

NOTE: Pursuant to Fed. Cir. R. 47.6, this disposition
is not citable as precedent. It is a public record.

United States Court of Appeals for the Federal Circuit

05-1555

MEADE INSTRUMENTS CORP.,

Plaintiff-Appellant,

v.

YAMCON, INC.,

Defendant-Appellee.

DECIDED: August 25, 2006

Before MAYER, BRYSON, and LINN, Circuit Judges.

BRYSON, Circuit Judge.

Meade Instruments Corp. brought this patent infringement suit alleging that Yamcon, Inc., infringes one of Meade's patents, U.S. Patent No. 5,311,203 ("the '203 patent"). The district court granted Yamcon's motion for summary judgment, holding that Yamcon's accused "SkyScout" device does not infringe the '203 patent. Meade appeals, challenging the district court's claim construction. We affirm.

I

The '203 patent relates to a handheld device for locating and identifying celestial objects that are visible to the naked eye. The device described in the patent is capable of determining the direction it is pointing and uses that information to find and to identify objects whose celestial coordinates are stored in the device's database. When

operating the device in the “find” mode, the user selects an object he wishes to view and the device then directs the user to point the device to the part of the sky where the object is located. When operating the device in the “identify” mode, the user points the device at a particular celestial object and the device identifies the object. In either mode, the device can present information to the user about the celestial object of interest.

Yamcon’s accused SkyScout is a handheld viewing device that allows the user to look through an eyepiece to see a portion of the sky. Like the patented device, the SkyScout incorporates a find mode and an identify mode. The SkyScout, however, presents information to the user on a display screen that is situated on the side of the device. Because of the location of the screen, the user must take the device away from his eye and turn the device 90 degrees in order to view the information on the screen. In find mode, the user inputs a celestial object and the SkyScout displays arrows in the field of view that direct the user to move the device so that the selected object will appear in the field of view.

Yamcon moved for summary judgment of noninfringement. After construing the pertinent claim language, the district court ruled that Yamcon’s device does not infringe any of the asserted claims of the ’203 patent. Meade Instruments Corp. v. Yamcon, Inc., No. SACV 04-1213 (C.D. Cal. Aug. 22, 2005). On appeal, Meade argues that under the proper construction of the claim language, Yamcon infringes claims 1 and 15 of the patent.

II

In pertinent part, claim 1 recites:

A portable, hand-holdable viewing apparatus for use in viewing a predetermined subject, said apparatus having a field of view of a predetermined size and presenting information to the user about features of the subject visible in the field of view, comprising:

. . .

an electronic database containing data about the predetermined subject, the data being arranged in said database to be correlated with three-dimensional direction;

output means for providing data from said database to a user; and

microprocessor means . . . coupled to said database and to said output means to provide data about the subject to the user in real-time, the provided data being correlated with three-dimensional directions falling within said field of view of predetermined size;

whereby the provided data is automatically and simultaneously presented to the user as the user observes the field of view in a selected three-dimensional direction.

Claim 15 contains similar limitations but uses slightly different language:

A method of providing information to a user about a predetermined subject with a hand-held viewing apparatus with which the user may view the predetermined subject comprising the steps of:

providing an electronic database in said hand-held viewing apparatus containing data about the predetermined subject correlated with three-dimensional direction;

. . .

searching said database for data correlated with three-dimensional directions within a prescribed range about the three-dimensional coordinates of said viewing direction; and

providing data result from said searching step to the user, . . . whereby said data are provided in real-time as the user observes the field of view of the apparatus in said viewing direction.

Meade argues that the court erred in its interpretation of the claim term “data” and in its interpretation of the requirement that data be “simultaneously presented to the user as the user observes the field of view” (claim 1) or that data be provided “to the user . . . in real-time as the user observes the field of view of the apparatus” (claim 15). Under the district court’s interpretation, claims 1 and 15 do not read on Yamcon’s

accused device because there is no “data”—as that term is used in the '203 patent—that is presented or provided to the user as the user observes the field of view. The court ruled that neither the information displayed on the side screen of the SkyScout nor the directional arrows displayed in the SkyScout’s field of view meet the disputed limitation. The court held that, although the information displayed on the side screen of the SkyScout device is “data,” it is not presented or provided to the user as the user observes the field of view; and although the directional arrows are presented to the user as the user observes the field of view, the directional arrows do not constitute “data.”

