NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2008-1259

VEHICLE IP, LLC,

Plaintiff-Appellant,

٧.

GENERAL MOTORS CORPORATION and ONSTAR CORPORATION,

Defendants-Appellees,

and

CELLCO PARTNERSHIP (doing business as Verizon Wireless) and NETWORKS IN MOTION, INC.,

Defendants-Appellees.

<u>Frank P. Porcelli</u>, Fish & Richardson P.C., of Boston, Massachusetts, argued for plaintiff-appellant. With him on the brief were <u>Frank E. Schekenbach</u>; <u>Richard J. Anderson</u>, <u>Michael J. Kane</u>, <u>Deanna J. Reichel</u> and <u>William R. Woodford</u>, of Minneapolis, Minnesota.

<u>Jonathan E. Retsky</u>, Howrey LLP, of Chicago, Illinois, argued for defendants-appellees General Motors Corporation, et al. With him on the brief were <u>Henry C. Bunsow</u>, <u>Steven Yovits</u> and <u>Nathan A. Frederick</u>.

<u>Vincent J. Belusko</u>, Morrison & Foerster LLP, of Los Angeles, California, argued for defendants-appellees Cello Partnership (d/b/a Verizon Wireless), et al. With him on the brief were Martin M. Noonen and Alex S. Yap.

Appealed from: United States District Court for the Western District of Wisconsin

Chief Judge Barbara B. Crabb

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2008-1259

VEHICLE IP, LLC,

Plaintiff-Appellant,

٧.

GENERAL MOTORS CORPORATION and ONSTAR CORPORATION,

Defendants-Appellees,

and

CELLCO PARTNERSHIP (doing business as Verizon Wireless) and NETWORKS IN MOTION, INC.,

Defendants-Appellees.

Appeal from the United States District Court for the Western District of Wisconsin in case no. 07-CV-345, Chief Judge Barbara B. Crabb.

DECIDED: January 6, 2009

Before MAYER, BRYSON, and PROST, Circuit Judges.

Opinion for the court filed by <u>Circuit Judge</u> PROST. Dissenting opinion filed by <u>Circuit Judge</u> MAYER.

PROST, Circuit Judge.

Vehicle IP ("VIP") holds the rights to U.S. Patent No. 6,535,743 (the "743 patent"), which covers various aspects of a mobile navigation system. VIP sued General Motors, OnStar, Cellco, and Networks in Motion (collectively, "Defendants") in the United States District Court for the Western District of Wisconsin for infringing the

'743 patent. The district court granted Defendants' motions for summary judgment of noninfringement as to all asserted claims. <u>Vehicle IP, LLC v. Gen. Motors Corp.</u>, 578 F. Supp. 2d 1107, 1120–21 (W.D. Wis. 2008). For the reasons set forth below, we <u>affirm</u>.

I. BACKGROUND

The '743 patent, which is entitled "System and Method for Providing Directions Using a Communications Network," describes a method and apparatus for providing turn-by-turn directions to a mobile unit. Claim 1 is representative of the claim language at issue:

A system for providing directions, comprising:

a server coupled to a communication network, the server operable to determine directions from an origination location to a destination location and to communicate the directions using the communication network, wherein the directions comprise a plurality of segments, each segment separated from an adjacent segment by a separator signal and comprising a command and a notification region defined by a plurality of notification coordinates; and

a mobile unit coupled to the communication network remote from the server, the mobile unit operable to receive the communicated directions, the mobile unit further operable to present automatically a particular segment of the directions to a user if the location of the mobile unit substantially corresponds to a notification coordinate defining the notification region associated with that segment.

'743 patent col.31 II.19–36 (emphasis added). The phrase "a notification region defined by a plurality of notification coordinates" is at the heart of the dispute between the parties and is found in each independent claim in the '743 patent.

During claim construction, the district court first held that a "plurality" is used in the ordinary sense of "requiring a minimum of two of something." Vehicle IP, 578 F.

2008-1259

Supp. 2d at 1115. This construction is not debated by any party.¹ The court went on to hold that (1) in accordance with its ordinary meaning, a coordinate is "any of a set of numbers that provides the position of a point," (2) notification coordinates are "any of a set of numbers used to locate the position of a point in a direction segment," and (3) a notification region is a "location defined by two or more coordinates that provide the position of points in near proximity to, but not including, the position of an upcoming maneuver point." Id. at 1115–17.

On appeal, VIP argues that the district court misconstrued those terms, and that even under the district court's erroneous construction Defendants' navigation systems infringe the '743 patent. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II. DISCUSSION

As claim construction is a matter of law, we review a district court's claim construction without deference. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). We evaluate a district court's grant of summary judgment of noninfringement de novo as well. O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc., 467 F.3d 1355, 1369 (Fed. Cir. 2006).

