NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

2007-1196
(Serial No. 10/658,143)

IN RE PAUL LEW and JASON SCHIERS

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DECIDED: November 29, 2007

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Before NEWMAN, GAJARSA, and LINN, Circuit Judges.

GAJARSA, Circuit Judge.

Paul Lew and Jason Schiers (collectively "Lew") appeal the decision of the United States Patent and Trademark Office's Board of Patent Appeals and Interferences ("the Board" or "the PTO") sustaining a final rejection of claim 19 of patent application No. 10/658,143 (the '143 application"). Because we find that the Board's determination was supported by substantial evidence, we affirm.

## BACKGROUND

Lew's '143 application, as originally submitted, describes a "wheel hub with clutch," primarily intended for bicycles, which allows the wheel connected to the hub to "free wheel" when no torque is applied (e.g., the bicycler is not pedaling), but which nearly instantly engages when torque is applied (e.g., the bicycler is pedaling),

transferring an applied torque to the connected wheel. According to the original specification, this torque transfer is facilitated “through a multitude of ball bearings.”

Specifically, as seen in Figures 4, 6A, and 6B, the written description describes two sleeves—an outer or “gear spline” sleeve 42 (connected to the gears and pedals) and a center sleeve 41 (connected to the wheel)—and a hub clutch arranged between the two sleeves that has a ring section with pockets that contain a “plurality of ball bearings” 59.