A

We agree with the district court that claims 1 and 15 require that information be presented to the user in a manner that allows the user to access the information at the same time that he is observing the field of view. Claim 1 requires the information to be “simultaneously presented to the user as the user observes the field of view” (emphasis added), and claim 15 requires the information to be “provid[ed] . . . to the user . . . in real-time as the user observes the field of view.” Especially when followed by the preposition “to,” the verb “present” (or “provide,” in the case of claim 15) suggests the act of making something immediately accessible for the user to view. Webster’s New International Dictionary 1955 (2d ed. 1954) (defining “present” as “[t]o exhibit or offer to view”); *id.* at 1994 (defining “provide” as “[t]o supply for use”). It would be strange to say that an image is “presented to” a user as the user observes the field of view if the user is not in a position to view the image while observing the field of view.

In the context of the '203 patent, there is a significant difference between displaying information on a side screen that the user cannot see while observing the

field of view, as opposed to simultaneously presenting information to a user as the user observes a celestial object in the field of view. The specification makes it clear that one of the key features of the invention is that the user can receive information about a particular celestial object while using the device to observe the object in the field of view. For example, the patent explains that one of the main disadvantages of observing aids such as star charts is that the observer “has to refer back and forth from the sky to the star chart.” ’203 patent, col. 1, ll. 30-31. But that is precisely what users of Yamcon’s accused device must do with respect to the screen display, because Yamcon’s device lacks the simultaneity feature touted in the patent.

All of the embodiments described in the patent allow information to be presented so that the user is exposed to the information and the field of view at the same time. In one embodiment, the device “superimposes on the observed night sky within the instrument’s field of view an image in the form of a graphic representation of a prominent astronomical feature such as a constellation.” ’203 patent, col. 2, ll. 22-25. In discussing alternative embodiments, the specification notes that the “display is placed in the user’s line of sight for direct viewing.” ’203 patent, col. 4, ll. 20-21. Nothing in the specification indicates that the relevant claim language can be interpreted to cover devices that do not present information to the user while the user is viewing the field of view.

Meade makes several arguments in support of its interpretation, but they are not persuasive. First, Meade challenges the district court’s conclusion that the “user of the device must actually be aware of and receive the data at the same time that he or she is viewing the celestial object.” Meade argues that the claims do not require “awareness”

of the information on the part of the user, but only require that the information be “presented or provided.” While it is true that the claim limitations are directed to the capabilities of the device, not the capabilities of the user, we do not interpret the district court’s claim construction to require that the user actually absorb textual information at the same time that he is viewing an object. All that is required is that the information be made available to the user so that the user can access it while observing the field of view. In that regard, the district court’s claim construction is entirely consistent with the prosecution history of the ’203 patent, in which the applicant asserted that the invention “provides a device that a user can hold in his or her hand, point it in a desired direction, look through it at the night sky, and see both the actual night sky (in some limited field of view) and also see educational information about the prominent feature or features in that portion of the sky.”

Second, Meade makes the related argument that the district court’s claim construction excludes the embodiments disclosed in the specification, because even in the embodiments that call for overlaying information on the field of view it would be impossible for a user to read the displayed textual information and look at a celestial object in the field of view at the same moment. That is because, according to Meade, a user must shift the focus of his eyes away from the celestial object in order to focus on the overlaid visual display. Again, that argument overlooks the claim language. The claims require that the user be able to access the information at the same time that he is “observ[ing] the field of view.” If the user can detect the information while using the device to observe the field of view, then even if the user must shift his attention from the celestial object in order to read the information that is displayed in or around the

eyepiece field of view, the user is still observing the field of view as he accesses the information.

Finally, Meade raises a claim differentiation argument in support of its interpretation of the claim language. Meade argues that the only distinction between independent claim 1 and some of the dependent claims, such as claims 2 and 3, is that the dependent claims require real-time display of textual information overlaid on the field of view. Thus, in Meade's view, claim 1 must include some means of presentation other than overlaying information on the field of view. Although we agree that claim 1 must be broader than the claims that depend on claim 1, we disagree that the broader scope of claim 1 includes Yamcon's side screen display. Rather, the additional breadth of claim 1 includes methods of simultaneous presentation to the user other than overlaying the information as text on the field of view. For example, claim 1 may include audio presentation of information, see '203 patent, col. 11, ll. 39-42 ("certain data from the database may be provided to the user aurally with known speech synthesis integrated-circuit chips in place of the visual display"), or overlaying textual information within the observer's vision but outside the field of view of the eyepiece. Particular embodiments are not at issue in this appeal, so we need not rule on whether they would fall within the scope of claim 1; it is sufficient simply to note that there are various embodiments that might fall within claim 1 but outside the dependent claims. Therefore, we reject Meade's claim differentiation argument.

