

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERNEST W. PLASSE

Appeal 2007-2614
Application 10/012,980
Technology Center 3600

Decided: March 18, 2008

Before TERRY J. OWENS, JENNIFER D. BAHR, and JOSEPH A.
FISCHETTI, *Administrative Patent Judges*.

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DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1-20. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

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This appeal arises from the Examiner's Final Rejection, mailed November 10, 2003. The Appellant filed an Appeal Brief in support of the appeal on June 14, 2006. An Examiner's Answer to the Appeal Brief was mailed on July, 17, 2006.

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

Appellant claims a thrust bearing which is said to respond to the need "...for a one-piece, combination thrust shaft flange and thrust plate design which would eliminate the difficulties and drawbacks associated..." with prior art thrust bearing structures (Specification 3:1-4).

Claim 1, reproduced below, is representative of the subject matter on appeal.

1. A rotating combination thrust plate and thrust shaft flange (10) comprising:
 - a generally cylindrical body portion (22) having a rotating base surface (24) and a lateral surface (23);
 - a frustoconical body portion (29); and
 - a bore (12) extending through said cylindrical body portion (22) and said frustoconical body portion (29), wherein said bore (12) has a first bore section (14) and a second bore section (16), said second bore section (16) being adjacent said rotating base surface (24) and having a smaller diameter than said first bore section (14), and said first and second bore sections (14 and 16) meeting at a junction (18) defining a lip (21).

THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Appellant's Admitted Prior Art (APA) Figure 1

The following rejections are before us for review.

1. Claims 1, 2, 4-8, 10-14, and 16-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Appellant's Admitted Prior Art (APA) in Figure 1.

2. Claims 3, 9, and 15 stand rejected under 35 U. S. C. § 103(a) over Appellant's APA in Figure 1.

ISSUE

The anticipation issue before us is whether Appellant has shown that the Examiner erred in rejecting claims 1, 2, 4-8, 10-14, and 16-20 under 35 U.S.C. § 102(b) as anticipated by APA Figure 1. This anticipation issue turns on whether APA Figure 1 expressly or inherently discloses a single component with both a generally cylindrical body portion and a frustoconical body portion.

The obviousness issue is whether Appellant has sustained its burden of showing that the Examiner erred in rejecting claims 3, 9, and 15 on appeal as being unpatentable under 35 U.S.C. § 103(a) over APA Figure 1 based on design choice.

FINDINGS OF FACT

1. The Examiner noted that

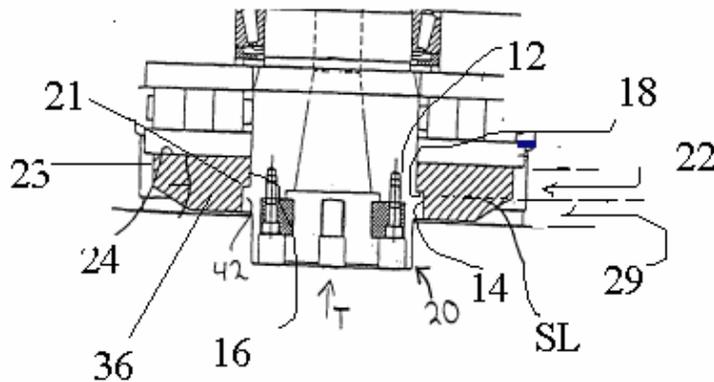
Prior art figure 1 shows a rotating combination thrust plate and thrust shaft flange 34,36 the rotating combination comprising: a generally cylindrical body portion 34 having a rotating base surface shown directly adjacent to element 26 and a lateral surface shown in the area of the lead line associated with element 34, a frustoconical body portion shown immediately above and to the right of the lead line associated with element number 36, and a bore extending through the cylindrical and frustoconical body portions, wherein the bore has a first bore section shown in the area of the lead line associated with element number 42 and a second bore section shown to the left of the first bore section, the second bore section being adjacent the rotating base surface and having a smaller diameter than the first bore section as shown, and the first and second bore sections meeting at a junction defining a lip shown in the area of the lead line associated with element number 42.

(Answer 3.)

2. We find that the Appellant's Admitted Prior Art (APA) Figure 1 (as annotated *infra* (FF 3)) discloses a component 36 having a generally cylindrical body portion (22) having a rotating base surface (24) and a lateral surface (23); a frustoconical body portion (29); and a bore (12) extending

through the cylindrical body portion (22) and the frustoconical body portion (29), wherein the bore (12) has a first bore section (14) and a second bore section (16), the second bore section (16) being adjacent the rotating base surface (24) and having a smaller diameter than the first bore section (14), and the first and second bore sections (14 and 16) meeting at a junction (18) defining a lip (21) wherein the phantom line SL (added in this Decision) delineates between the cylindrical body portion (22) and frustoconical portion (29).

