UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT P. ARENTSEN, CHALARD BUNLUAPHOB,
PRASERT BURANATUM, DANIEL E. SCHAFFER, and
LISA E. HATHY-RILES

Appeal 2008-1953
Application 11/405,187
Technology Center 3700

Decided: January 16, 2009

Before LINDA E. HORNER, JOHN C. KERINS, and
STEVEN D.A. McCARTHY, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Robert P. Arentsen et al. (Appellants) seek review under 35 U.S.C. § 134 of the final rejection of claims 10-14, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We REVERSE.

THE INVENTION

The Appellants' claimed invention is directed to an isolation valve assembly including a quarter turn ball valve, an insert, and a flange. Spec. ¶ 0011. The flange is rotatably carried on the outer surface of the insert. *Id.* Claims 10 and 12, reproduced below, are representative of the subject matter on appeal.

> 10. A valve assembly comprising:
>
> a quarter turn ball valve including a valve housing having inlet and outlet ports;
>
> an insert having a body member including an exterior surface and an internal flow channel, one end of the insert being coupled to the valve housing so that the internal flow channel communicates with one of the ports, a lip formed on the free end of the body member, the lip being spaced from the valve housing when the insert is assembled to the valve housing;
>
> a flange carried on the exterior surface of the insert between the lip and the valve housing, the flange being freely rotatable relative to the insert and the valve housing, the axial thickness of the flange being less than the axial length of the space between the lip and the valve housing, and fastener holes formed in the flange for receiving fasteners that secure the valve assembly in a fluid system.

12. A valve assembly comprising:

a quarter turn ball valve mounted in a valve housing formed with inlet and outlet ports;

an insert including a body member having an exterior surface and an internal axial flow channel, one end of said body member being fixed to the valve housing so that the exterior surface extends axially from the valve housing and the internal axial flow channel communicates with one of the ports, a lip formed on the free end of the body member and spaced from the valve housing by the exterior surface of the insert;

a flange having central opening formed therein of a size and shape complementary to the exterior surface of the insert so that the flange is freely rotatable on the exterior surface of the insert, the axial thickness of the flange being less than the distance between the lip and the valve housing.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Keller III ("Keller")	US 3,241,810	Mar. 22, 1966
Rocheleau	US 2002/0162986 A1	Nov. 7, 2002

The Examiner made the following rejections which are at issue in this appeal:

1. Claims 10-14 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

2. Claims 10, 12, and 13 are rejected under 35 U.S.C. § 102(e) as anticipated by Rocheleau.
3. Claims 11 and 14 are rejected under 35 U.S.C. § 103(a) as unpatentable over Rocheleau and Keller.[1]

ISSUES

The Examiner determined that no support exists in the originally-filed Specification for the claim limitation that the flange is freely rotatable relative to the insert and the valve housing. More specifically, the Examiner found that there is no support in the originally-filed Specification for a flange that can rotate freely *after* assembly. Ans. 4. The Appellants contend that the originally-filed Drawings, Specification, and Claims describe a "valve assembly" having a "rotatable flange." App. Br. 6.

The first issue presented by this appeal is:

Have the Appellants shown the Examiner erred in determining that the originally-filed Specification lacks sufficient written descriptive support for a flange that can rotate freely after assembly?

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[1] The Examiner, for the first time in the Answer, rejected claims 11 and 14 under 35 U.S.C. § 103(a) as unpatentable over Rocheleau alone. Ans. 6. The Appellants correctly noted that this rejection was not included in the Final Rejection from which this Appeal is taken. Reply Br. 1. Further, the Examiner has not followed the proper procedure for including this rejection as a New Ground of Rejection. *See* MPEP § 1207.03(I). As such, the Examiner has not properly rejected claims 11 and 14 under 35 U.S.C. § 103(a) as unpatentable over Rocheleau alone, and such a rejection is not before us in this Appeal.

The Examiner found that Rocheleau discloses the claimed valve assembly. Ans. 4-5. The Appellants argue that Rocheleau does not disclose the claimed relationship between the thickness of the flange element and the distance between the lip and the valve housing. App. Br. 11.

The second issue presented by this appeal is:

Have the Appellants shown the Examiner erred in finding that Rocheleau discloses a flange having an axial thickness less than the axial length of the space between the lip and the valve housing?

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. The customary meaning of "assembly," as a noun, is a collection of parts fit together into a complete machine, structure, or unit. App. Br. 6 (citing *Merriam-Webster's Collegiate Dictionary*, Eleventh Edition (First Printing 2003)).
2. The Appellants' Specification describes in the Background of the Invention:

> Mating flanges are commonly used to couple isolation valves to the system components. In order to couple the component to the isolation valves, the bolt holes in the mating flanges must be matched up accurately. This may be difficult in tight spaces with heavy, cumbersome components.

Spec. 2:¶ 0004.

3. Figure 1B of the Appellants' Specification shows a perspective view of an isolation valve assembly in an assembled condition. Spec. 4:¶ 0015.
4. The Appellants' Specification describes that the valve assembly of Figure 1B includes a valve 98, insert 102, and rotatable flange 106. Spec. 5:¶ 0024.
5. The Appellants' Specification describes that the diameter of a central hole 115 formed in rotatable flange 106 is such that it snugly, but rotatably fits on the exterior of the insert 102. Spec. 6:¶ 0029.
6. The Appellants' Specification describes that the insert 102 includes a lip 104 that prevents "rotatable flange 106" from being removed from the assembled valve assembly. Spec. 7:¶ 0029.
7. Rocheleau discloses that the flange element 28 is installed by threading member 16 into female threads 17 in valve body 10. Rocheleau, p. 2, ¶ 0016, col. 1, ll. 12-14.
8. It is not clear from the disclosure of Rocheleau whether the flange element 28 has an axial thickness less than the space formed between the threading member 16 and the valve body 10 when the threading member 16 is inserted into the valve body 10.