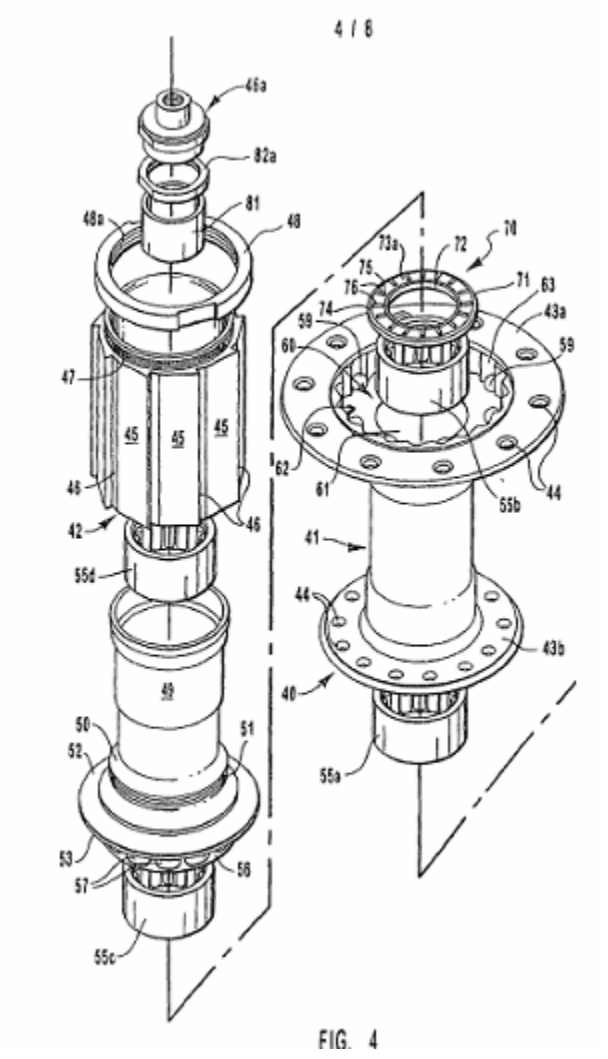


FIG. 4

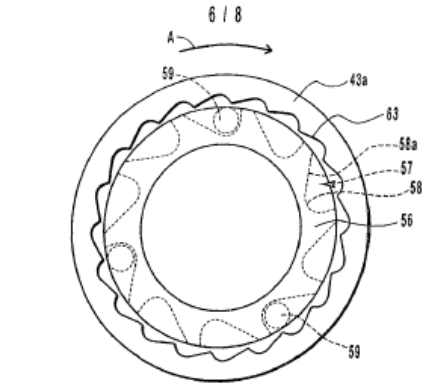


FIG. 6A

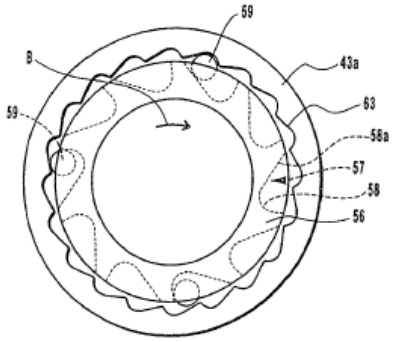


FIG. 6B

When no torque is being applied, the ball bearings sit in the forward section 58 of the gear spline sleeve's contoured pocket 57. In this state, there is no coupling between the gear spline sleeve and the center sleeve, and the wheel connected to the center sleeve can free wheel. When torque is applied, e.g., a person begins pedaling, ring 56 of the gear spline sleeve is turned in a clockwise direction. This causes "ball bearings 59 [to] travel outwardly along the track 58a" and engage ring step 63 on the center sleeve, locking the gear spline sleeve to the center sleeve. In this locked state, torque transfers from the gears being pedaled to the wheel of the bike. As soon as the pedaler stops pedaling, torque is no longer applied and ring 56 stops moving. This causes the ball bearings to roll back along 58a to the forward section 58 of the contoured pocket, disengaging ring step 63 and decoupling the gear spline sleeve from the center sleeve. This allows the wheel to resume freewheeling.

The '143 application originally contained 18 claims, each of which recites the use of ball bearings in the clutch. The PTO examiner rejected, on the basis of statutory double patenting, all 18 of the original claims, finding that they claimed the "same invention" as U.S Patent No. 6,644,452, issued to Lew after the '143 application had been filed.

Lew responded by (a) canceling all of the original claims and introducing a new claim 19, and (b) submitting a "substitute specification." The substitute specification was essentially identical to the prior specification, except that each use of the term "ball bearings" was replaced with "curved members," a term not previously used anywhere in the application, and references to "pockets" were replaced with "slots."

Similarly, claim 19 was substantively different from the canceled claims, at least as at issue here, only in that it substituted the term "curved members" for "ball bearings" and "slots" for "pockets." The claim reads as follows:

> A hub with clutch comprising:
>
> (a) a hub body including a first sleeve and a second sleeve;
> (b) the first sleeve includes an outer surface that includes a plurality of slots, wherein said slots are provided with a forward section, a tapered section, and an outwardly sloping surface extending from the forward section to the tapered section;
> (c) the second sleeve includes a wall that includes a plurality of steps; and
> (d) a plurality of curved members, wherein said curved members travel from the forward section along the outwardly sloping surface toward the tapered section, whereat the curved members contact the steps and transfer torque between the first sleeve and the second sleeve

Lew explained that purpose of the amendment was to "obviate" the statutory double patenting rejection.

The PTO examiner objected to the substitute written description and rejected the new claim on the grounds that, by substituting "curved members" for the originally disclosed "ball bearings," the amendments introduced new matter into the application that was not supported by the initial disclosure. Accordingly, the Examiner issued a final rejection of claim 19 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.[1] The Board affirmed, finding "no convincing evidence in the record that the limited disclosure in the specification of a ball bearing, without any indication that anything else could be used, would reasonably convey to an artisan that appellants had possession of the broader concept of any 'curved member.'"

This appeal followed.

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[1] In addition the Examiner rejected the claim under 35 U.S.C. § 102. The Board reversed this finding, however, so the issue is not before us on appeal.

## DISCUSSION

It is well established that "[w]hen the applicant adds a claim or otherwise amends his specification after the original filing date . . . the new claims or other added material must find support in the original specification." TurboCare Div. of Demag Delaval Turbomachinery Corp. v. General Elec. Co, 264 F.3d 1111, 1118 (Fed. Cir. 2001). While this requirement most directly stems from the prohibition in 35 U.S.C. § 132 against introducing new matter into the disclosure, we have also policed this requirement under the written description requirement of 35 U.S.C. § 112, first paragraph. Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306, 1319 (Fed. Cir. 2003) (explaining that "a rejection of an amended claim under § 132 is equivalent to a rejection under § 112, first paragraph" (quoting In re Rasmussen, 650 F.2d 1212, 1214 (CCPA 1976)); see also Chiron Corp. v. Genentech, Inc., 363 F.3d 1247, 1255 (Fed. Cir. 2004).

Thus, we have long explained that the written description requirement of § 112 requires the application to "convey with reasonable clarity to those skilled in the art that, as of the filing date sought, he or she was in possession of the invention." Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991); see also In re Wright, 866 F.2d 422, 424 (Fed. Cir. 1989) ("When the scope of a claim has been changed by amendment in such a way as to justify an assertion that it is directed to a different invention than was the original claim, it is proper to inquire whether the newly claimed subject matter was described in the patent application when filed as the invention of the applicant. That is the essence of the so-called 'description requirement' of § 112, first paragraph . . . ."). The claimed subject matter need not be described "in haec verba" in

the original specification in order to satisfy the written description requirement. In re Wright, 866 F.2d at 425. Rather, "the test . . . is whether a person of ordinary skill in the art would recognize that the applicant possessed what is claimed in the later filed application as of the filing date of the earlier filed application." Noelle v. Lederman, 355 F.3d 1343, 1348 (Fed. Cir. 2004). The same standards govern whether new matter has been added to the specification. See TurboCare, 264 F.3d at 1118.

