claim;

(d) the Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One, TomTom Navigator 5 and TomTom Navigator 6 infringed claims 1, 7-9 of U.S. Patent No. 6,999,873 because those devices do not infringe those claims;

(e) the Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider, TomTom One, TomTom Navigator 5 and TomTom Navigator 6 infringed claim 10 of U.S. Patent No. 6,999,873 because that claim is invalid under 35 U.S.C. § 102(b), as anticipated by the prior art;

(f) the Tom Tom Go, TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider and TomTom One infringed claim 9 of U.S. Patent No. 6,901,330 because that claim is invalid under 35 U.S.C. § 102(b), as anticipated by the prior art;

(g) the TomTom Navigator 5 and TomTom Navigator 6 infringed claim 10 of U.S. Patent No. 6,901,330 because that claim is invalid under 35 U.S.C. § 102(b), as

anticipated by the prior art;

(h) the TomTom Go 300, TomTom Go 510, TomTom Go 700, TomTom 910, TomTom Rider and TomTom One infringed claim 11 of U.S. Patent No. 6,901,330 because that claim is invalid under 35 U.S.C. § 102(b), as anticipated by the prior art;

5. Summary judgment is GRANTED to Garmin Ltd., Garmin International and Garmin Corporation on TomTom, Inc.'s and Baldivi B.V.'s claims that:

(a) the StreetPilot III, StreetPilot 2610, StreetPilot 2620, StreetPilot 2650, StreetPilot 2660, StreetPilot 2720, StreetPilot 2730, StreetPilot 2820, StreetPilot 7200, StreetPilot 7500, StreetPilot c310, StreetPilot c320, StreetPilot c330, StreetPilotc340, StreetPilot c510, StreetPilot c530, StreetPilot c550, StreetPilot i2, StreetPilot i3, StreetPilot i5, nüvi 300, nüvi 310, nüvi 350, nüvi 360. nüvi 610, nüvi 660, Quest, Quest 2, cfQue 1620, GPS 18, iQue 3000, iQue 3200, iQue 3600, iQueM3, iQueM4, iQueM5, GPSMAP 60, GPSMAP 60C, GPSMAP 60CS, GPSMAP 76C, GPSMAP 76CS, GPSMAP 60Cx, GPSMAP 60 Csx, GPSMAP 76Cx, GPSMAP 76CSx, GPSMAP 276C, GPSMAP 376C, GPSMAP 378, GPSMAP 478, eTrex Venture Cx, eTrex Legend C, eTrex Legend Cx, eTrex Vista C, eTrex Vista Cx, Rino 520, Rino 530, Mobile, Mobile 20, and zumo 550, GPS V infringed claims 1 and 2 of U.S. Patent No. 5,550,538 because those devices do not infringe those claims;

(b) theStreetPilot III, StreetPilot 2610, StreetPilot 2620, StreetPilot 2650,

StreetPilot 2660, StreetPilot 2720, StreetPilot 2730, StreetPilot 2820, StreetPilot 7200, StreetPilot 7500, StreetPilot c3 10, StreetPilot c320, StreetPilot c330, StreetPilot c340, StreetPilotc510, StreetPilot c.530, StreetPilot c550, StreetPilot i2, StreetPilot i3, StreetPilot i5, nüvi 300, nüvi 310, nüvi 350, nüvi 360. nüvi 610, nüvi 660, Quest, Quest 2, GPS V, cfQue 1620, GPS 18, iQue 3000, iQue 3200, iQue 3600, iQueM3, iQueM4, iQueM5, GPSMAP 60, GPSMAP 60C, GPSMAP 60CS, GPSMAP 76C, GPSMAP 76CS, GPSMAP 60Cx, GPSMAP 60 Csx, GPSMAP 76Cx, GPSMAP 76CSx, GPSMAP 276C, GPSMAP 376C, GPSMAP 378, GPSMAP478, eTrex Venture Cx, eTrex Legend C, eTrex Legend Cx, eTrex Vista C, eTrex Vista Cx, Rino 520, Rino 530, Mobile 20, and zumo 550, Rino 110, Rino 120, Rino 130, GPS 60 and eMap products infringed claims 1, 3, 8, 9, 11, 12, 13 and 14 of U.S. Patent No. 5,291,412 because those devices do not infringe those claims;

(c) the StreetPilot III, StreetPilot 2610, StreetPilot 2620, StreetPilot 2650, StreetPilot 2660, StreetPilot 2720, StreetPilot 2730, StreetPilot 2820, StreetPilot 7200, StreetPilot 7500, StreetPilot c3 10, StreetPilot c320, StreetPilot c330, StreetPilot c340, StreetPilotc510, StreetPilot c.530, StreetPilot c550, StreetPilot i2, StreetPilot i3, StreetPilot i5, nüvi 300, nüvi 310, nüvi 350, nüvi 360. nüvi 610, nüvi 660, Quest, Quest 2, GPS V, cfQue 1620, GPS 18, iQue 3000, iQue 3200, iQue 3600, iQueM3, iQueM4, iQueM5, GPSMAP 60, GPSMAP 60C, GPSMAP 60CS, GPSMAP 76C, GPSMAP 76CS, GPSMAP 60Cx, GPSMAP 60 Csx, GPSMAP 76Cx, GPSMAP 76CSx, GPSMAP 276C, GPSMAP

376C, GPSMAP 378, GPSMAP478, eTrex Venture Cx, eTrex Legend C, eTrex Legend Cx, eTrex Vista C, eTrex Vista Cx, Rino 520, Rino 530, Mobile 20, and zumo 550, Rino 110, Rino 120, Rino 130, GPS 60 and eMap products infringed claims 1, 2-6, 11-16, 22-23 and 25-32 of U.S Patent No. 5,922,042 because those devices do not infringe those claims.

6. The clerk of court is directed to enter judgment in accordance with this order and close this case.

Entered this 22d day of December, 2006.

BY THE COURT:
/s/
BARBARA B. CRABB
District Judge