PRINCIPLES OF LAW

Claim Construction

During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the specification. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969); *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

Written Description

The purpose of the written description requirement is to ensure that an application conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed. *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). The possession test alone, however, is not always sufficient to meet the written description requirement. *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 323 F.3d 956, 969 (Fed. Cir. 2002). Rather, "the written description requirement is satisfied by the patentee's disclosure of 'such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention.'" *Id.* (quoting *Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)). 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 422, 425 (Fed. Cir. 1989).

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. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

ANALYSIS

Claim Construction

Independent claims 10 and 12 recite a "valve assembly." The word "assembly" is used in these claims as a noun. The customary meaning of "assembly," as a noun, is a collection of parts fit together into a complete machine, structure, or unit (Fact 1). Claim 10 recites that one end of an insert is coupled to a valve housing, and a flange is freely rotatable relative to the insert and the valve housing. Claim 10 further recites that a lip formed on the free end of a body member of the insert is spaced from the valve housing "when the insert is assembled to the valve housing." Claim 12 similarly recites one end of a body member of an insert being fixed to a valve housing, and a flange being freely rotatable on an exterior surface of the insert. Thus, both claims recite the parts of the valve assembly as they are disposed relative to one another once the valve assembly has been assembled.

Written Description Rejection

The Appellants' Specification adequately describes the flange being freely rotatable on an exterior surface of the insert after assembly. Thus, the Appellants' Specification sufficiently demonstrates that the Appellants were in possession of this claim element at the time of filing of the present

application.[2] In particular, the Appellants' Specification describes that the problem to be solved was to find a way to easily match up the bolt holes in the mating flanges used to couple an isolation valve to system components (Fact 2). The Specification further depicts an assembled isolation valve assembly that is described as containing a rotatable flange that rotatably fits on the exterior of the valve assembly insert (Facts 3-5). The Appellants' Specification further describes that the insert includes a lip to retain the rotatable flange on the assembled valve assembly, thereby implying that the central hole in the flange is large enough to allow the flange to be removed from the insert, and thus freely rotate about the exterior surface of the insert, but for the lip (Fact 6). Thus, a person of ordinary skill in the art would recognize that the Appellants were in possession of an isolation valve assembly having a flange freely rotatable upon an exterior of an insert after assembly of the valve assembly as of the filing date of the present application. As such, we cannot sustain the Examiner's rejection of claims 10-14 under 35 U.S.C. § 112, first paragraph, for lack of sufficient written description.

[2] Although the Appellants presented arguments in the Brief that the argued limitation is supported by the disclosure of the grandparent application 10/337,498, we see no need to decide whether sufficient support existed in the grandparent application for the issues now before us. The issue of whether the claims are entitled to benefit of priority from the grandparent filing date is not presented in this appeal.

Anticipation Rejection

Independent claims 10 and 12 recite "the axial thickness of the flange being less than the axial length of the space between the lip and the valve housing."

The Examiner found that the disclosure in Rocheleau meets the claimed axial thickness limitation when "taking a point on the valve housing farthest from the lip." Ans. 5. The Examiner explained that "Appellant has not positively recited at which end or where on the housing the space is between." Ans. 8. The Examiner's broad reading of the claim language is unreasonable in light of the language of the claims and the description provided in the Specification.

The claims recite that the lip is "spaced from the valve housing when the insert is assembled to the valve housing" (claim 10) and is "spaced from the valve housing by the exterior surface of the insert" (claim 12). The claims then refer to the "space between the lip and the valve housing." In the context of the claim, this "space between the lip and the valve housing" refers to the gap formed between the valve housing and the lip when the insert is assembled to the valve housing. This understanding of the claimed "space" comports with the valve assembly depicted in Figures 1A and 1B, which show the axial thickness of the flange being less than the space between the interior surface of the lip 104 and the interior surface of the valve body 100.

It is not clear from the disclosure of Rocheleau whether the flange element 28 has an axial thickness less than the space formed between the

threading member 16 and the valve body 10 when the threading member 16 is inserted into the valve body 10 (Facts 7-8). As such, we cannot sustain the Examiner's rejection of claims 10, 12, and 13 under 35 U.S.C. § 102(e) as anticipated by Rocheleau.

Obviousness Rejection

The Examiner rejected claims 11 and 14 under 35 U.S.C. § 103(a) as unpatentable over Rocheleau and Keller. Claims 11 and 14 depend from claims 10 and 12, respectively. The Examiner relied on Rocheleau for teaching the claimed axial thickness of the flange and relied on Keller for teaching the use of a polygonal cross-section to accommodate a tool coupling the insert to the valve body. Ans. 6. The Examiner failed to provide reasoning as to why one having ordinary skill in the art would have been led to modify the valve assembly of Rocheleau so that the flange has an axial thickness less than the space formed between the threading member and the valve body after assembly. Thus, the Examiner has failed to set forth a prima facie case of obviousness of claims 11 and 14. As such, we cannot sustain the Examiner's rejection of claims 11 and 14 under 35 U.S.C. § 103(a) as unpatentable over Rocheleau and Keller.

CONCLUSIONS

The Appellants have shown the Examiner erred in determining that the originally-filed Specification lacks sufficient written descriptive support for a flange that can rotate freely after assembly. The Appellants have also

shown the Examiner erred in finding that Rocheleau discloses a flange having an axial thickness less than the axial length of the space between the lip and the valve housing.

DECISION

The decision of the Examiner to reject claims 10-14 is REVERSED.

REVERSED

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RATNERPRESTIA
P.O. BOX 980
VALLEY FORGE PA 19482