B

Meade also challenges the district court's construction of the term "data." The crux of the dispute over that term is whether directional arrows that guide a user to a

selected object, when the device is operated in the find mode, constitute “data,” as that term is used in the ’203 patent. The directional arrows are overlaid on the field of view in Yamcon’s device so that they are “simultaneously presented to the user as the user observes the field of view.” Thus, if directional arrows constitute “data,” Yamcon’s device would meet the disputed limitation.

Meade argues that directional arrows constitute “data,” as broadly defined, and that the district court erred by concluding that the claims use the term in a narrower sense. The problem with Meade’s argument is that the claims and the specification make it clear that the claim is referring to a predetermined set of data that has been entered into the device’s database, not merely to any abstract bit of data in the broadest sense of the term.

The disputed limitation in claim 1 refers to “the provided data.” The antecedent basis in the claims for that “provided data” requires that it be taken from a database “containing data about the predetermined subject [i.e., celestial feature], the data being arranged in said database to be correlated with three-dimensional direction.” Claim 15 contains a similar antecedent basis for “data.” Thus, the word “data” in claims 1 and 15 refers to a preselected set of information that is entered into the database about predetermined celestial features and is then provided to the user during operation of the device.

The specification provides several examples of such data, including “such information as the equatorial coordinates of the [celestial] object, its apparent magnitude, and a label for the object.” ’203 patent, col. 5, ll. 65-67; see also col. 2, ll. 21-27 (discussing an embodiment that displays graphic representation and labels for

prominent astronomical features); col. 11, ll. 39-47 (noting that a potential data display might read “The bright star is Betelgeuse in the constellation Orion”). Thus, as used in claims 1 and 15, the word “data” refers to preselected facts about celestial features that can be stored in the device’s database and then presented to the user when the user views that particular celestial feature.

In Yamcon’s device, neither the directional arrows nor the information that they represent (i.e., the direction from the user’s current field of view to the relevant celestial feature) is part of any preselected set of data that is stored in the database. Rather, the directional arrows are purely the result of dynamic real-time calculations. Moreover, the claims require that the data be “about features of the subject visible in the field of view,” those “subjects” being “predetermined.” When Yamcon’s device displays directional arrows, the only information those arrows convey is that the targeted celestial object is in the current field of view or that the device must be moved in a particular direction to put the object in the field of view. It strains the ordinary meaning of the phrase to say that such information is information “about features of the subject visible in the field of view,” and it is contrary to the meaning of the phrase as used in the ’203 patent.

Meade points out that all of the information displayed on the screen of the patented device is in a sense the product of calculations, just as Yamcon’s directional arrows are the product of calculations. Thus, in order for the device to display the relevant educational fact (e.g., “This is Saturn, the sixth planet from the Sun”), the device must perform calculations to match the three-dimensional location of the field of view with the location of the relevant celestial object (e.g., Saturn). For that reason, Meade argues, it is inappropriate to exclude the arrows from the definition of “data” merely

because the arrows are the result of calculations. That argument, however, obscures a critical distinction. In the case of matching Saturn with the field of view, the calculations involve determining which data to pull from the database by ascertaining the direction the device is pointing. The data that is ultimately displayed is information that is stored in the database about the target celestial object. Yamcon's directional arrows, on the other hand, are purely the result of a real-time calculation. They are not data that is preselected and stored in the database, and they are not "about" the target celestial object in the sense referred to in the specification. Based on that distinction, the district court correctly ruled that the directional arrows in Yamcon's device are not "data" within the meaning of claims 1 or 15.

As an alternative ground for affirmance, Yamcon argues that its SkyScout device does not meet the claim requirement that the reference data that is presented to the user must be automatically updated to correspond to where the device is being pointed. The district court found it unnecessary to address that issue, and for the same reason we decline to do so. In addition, although the district court addressed and rejected Meade's argument of infringement under the doctrine of equivalents, Meade did not raise that argument in its opening brief, and we therefore treat that argument as waived. See SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1319 (Fed. Cir. 2006); Amoco Oil Co. v. United States, 234 F.3d 1374, 1377 (Fed. Cir. 2000).