

United States Court of Appeals for the Federal Circuit

2008-1500

ANASCAPE, LTD.,

Plaintiff-Appellee,

v.

NINTENDO OF AMERICA, INC.,

Defendant-Appellant.

Douglas A. Cawley, McKool Smith, P.C., of Dallas, Texas, argued for plaintiff-appellee. With him on the brief were David Sochia, Steven C. Callahan, and Anthony M. Garza.

William F. Lee, Wilmer Cutler Pickering Hale and Dorr LLP, of Boston, Massachusetts, argued for defendant-appellant. With him on the brief were Lauren B. Fletcher, Robert J. Gunther, Jr., Alexandra McTague, and Sadaf R. Abdullah, of New York, New York. Of counsel on the brief were Robert W. Faris, Joseph S. Presta, and Gordon P. Klancnik, Nixon & Vanderhye P.C., of Arlington, Virginia; and James S. Blank, Kay Scholer LLP, of New York, New York.

Appealed from: United States District Court for the Eastern District of Texas

Judge Ron Clark

United States Court of Appeals for the Federal Circuit

2008-1500

ANASCAPE, LTD.,

Plaintiff-Appellee,

v.

NINTENDO OF AMERICA INC.,

Defendant-Appellant.

Appeal from the United States District Court for the Eastern District of Texas in Case No. 9:06-CV-158, Judge Ron Clark

DECIDED: April 13, 2010

Before NEWMAN, GAJARSA, and DYK, Circuit Judges.

Opinion for the court filed by Circuit Judge Newman. Concurring Opinion filed by Circuit Judge GAJARSA.

NEWMAN, Circuit Judge.

Nintendo of America Inc. appeals the judgment of the United States District Court for the Eastern District of Texas, holding that certain Nintendo video game controllers infringed certain claims of U.S. Patent 6,906,700 (the '700 patent) owned by Anascape,

Ltd., and awarding damages.¹ After trial to a jury the district court denied duly made post-trial motions, enjoined further infringement, and stayed the injunction pending appeal. On Nintendo's appeal (Microsoft settled in the district court), the judgment is reversed.

DISCUSSION

The field of invention is hand-operated controllers for the movement of images on a computer screen or television display, particularly as used in video games. The controller is the tool by which human hands manipulate a graphic image, a procedure called "hand inputs." The hand inputs are implemented through handles such as joysticks or trackballs, whereby the hand actions of the human operator are sensed and translated electronically into corresponding linear and rotational movements that are shown in graphic display. As discussed in the patents in suit, hand inputs move images in six general directions that are called "degrees of freedom" (DOF) in the lexicon of this technology. Thus, the hand inputs may produce linear movement along three axes (forward/backward, left/right, or up/down), and rotational movement about the three linear axes (roll, pitch, or yaw).

The '700 patent was filed on November 16, 2000 as a continuation-in-part of the application that became U.S. Patent 6,222,525 (the '525 patent). The validity of the '700 patent claims in suit depends on whether these claims, as construed by the district court, are entitled to the filing date of the '525 patent, July 5, 1996. See 35 U.S.C. §120 ("An application for patent for an invention disclosed in the manner provided by the first

¹ Anascape, Ltd. v. Microsoft Corp., No. 9:06-CV-158, 2008 WL 160546 (E.D. Tex. Jan. 11, 2008) (claim construction); Anascape, Ltd. v. Nintendo of Am., Inc., No. 9:06-CV-158 (E.D. Tex. July 23, 2008) (final judgment).

paragraph of section 112 of this title in an application previously filed in the United States . . . shall have the same effect, as to such invention, as though filed on the date of the prior application"). In Reiffin v. Microsoft Corp., 214 F.3d 1342, 1345-46 (Fed. Cir. 2000), the court explained the need "to ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of art as described in the patent specification." This rationale applies to a specification whose filing date is needed to antedate prior art. See Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306, 1319-20 (Fed. Cir. 2003); Ralston Purina Co. v. Far-Mar-Co, Inc., 772 F.2d 1570, 1575 (Fed. Cir. 1985). Anascape has conceded that if not so entitled, the '700 patent claims are subject to invalidation based on the intervening prior art of a Sony "DualShock" controller sold in the United States in 1998 and described in a patent application of Goto published in 1998, and a Sony "DualShock 2" controller sold in the United States in October 2000. Anascape's response to this prior art is that the '700 patent claims are entitled to the July 5, 1996 filing date. The district court so found; this is the principal issue on this appeal.