3. Appellant's Admitted Prior Art Figure 1 is reproduced below and is annotated to show the thrust flange 36 annotated to include the various reference numbers discussed *supra* (FF 2).



Appellant's Admitted Prior Art Figure 1 is shown above depicting the elements of claim 1 on the thrust flange 36.

4. The Specification designates the rotating flange plate combination as a single element identified in Figure 2 as element 10 and describes the element 10 as replacing the prior art two piece conventional rotating thrust

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plate (36) and thrust flange (34) shown in FIG. 1 (Specification 5:2-6) in response to the need “...for a one-piece, combination thrust shaft flange and thrust plate design which would eliminate the difficulties and drawbacks associated...” with prior art thrust bearing structures (Specification 3:1-4).

PRINCIPLES OF LAW

We begin with the language of the claims. The general rule is that terms in the claim are to be given their ordinary and accustomed meaning. *Johnson Worldwide Assocs. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed. Cir. 1999). In the United States Patent and Trademark Office (USPTO), claims are construed giving their broadest reasonable interpretation.

[T]he Board is required to use a different standard for construing claims than that used by district courts. We have held that it is error for the Board to “appl[y] the mode of claim interpretation that is used by courts in litigation, when interpreting the claims of issued patents in connection with determinations of infringement and validity.” *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989); *accord In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997) (“It would be inconsistent with the role assigned to the PTO in issuing a patent to require it to interpret claims in the same manner as judges who, post-issuance, operate under the assumption the patent is valid.”). Instead, as we explained above, the PTO is obligated to give claims their broadest reasonable interpretation during examination.

In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1369 (Fed. Cir. 2004).

Although a patent applicant is entitled to be his or her own lexicographer of patent claim terms, in *ex parte* prosecution it must be

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within limits. *In re Corr*, 347 F.2d 578, 580 (CCPA 1965). The applicant must do so by placing such definitions in the specification with sufficient clarity to provide a person of ordinary skill in the art with clear and precise notice of the meaning that is to be construed. *See also In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994) (although an inventor is free to define the specific terms used to describe the invention, this must be done with reasonable clarity, deliberateness, and precision; where an inventor chooses to give terms uncommon meanings, the inventor must set out any uncommon definition in some manner within the patent disclosure so as to give one of ordinary skill in the art notice of the change).

If “the preamble merely state[s] a purpose or intended use and the remainder of the claim completely defines the invention independent of the preamble,” it does not constitute a limitation. *Lipscomb’s Walker on Patents*, 3rd Ed., Vol. 3, § 11.11 at 361 (citing *Marston v. J.C. Penney Co.*, 353 F.2d 976, 986 (4th Cir. 1965)); *see also, Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997); *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) (An element initially recited in the preamble, is thereafter fully incorporated into the body of the claim so as to breathe life and breath into it by setting forth the complete combination).

Anticipation

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir.

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1987). “When a claim covers several structures or compositions, either generically or as alternatives, the claim is deemed anticipated if any of the structures or compositions within the scope of the claim is known in the prior art.” *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001). “The identical invention must be shown in as complete detail as is contained in the . . . claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

Obviousness

A claimed invention is unpatentable if the differences between it and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a) (2000); *KSR Int’l v. Teleflex Inc.*, 127 S.Ct. 1727 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

In *Graham*, the Court held that that the obviousness analysis is bottomed on several basic factual inquiries: “[(1)] the scope and content of the prior art are to be determined; [(2)] differences between the prior art and the claims at issue are to be ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved.” 383 U.S. at 17. *ee also KSR Int’l v. Teleflex Inc.*, 127 S.Ct. at 1734. “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, at 1739.

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ANALYSIS

The rejection under 35 USC § 102(b)

Appellant argues claims 1, 2, 4-8, 10-14, and 16-20 as a group. We select claim 1 as the representative claim for this group, and the remaining independent claims 5 and 12 stand or fall with claim 1. 37 C.F.R. § 1.37(c)(1)(vii) (2007).

For the reasons that follow, we sustain the Examiner's rejection of claims 1, 2, 4-8, 10-14, and 16-20.

The Examiner rejected claims 1, 2, 4-8, 10-14, and 16-20 under 35 U.S.C. § 102(b) as anticipated by Applicant's Admitted Prior Art Figure 1. In so doing, the Examiner interpreted the term "rotating combination" of claim 1 to mean two separate elements which rotate as a combination, namely, the rotating thrust plate 34 and the rotating flange 36 illustrated in Prior Art Figure 1 (FF 1). The Examiner reasoned that "...the claim language [only] broadly requires a 'combination thrust plate and thrust shaft flange' and does not specifically recite that that [sic] the thrust plate and the thrust flange form a 'single component' as argued." (Answer 5-6.)