Whether an amendment violates the written description requirement of 35 U.S.C. § 112 and the new matter prohibition of 35 U.S.C. § 132 are questions of fact. Vas-Cath Inc., 935 F.2d at 1563; Brooktree Corp. v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1574-75 (Fed. Cir. 1992). In appeals from the Board, the issue is reviewed under the substantial evidence standard. Noelle, 355 F.3d at 1348. "If the evidence in the record will support several reasonable but contradictory conclusions, we will not find the Board's decision unsupported by substantial evidence simply because the Board chose one conclusion over another plausible alternative." In re Jolley 308 F.3d 1317, 1320 (Fed. Cir. 2002).

Lew admits that "curved member" can refer both to ball bearings, which are spherical, and various differently shaped bearings, such as cylindrical roller bearings, and, therefore, that "curved member" is a broader term than "ball bearing." But Lew argues that because a "ball bearing" is inherently a curved object, he is now entitled to claim the entire broader category of "curved objects." Our case law offers no support for such a broad rule. While we have at times framed the new matter inquiry as whether "material added by amendment was inherently contained in the original application," such material is not inherent to the original specification for the purposes of § 132 and §

112 if that amendment would broaden the scope of the invention beyond that which is supported in the initial disclosure. See Schering Corp. v. Amgen, 222 F.3d 1347, 1352-53 (Fed. Cir. 2000).

Rather, the Board properly framed the question as whether Lew's disclosure of only "ball bearings"[2] is sufficient, in light of the initial disclosure, for a person of ordinary skill in the art to have determined that Lew was in possession, as of the initial filing date, of using any "curved member" in place of the ball bearings. See Noelle, 355 F.3d at 1348; TurboCare, 264 F.3d at 1118.

There is no language in the original written description that would suggest that using "ball bearings" was only one specific embodiment of Lew's invention. See Phillips v. AWH Corp., 415 F.3d 1303, 1323 (Fed. Cir. 2005) (en banc) (explaining that it will usually be clear from reading the written description whether "the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive.") To the contrary, each time "the invention" is described, including in the summary of the invention and the abstract, it is stated to include "ball bearings." See, e.g., App. at 4 ("[I]t is a principle object of the present invention to provide a hub clutch

[2] On appeal to this Court, Lew seems to argue that he disclosed in his original specification, not only "ball bearings" but multiple species of "curved members" including "roller bearings" and "ball surfaces." However, we decline to consider this argument as it was not presented to the Board. In re Watts, 354 F.3d 1362, 1367-68 (Fed. Cir. 2004). We also note that the only mention of "roller bearings" in the original specification was in the brief description of the drawings for Figure 6B and 6C, but the detailed descriptions of these figures clearly describe the figures as examples of spherical ball bearings being employed. See App. at 13 ("Figs 6A and 6B show the cavity between gear spline sleeve spaced pockets 57 and ring step 63 surface as accommodating three ball bearings 59. Whereas, FIG. 6C shows ten ball bearings 59 arranged one in each gear spline sleeve contoured pocket 57.").

bearing assembly that provides for a nearly instantaneous coupling of hub inner and annular sections across ball bearings . . . ."); App. at 4 ("[T]he hub of the invention facilitates torque transfer through a multitude of ball bearings that are each housed in contoured pockets . . . ."). This court has consistently viewed such language as "strong evidence" that the inventor intended his invention to be limited to embodiments containing such an element. See Scimed Life Sys., Inc. v. Advanced Cariovascular Sys., Inc., 242 F.3d 1337, 1343 (Fed. Cir. 2001).

Moreover, the original written description could be read as suggesting that the spherical nature of the ball bearings was important to the proper functioning of the invention. The written description discloses that a key improvement of the invention over the prior art is that there is less "scrubbing of the bearing surface" and that therefore the clutch will deteriorate less rapidly, because "[a]s the ball bearings . . . tend to roll in the contoured pockets during free-wheel the engaging surfaces of each of the ball bearings will vary between each engagement." At the very least, the spherical nature of the ball bearings would appear to maximize this ability to roll and engage different parts of the bearing surface.

Accordingly, substantial evidence supports the Board's determination that Lew's amendments to replace the term "ball bearing" with the broader term "curved member" were not supported by the initial disclosure, and, therefore, the examiner did not err in rejecting claim 19 under § 112, first paragraph. The decision is affirmed.