I

To obtain the benefit of the filing date of a parent application, the claims of the later-filed application must be supported by the written description in the parent "in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought." Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572 (Fed. Cir. 1997). See generally Ariad Pharmaceuticals, Inc. v. Eli Lilly & Co., No. 2008-1248, 2010 WL 1007369 (Fed. Cir. Mar. 22, 2010). The issue turns on whether the specification of the '525 patent supports not only controllers having

a single input member that operates in six degrees of freedom, as described and claimed in the '525 patent, but also controllers having multiple input members that together operate in six degrees of freedom, as described and claimed in the '700 patent.

The district court observed in its claim construction ruling that in the '525 patent "[t]he patentee clearly expected the inventions to be used with a single input member (such as a joystick) that moved in 6 DOF to control an image appearing to move in three dimensions." Anascape, 2008 WL 160546, at *4. We agree that the '525 specification describes controllers having a single input member that is operable in six degrees of freedom. As originally filed, all of the claims of the '525 patent recited such a single input member.

Anascape argued, for the purpose of establishing the '525 filing date for the '700 claims, that the '525 specification also supports the '700 claims that are not limited to a single input member operable in six degrees of freedom. Nintendo disputed that position, arguing that the '525 specification is directed to only a single input member. Many passages in the '525 specification are to this effect. For example, the "Background of the Invention" states:

In the prior art there exist 6 DOF controllers of a type having a hand operable, single input member moveable in six degrees of freedom for axes control relative to a reference member of the controller. This type of controller having the 6 DOF operable input member outputs a signal(s) for each degree of freedom input, and it is this type of 6 DOF controller which is believed to be by far the most easily used for 3-D graphics control, and it is with this type of 6 DOF controller that the present invention is primarily concerned.

'525 patent col.1 l.61 – col.2 l.2. The "Summary of the Invention" section of the '525 specification states:

The controllers provide structuring for converting full six degrees of freedom physical input provided by a human hand on a hand operable single input member into representative outputs or signals useful either directly or indirectly for controlling or assisting in controlling graphic image displays.

Id. col.4 ll.50-55. The specification also states:

A primary object of the invention is to provide a 6DOF image controller (physical-to-electrical converter), which includes a single input member being hand operable relative to a reference member of the controller

Id. col.7 ll.50-54; id. col.7 ll.59-62 (6DOF controller “includes a single input member being hand operable relative to a reference member of the controller”). The Abstract states that the invention concerns “multiple-axes controllers comprised of a single input member operable in 6 DOF relative to a reference member.” See also id. col.5 ll.8-9 (“the input member accepts 6 DOF of hand input relative to the reference member”); id. col.8 l.4 (“6 DOF controller, which includes a single input member”); id. col.8 l.12 (“single input member”); id. col.8 l.19 (“single input member”).

Similarly, the drawings all show a single input member, in the form of a trackball or a joystick, capable of operating in six degrees of freedom. Id. col.7 ll.47-49 (“A 6DOF trackball-type embodiment is illustrated in FIGS. 1-10, and 6DOF joystick type embodiments are illustrated in FIGS. 13-36.”).

Anascape argues that Figures 1-6 of the '525 patent describe multiple input members operating in fewer than six degrees of freedom. This statement does not match the description in the patent. Figures 1-4 are described as a “trackball-type embodiment” of the hand operable 6DOF controller in which trackball 12 is “the hand operable single input member operable in full six degrees of freedom.” Id. col.11 ll.19-25. Several figures show a rotatable collet surrounding the trackball, and the

specification states that the collet provides the user with "the option of rotating about yaw via the trackball or the rotatable collet." Id. col.17 ll.18-19. The specification also states that the collet "does not bar" the control of yaw by the trackball, which is capable of operating in six degrees of freedom. See id. col.17 ll.14-19 ("When a rotatable collet is used, a sensor is used to detect rotation of collet 16 as described above, but this does not bar still having a sensor (encoder) in communication with trackball 12 for detecting rotation of the trackball about the yaw axis, and this would give the user the option of rotating about yaw via the trackball or the rotatable collet."). The specification does not state that the collet replaces any of the six degrees of freedom of the trackball.

In Figure 20 the controller includes a handle as well as signal input elements in the form of buttons. The inventor testified that the handle of Figure 20 operates as a single input member movable in six degrees of freedom. The inventor testified that the embodiments of Figures 4 and 6, which depict a trackball/collet combination, and Figure 9, which depicts a handle/button combination, all include a single input member operable in six degrees of freedom.