Α

We turn first to the district court's construction of the term "coordinate." Although not explicitly included in its definition, in discussing the term the court found that "[f]or something to be a coordinate it must have a partner so that together the coordinates

Although Cellco and Networks in Motion argued before the district court that the "notification region" must be defined as a two-dimensional area, which arguably is in tension with the district court's construction of "plurality," the district court did not reach that issue. Likewise, we do not reach the issue since we affirm on other grounds.

can provide the location of a point." <u>Vehicle IP</u>, 578 F. Supp. 2d at 1117. The court therefore found that a "mere numeric value like 200 feet[] cannot be a coordinate without a partner." <u>Id.</u>

Defendants' navigation systems operate by downloading the coordinates for an upcoming maneuver point (sometimes called a "driving event") and either distance or time values. In the case of the Cellco and Networks in Motion ("Cellco") system, the server sends various information to a cell phone, including a "max-instruction distance," the coordinates of the maneuver point, and the speed of travel. The cell phone uses some of this information to calculate a warning distance, which is then compared to the max-instruction distance to determine when the user should receive the next instruction. Both the warning distance and the max-instruction distance are scalars; in other words, they are what the district court called "numeric values." Similarly, the GM OnStar® ("GM") system downloads driving event coordinates and up to three distance or time offsets, each of which is also a scalar. In part because it found that numeric values like those downloaded by Defendants' systems cannot be coordinates, the district court held that Defendants did not infringe the '743 patent. Vehicle IP, 578 F. Supp. 2d at 1117–18.

VIP argues that the patentees did not limit the term "coordinate" in the '743 patent, and therefore the term must be "broadly defined." And while VIP agrees that the term should be construed according to its ordinary meaning, VIP does not believe the court's construction reflects that meaning. Instead, VIP argues that the ordinary meaning of a coordinate is "any one of a set of numbers used in specifying the location of a point on a line, in space, or on a given plane or other surface." VIP presses us to

find that this construction allows for a numeric distance offset "so long as that offset specifies the location of a point."

Regardless of whether the district court correctly identified the term's ordinary meaning, however, we agree with the district court's conclusion. The '743 patent claims and the prosecution history indicate that the patentees did not contemplate scalar values serving as notification coordinates.

The term "coordinate" appears twice in the language of independent claims 1, 23, 35, and 56. Although the first mention of the term is as a plurality ("notification coordinates"), the second time, the term is used in the singular: a direction "segment" is presented when "the location of the mobile unit substantially corresponds to a notification coordinate defining the notification region." In the '743 patent, the mobile unit's location is identified using a GPS device. '743 patent col.2 II.64–col.3 I.1. To compare a notification coordinate to the mobile unit's location, as required by the claims, the notification coordinate necessarily must be of the same kind or type as the mobile unit location coordinates. The location of the mobile unit is expressed in terms of latitude and longitude, and cannot "substantially correspond" to a scalar value, such as 500 meters. No meaningful comparison between the two is possible. The plain language of the claims precludes the possibility that a coordinate can be a scalar.

The prosecution history lends further support to the conclusion that a scalar cannot serve as a "coordinate" as that term is used in the '743 patent. On March 14, 2001, the Examiner rejected claims 23 and 35 as being anticipated by U.S. Patent No. 5,126,941 (the "Gurmu patent"). In traversing the rejection based on the Gurmu patent, the applicants stated:

The present invention differs fundamentally from <u>Gurmu</u>. The present invention teaches and claims that the location of the vehicle is compared . . . to the notification coordinate. It is apparent that the location is determined independently of the notification coordinate to be able to compare the vehicle location to the notification coordinate. This fundamental difference is not taught, shown, or suggested by <u>Gurmu</u>.

J.A. 2191. If the location of the mobile unit must be determined <u>independently</u> of the notification coordinate, then the notification coordinate necessarily must provide an absolute location (as opposed to a location by reference to the mobile unit's position). VIP's argument to the effect that this is not a clear disclaimer is to no avail. <u>See 800 Adept, Inc. v. Murex Sec., Ltd.</u>, 539 F.3d 1354, 1364–65 (Fed. Cir. 2008) (recognizing that prosecution disclaimer is "typically invoked to limit the meaning of a claim term that would otherwise be read broadly," but consulting the prosecution history in that case "as support for the construction already discerned from the claim language and confirmed by the written description").

VIP maintains that while a distance offset standing alone might not be a coordinate, "the distance offset identifies a specific location in advance of a driving event." In other words, a distance offset of 500 meters should be read as "500 meters from the maneuver point." Once armed with the maneuver point's latitude and longitude, the argument goes, the system could calculate the latitude and longitude of the distance offset—in effect, transforming a scalar value into coordinates properly comparable to those at the maneuver point. But again, this interpretation is precluded by the plain language of the claims, which require comparison between the current location and a single notification coordinate. Further, a scalar and a maneuver point taken together do not define a second point at the distance offset, but instead define a circle centered at the maneuver point with a radius equal to the scalar value. To

pinpoint precisely where on that circumference the distance offset lies requires something more. For these reasons, we agree with the district court and hold that a distance offset of the type used in Defendants' systems is not a "coordinate" as the term is used in the '743 patent.