Appellant however argues this interpretation is improper because "[t]he invention claims a single rotating thrust plate comprised of several distinct *portions* or parts, which together create a self-supporting thrust bearing assembly that is adequate for use in extruders." (Appeal Br. 6.)

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We agree with the Appellant that claim 1 requires that the combination thrust plate and thrust shaft flange be a single component because the Specification makes this clear (FF 4). However, we find that even when claim 1 is construed to require the “combination thrust plate and thrust shaft flange” to be a single element, the structure of the thrust shaft flange 36 shown in Appellant’s Admitted Prior Art (APA) Figure 1 nevertheless includes all the limitations of claim 1 (FF 2,3).

We start with the preamble of claim 1. Although the preamble initially calls the article a “combination thrust plate and thrust shaft flange”, these terms are not again recited or referenced in the remainder of claim 1. Since, the body of claim 1 completely defines the invention independent of the preamble, the term “combination thrust plate and the thrust shaft flange” is thus interpreted merely as Appellant’s own lexicography for the name of the article being claimed. *See Marston at 986.*

With that said, we read the thrust shaft flange 36 shown in APA Figure 1 as a single component having two portions, namely, a generally cylindrical body portion (22) and a frustoconical body portion (29) delineated by our separation phantom line SL set at the intersection of the cylindrical wall of portion 22 and the frustoconical taper of portion 29 (FF 2 3). Further, as found *supra* (FF 2), all remaining structure required by claim 1 is present in the APA thrust shaft flange 36.

Appellant’s argument likewise fails to demonstrate error in the rejection of claims 2, 4, 6-8, 10, 11, 13, 14, 16-20 which Appellant has not

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argued separately from claims 1, 5 and 12. As such, we sustain the rejection of claims 1, 2, 4-8, 10-14, and 16-20 under 35 U.S.C. § 102(b) as anticipated by APA Figure 1.

The rejection under 35 USC § 103(a)

We also sustain the rejection of claims 3, 9, and 15 as being unpatentable under 35 U.S.C. § 103(a) over APA Figure 1.

Appellant challenges this rejection by: 1) restating the argument that claims 1, 2, 4-8, 10-14, and 16-20 are not anticipated, and thus claims 3, 9, and 15, which depend thereon, cannot be obvious under 35 U.S.C. § 103(a); and 2) arguing that “...there is no suggestion in the prior art of combining the thrust bearing assembly and an ancillary rotating thrust plate of Figure 1 to create a single, self-supporting thrust bearing for extrusion application” and “therefore, the angle at which the frustoconical surface extends from the lateral surface in the new, self-supporting thrust bearing of the present invention, is not an obvious modification of the prior art.” (Appeal Br. 7.)

Appellant’s arguments fail because: 1) as found *supra* (FF 2, 3), APA Figure 1 discloses all the structure recited in claim 1 and thus anticipates it; and 2) Appellant’s second argument is misplaced because the only modification advanced by the Examiner under 35 U.S.C. § 103(a) is “...to have modified Prior art figure 1 by having the frustoconical surface extend at an angle of about 230 degrees from the lateral surface...” (Final Rej. 4), and not to combine two members to create a one-piece thrust bearing as argued by Appellant. It is not apparent, and Appellant has not cogently

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explained, why the design considerations for the angle of the frustoconical surface of a combined one-piece thrust bearing assembly and ancillary rotating thrust plate would be any different from those for the angle of the frustoconical surface of a rotating thrust flange that is distinct from the thrust plate assembly. We thus sustain the rejection of dependent claims 3, 9 and 15.

CONCLUSIONS OF LAW

We conclude:

(1) We sustain the rejection of claims 1, 2, 4-8, 10-14, and 16- 20 as being unpatentable under 35 U.S.C. § 102(b) over APA Figure 1.

(2) We sustain the rejection of claims 3, 9, and 15 as being unpatentable under 35 U.S.C. § 103(a) over APA Figure 1.

DECISION

The decision of the Examiner to reject claims 1, 2, 4-8, 10-14, and 16-20 as being unpatentable under 35 U.S.C. § 102(b) over APA Figure 1 is affirmed.

The decision of the Examiner to reject claims 3, 9, and 15 as being unpatentable under 35 U.S.C. § 103(a) over APA Figure 1 is affirmed.

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The decision of the Examiner to reject claims 1-20 is affirmed but, because our rationale is substantially different from that used by the Examiner, we denominate this as new grounds of rejection under 37 C.F.R. § 41.50(b).

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 CFR § 41.50(b) also provides that the Appellant, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner
- (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED; 37 C.F.R. § 41.50(b)

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LEVY & GRANDINETTI
Suite 408
1725 K Street, N.W.
Washington, D.C. 20006-1419