Nintendo counts over twenty explicit statements that the invention is directed to a single input member that is operable in six degrees of freedom. The '525 specification does not describe a controller with input members limited to fewer than six degrees of freedom. Anascape points to a sentence in the '525 patent which states that "[t]he input member of the joystick-type controller may be manipulatable or operable in up to 6 DOF." Id. col.7 ll.40-42. However, this is not a description of the '525 invention; it is a description of prior art joysticks as generally used in video games. The '525

specification consistently describes the joystick in the drawings as a "6DOF joystick type embodiment." Id. col.7 ll.47-49.

The '525 patent stresses the advantages of using a single input member operable in six degrees of freedom, and describes the use of multiple input members as having "significant disadvantages," discussing prior art U.S. Patent 5,298,919 to Chang:

[I]n Chang's controller, the lack of a hand operable single input member operable in six degrees of freedom has many significant disadvantages. Further, the Chang controller does not have a any [sic] input member capable of being manipulated in 6 DOF relative to any reference member of the controller, which yields additional significant disadvantages.

* * * *

The Chang controller does not have a single input member such as one ball or one handle which can be operated (causing representative electrical output) in six degrees of freedom. Nor can any one Chang input member be manipulated (moved) relative to a reference member on the controller in six degrees of freedom. Thus, the Chang device is functionally and structurally deficient.

'525 patent col.3 l.30 – col.4 l.30.

For a parent application to provide the filing date for claims of a continuing application, the description in the parent must meet the requirements of 35 U.S.C. §112, first paragraph, as to that claimed subject matter. Tronzo v. Biomet, Inc., 156 F.3d 1154, 1158 (Fed. Cir. 1998); see also, e.g., Fiers v. Revel, 984 F.2d 1164, 1169-70 (Fed. Cir. 1993) (entitlement to the benefit of an earlier-filed application date requires that the earlier application meets the requirements of §112). Anascape points to some of the issued claims of the '525 patent, which recite an "input member moveable on at least two axes," and argues that this adequately describes, for priority purposes, use of more than a single input member in order to obtain movement in six degrees of freedom. We need not decide the significance of the words "at least two," for, as

Nintendo points out, this text was not part of the specification and claims as filed in 1996, but was added to the claims by amendment in August 2000. See PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1306 (Fed. Cir. 2008) ("[T]o satisfy the written description requirement, 'the missing descriptive matter must necessarily be present in the [original] application's specification such that one skilled in the art would recognize such a disclosure.'" (quoting Tronzo, 156 F.3d at 1159) (alteration in original)). This text was not present in the original '525 specification, and cannot contribute written description support for the '700 claims as of the '525 filing date.

Claim 19 of the '700 patent is representative of the claims that were asserted against the Nintendo game products:

19. A hand operated controller comprising structure allowing hand inputs rotating a platform on two mutually perpendicular axes to be translated into electrical outputs by four unidirectional sensors to allow controlling objects and navigating a viewpoint, the controller including a tactile feedback means for providing vibration detectable by the user through the hand operating the controller;

a second element movable on two mutually perpendicular axes, said second element structured to activate two bi-directional proportional sensors providing outputs at least in part controlling objects and navigating a viewpoint;

a third element movable on two mutually perpendicular axes, said third element structured to activate two bi-directional proportional sensors providing outputs at least in part controlling objects and navigating a viewpoint;

a plurality of independent finger depressible buttons, each button associated with a button sensor, said button sensor outputs at least On/Off data to allow controlling of the objects.

The specification of the '700 patent describes controllers that are not limited to a single input member capable of movement in six degrees of freedom. In filing the application

that became the '700 patent, several changes were made in the '525 specification.² Nintendo points to the areas in which the applicant changed the text that had limited the controller to a single input member operable in six degrees of freedom. In the "Background of the Invention" and "Summary of the Invention" sections, every occurrence of "hand operable single input member" in the '525 specification was replaced with "hand operable input member(s)," e.g., '700 patent col.2 ll.22, or "at least one hand operable input member," e.g., id. col.2 ll.37-38.