В

VIP also asserts that Defendants' systems infringe the '743 patent even under the district court's claim construction, with each system allegedly infringing in a different manner. VIP argues that the Cellco system infringes when it downloads a "polyline" made up of a series of latitude and longitude coordinates that define the region between the max-instruction distance and the maneuver point. VIP believes that between these polyline coordinates lies a region which would meet the district court's construction of a "notification region," thereby infringing the '743 patent.

In contrast, the GM system uses two distance offset points in conjunction with the maneuver point to dictate when directions are provided to the user. The first point is an early "preparation" distance offset, which alerts the user that a maneuver is approaching. Next is the "immediate" distance offset, which alerts the user that the time has come to execute the maneuver. VIP contends that an infringing notification region is created between the preparation and immediate distance offsets.

Regarding the Cellco system, VIP did not raise this argument before the district court, and thus is barred from raising it for the first time on appeal. See Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1426 (Fed. Cir. 1997). VIP points to various places in its summary judgment briefs where it stated that between Cellco's maxinstruction distance and maneuver point "is a series of coordinates, also downloaded"

from the server, that form the <u>polyline</u> and further define the region." While it is true that VIP made this statement more than once, asserting the fact that a polyline is created or further defines a region is not equivalent to arguing that there might be more than one notification region created by Cellco's system; further, VIP never indicated that a notification region could be defined by anything besides the maneuver point and the max-instruction distance. Merely invoking words such as "polyline" or "coordinates" is not enough to preserve a point of appeal. As to Cellco, then, VIP's claim is dismissed.

VIP's arguments as to GM's system were properly raised before the district court, but VIP simply cannot prevail under the court's construction. The court excluded scalar values from serving as "coordinates" which could define a notification region. We agree. Since both the preparation and immediate distance offset points are scalar values, the region defined by those values cannot be a "notification region" as necessary to infringe the '743 patent.

III. CONCLUSION

For the reasons detailed above, we affirm the district court's summary judgment of noninfringement.

2008-1259

NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

2008-1259

VEHICLE IP, LLC,

Plaintiff-Appellant,

٧.

GENERAL MOTORS CORPORATION and ONSTAR CORPORATION.

Defendants-Appellees,

and

CELLCO PARTNERSHIP (doing business as Verizon Wireless) and NETWORKS IN MOTION, INC.,

Defendants-Appellees.

Appeal from the United States District Court for the Western District of Wisconsin in case no. 07-CV-345, Chief Judge Barbara B. Crabb.

MAYER, Circuit Judge, dissenting.

I respectfully dissent, because the district court has misconstrued the terms "coordinate" and "notification region." The plain ordinary meaning of "coordinate" is quite broad and not limited to a longitude latitude pair. In mathematics, there are many types of coordinate systems and the common ground is that they all define a point. For instance, in a curvilinear system, coordinates are defined with a fixed origin point, and a scalar distance offset from that point along a known curve, such as a section of road. A distance offset necessarily has a "partner" to define a point, as offsets are necessarily

set off from another known point. A coordinate should not be construed to exclude defining a point by an offset from another point along a known path.

Moreover, I cannot conclude that because the mobile unit receiving its location with a GPS device determines its location as a longitude, latitude, and altitude in space, we must therefore construe coordinate to have the same format to allow for comparison. Any point described by one coordinate system may be easily converted to another coordinate system for direct comparison. Appellees contend that the plain language of the claims precludes any conversion for comparison purposes because the claim recites using only a single notification coordinate. I am not convinced because a coordinate in this usage appears to be a single unique point in space among many points that collectively define a notification region, not just part of the description of a point. Further support is found in the claims because a notification region is defined by a plurality of notification coordinates. A plurality of points is required to define a region in space. It is consistent to use coordinate in the singular to describe a single point within such a region. Also, the specification often uses coordinate in the singular in the term "geographical coordinate," which is clearly a point in space.

I therefore agree with VIP that a coordinate can be anything that describes a particular point on a line, on a plane or surface, or in space. This includes a numeric value (a scalar) describing an offset to a fixed point along a known curve.

While not reached by the majority, I also believe that the district court has misconstrued "notification region." There is nothing in the specification to suggest that a notification region cannot include the point corresponding to the driving event. I believe the district court erred by assuming that a notification region must only include points

ahead of the driving event in order for the invention to be useful. I agree that when a driver using the system approaches a driving event at speed, a notification to the user that he or she must perform a maneuver would not be useful, and could even be dangerous, unless it occurred well prior to reaching the driving event. However, the district court erred by assuming that the user would approach the driving event at speed. The driving event could be at a stop sign, or in some other situation where the user is not in motion but is at the point where the user must make a maneuver. In these cases, the notification region would include the point of the driving event.

I would reverse the construction of both coordinate and notification region and remand to review infringement under the correct construction.

2008-1259