At column 4, lines 47-49 the '525 specification states: "I have developed improved, low-cost hand operated 6DOF controllers" As changed, the '700 specification states at column 2, lines 14-20, "I have developed improved, low cost hand operated controllers, providing up to 6 degrees of freedom in preferred embodiments . . . while not restricted or required to be full six degrees of freedom" At column 5, lines 1-8 the '525 patent states that "the hand operable input member . . . accepts 6DOF of hand input." This is changed in the '700 patent at column 2, lines 37-44 to "at least one hand operable input member [in which] . . . the input member(s) accept 3D of hand input." Again at column 7, lines 50-53 the '525 patent states: "A primary object of the invention is to provide a 6DOF image controller . . . which includes a single input member being hand operable" As changed, the '700 patent at column 4, lines 34-37 states: "A primary object of the invention is to provide a 3D image controller . . . which includes at least one input member being hand operable" Nintendo points out that the applicant changed sixteen of the seventeen references to a "single input

² The '700 specification was designated, upon filing, as a continuation-in-part of the '525 application. Although the inventor later changed the designation to a "continuation," the designation given to a derivative application does not determine its legal status.

member" to reference "at least one input member." E.g., '700 patent col.4 ll.56, 64; id. col.5 l.6. The '700 specification also deleted all mention of the prior art Chang controller and its deficiencies.

Anascape states that these changes in the '700 specification and claims are not "new matter." That position is untenable, for the changes are extensive and substantive. A description can be broadened by removing limitations. The limitation to a single input member capable of movement in six degrees of freedom was removed, in filing the '700 application, and new claims were provided of commensurately broadened scope. This is classical new matter. See, e.g., Baldwin Graphic Systems, Inc. v. Siebert, Inc., 512 F.3d 1338, 1344 (Fed. Cir. 2008) ("the examiner rightly refused to allow the applicants to amend the specification to remove references to 'heat' as the way of sealing the sleeve," for the change "would have broadened the patent and introduced impermissible new matter" and rendered the reissue claims "invalid for lack of support in the initial disclosure").

Anascape argues that the subject matter described in the '525 specification simply is the preferred embodiment, and that the inventor did not disclaim the broader scope of the '700 claims. The district court observed that "nothing in the ['525] specification disclaims other variations." Anascape, 2008 WL 160546, at *6. However, the question is not whether the patentee in the '525 specification "disclaimed" the scope of the '700 patent; the question is whether the '525 specification sufficiently describes the later-claimed subject matter, as to entitle the '700 claims to the filing date of the '525 application. See Lucent Technologies, Inc. v. Gateway, Inc., 543 F.3d 710, 718-19

(Fed. Cir. 2008) (to claim priority based on the filing date of an earlier application, the earlier application must support the claims of the later-filed application).

A patentee is not deemed to disclaim every variant that it does not mention. However, neither is a patentee presumed to support variants that are not described. See Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1330 (Fed. Cir. 2003) (“The purpose of the written description requirement is to prevent an applicant from later asserting that he invented that which he did not; the applicant for a patent is therefore required to ‘recount his invention in such detail that his future claims can be determined to be encompassed within his original creation.’” (quoting Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1561 (Fed. Cir. 1991))). Each case must be viewed as it would be understood by a person of ordinary skill in the field of the invention.

Anascope argues that the testimony of its expert witness, Dr. Robert Howe, established its position that the '525 specification adequately described the subject matter of the '700 claims, at least sufficiently to support the jury verdict. Dr. Howe testified that “the ['525] patent is simply not limited to single input 6-degree-of-freedom controllers; and the claims which do not concern those are – find support in both the 1996 application and the '700 patent.” J.A. 4685. However, Dr. Howe’s conclusion is not supported by any evidence at all, and cannot override the objective content of these documents. See PowerOasis, 522 F.3d at 1307-08 (in determining the relationship between a later-claimed invention and an earlier application, it is helpful to consider the changes made in the later application).

Anascope also refers to the testimony of a Nintendo engineer, Mr. Kazunori Koshiishi, concerning Figure 2 of the '525 patent. Anascope states that Mr. Koshiishi

testified that a trackball-type embodiment in the '525 patent shows a combination of a 3DOF trackball and a 3DOF collet, as opposed to a single input member that is operable in six degrees of freedom. Nintendo points out that this is a misstatement of Mr. Koshiishi's testimony. He responded to questioning about hypothetical modifications of the trackball-type embodiment, such as controllers where either the trackball or collet (called a "cup" during questioning) is removed; for example:

Q. If you removed the cup from the controller depicted in Figure 2, you would not be able to sense movement on three linear axes; is that correct?

A. No, you wouldn't.

Q. But if you still had the trackball, you would still have a 3-degree-of-freedom controller because you could still sense rotational movement on three axes; is that correct?

A. Yes.

Q. So, if you remove the cup, instead of six separate outputs being sent to the CPU, there would only be three outputs sent to the CPU, one representing each axis of rotational movement of the trackball; is that correct?

A. Yes.

Q. Now, conversely, if you did not remove the cup but you did remove the trackball, then you would still have a 3-degree-of-freedom controller except it would be able to measure linear movement on three axes and not rotational movement on three axes; is that correct?

A. Yes.

J.A. 4532-33. This testimony on hypothetical modifications to the embodiment hypothetically separates the functions of the collet from the functions of the trackball, and is inconsistent with the disclosure of the specification, which states that the "trackball . . . is the hand operable single input member operable in full six degrees of

freedom." '525 patent col.11 ll.23-25. Indeed, the specification explicitly contemplates a version of the embodiment without a collet: "If a graspable collet is not used, then the exposed portion of trackball 12 is available for grasping with the fingers to apply force in any linear direction" Id. col.12 ll.54-56. Thus, the trackball is capable of operating in six degrees of freedom regardless of the presence of the collet.

Similarly, Anascape argues that the embodiment shown in Figures 5 and 6 of the '525 patent discloses multiple inputs that together operate in six degrees of freedom. This embodiment is substantially similar to the trackball-type embodiment of Figures 1 through 4, except that the collet is given the ability to rotate in order to control yaw motion. This difference, however, is immaterial, as the collet is merely a secondary means of yaw control. The trackball retains the ability to operate in all six degrees of freedom: "When a rotatable collet is used, . . . the trackball 12 input member may be interpretable on all six axes as previously described" Id. col.17 ll.14-21.

Thus, the description in the '525 specification is not reasonably read as describing a larger invention, of which the single input was only a preferred embodiment. See Honeywell Int'l, Inc. v. ITT Industries, Inc., 452 F.3d 1312, 1318 (Fed. Cir. 2006) ("Here, the written description uses language that leads us to the conclusion that a fuel filter is the only 'fuel injection system component' that the claims cover, and that a fuel filter was not merely discussed as a preferred embodiment."). Whether or not the inventor could have described the '525 invention more broadly, "[i]t is not sufficient for purposes of the written description requirement of §112 that the disclosure, when combined with the knowledge in the art, would lead one to speculate

as to modifications that the inventor might have envisioned, but failed to disclose.”
Lockwood, 107 F.3d at 1572.

We conclude that the only reasonable reading of the '525 specification is that it is directed to and describes only a controller having a single input member operable in six degrees of freedom. In contrast, the '700 specification and claims were enlarged to cover more than single input members operable in six degrees of freedom. The district court erred in ruling that this subject matter is adequately described in the '525 specification, for the statutory requirements are not met, on any reading of the '525 specification.

II

The district court construed the '700 claims as not limited to a controller with a single input member capable of moving in six degrees of freedom. This construction is necessary to the jury's verdict of infringement, for the accused Nintendo controllers do not have a single input member that moves in six degrees of freedom.³ We conclude that the district court correctly construed the claims of the '700 patent in light of the '700 specification. However, as we have discussed, the district court erred in its ruling that, as construed, the broadened scope of the '700 claims is entitled to the filing date of the '525 patent.

The jury found that the '700 claims are not invalid on the ground of anticipation or obviousness or written description requirements. These verdicts all require that the '700 claims are entitled to the filing date of the '525 patent, for Anascape has agreed that if

³ The parties stipulated that the district court's claim construction of the '525 patent precluded a finding of infringement of the '525 patent. Anascape does not appeal as to the '525 patent.

not so entitled the claims are invalid. We conclude that the district court erred in finding that the '525 specification contains descriptive text sufficient to support the '700 claims as construed, that is, claims that include multiple input members that do not operate in six degrees of freedom. Although the jury found by special verdict that the '700 claims are not invalid on written description grounds, the jury verdict form asked whether "the '700 patent fails to satisfy the written description requirement," not whether the '525 patent satisfies the written description requirement for the '700 claims.

Since the '700 claims are not entitled to the '525 filing date of July 5, 1996, the judgments of validity and infringement cannot stand, for Anascape conceded that the Sony prior art anticipates the '700 claims if not so entitled. Thus judgment as a matter of law is appropriate, for "a 'reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.'" Cambridge Toxicology Group, Inc. v. Exnicios, 495 F.3d 169, 179 (5th Cir. 2007) (quoting Fed. R. Civ. P. 50(a)(1)). The judgments of validity, infringement, and the award of damages must be reversed.

REVERSED