

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT J. BROWN, WILLIAM J. MABERY,
HAROLD T. GENTRY and GERALD P. McDERMOTT

Appeal No. 97-2602
Application 08/422,795¹

ON BRIEF

Before COHEN, PATE and McQUADE, Administrative Patent Judges.

McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Robert J. Brown et al. appeal from the final rejection of claims 1 through 8, all of the claims pending in the application.

¹ Application for patent filed April 17, 1995.

The invention relates to “high performance butterfly valves wherein the pivotable disk which is rotated to open and close the valve has a partially beveled outer periphery” (specification, page 1). Claim 1 is illustrative and reads as follows:

1. A high performance butterfly valve comprising:

a valve body having a substantially circular bore, said bore being adapted for the fluid flow through said bore and having a centerline through said bore;

a disk adapted for movement between an open position thereby allowing fluid flow through said circular bore and a closed position wherein fluid flow through said circular bore is restricted, said disk having the shape of a diagonal cross-section of a round rod and having an outer face and an inner face, said outer face having a peripheral edge, at least a portion of the circumference of said peripheral edge being notched, said inner face being adapted for mounting said disk in said circular bore, said disk having a centerline corresponding to the centerline of said bore;

an annular valve seat mounted in said valve body thereby providing a sealing surface extending into said circular bore for sealing said disk when said disk is in a closed position; and,

a shaft for mounting said disk in said circular bore and for rotating said disk between open and closed positions, said shaft having a centerline corresponding to the center of rotation of said disk, said centerline of said shaft being offset from said centerline of said bore and said disk.

The reference relied upon by the examiner as evidence of anticipation and obviousness is:

Miyairi

5,158,265

OCT. 27, 1992

Claims 1 through 8 stand rejected under both the first and second paragraphs of 35 U.S.C. § 112. In addition, claims 1, 2 and 5 through 8 stand rejected under 35

U.S.C. § 102(b) as being anticipated by Miyairi, and claims 3 and 4 stand rejected under 35 U.S.C. § 103 as being unpatentable over Miyairi.

Reference is made to the appellants' main and reply briefs (Paper Nos. 8 and 11) and to the examiner's final rejection and main and supplemental answers (Paper Nos. 5, 10 and 13) for the respective positions of the appellants and the examiner with regard to the merits of these rejections.

The examiner's explanation of the 35 U.S.C. § 112, first paragraph, rejection indicates that it is based on an alleged failure of the appellants' specification to comply with the enablement requirement of this section of the statute. The dispositive issue with regard to enablement is whether the appellants' disclosure, considering the level of ordinary skill in the art as of the date of the appellants' application, would have enabled a person of such skill to make and use the appellants' invention without undue experimentation. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563-64 (CCPA 1982).

In essence, the examiner contends that the appellants' disclosure is non-enabling because the description therein of the valve disk element of the claimed invention as being a perpendicular angle transported disk that appears to be the diagonal cross-section of a round rod (see, for example, specification pages 2, 3 and 5) is unclear. The appellants, on the other hand, submit that a person of ordinary skill in the art would have readily

understood this description of the valve disk, particularly when considered in light of prior U.S. Patent Nos. 4,037,819 and 4,058,290, both of which are discussed in the appellants' specification.

Although the appellants' disclosure does not itself define what a perpendicular angle transported disk is, the discussions of angle transported valve disks in the U.S. patents cited by the appellants make the meaning reasonably clear. In this regard, the examiner's conclusion that "Appellants use the term 'angle transported' valve to mean a rotary valve" (main answer, page 4) is way off the mark and is indicative of a fundamental misunderstanding of the cited patents. The additional description of the disk as appearing to be the diagonal cross-section of a round rod is self-explanatory and reasonably clear in defining the particular shape of the perpendicular angle transported disk, i.e., a disk having parallel elliptical faces and parallel opposing edges which are at an oblique angle to a line perpendicular to the elliptical faces. The examiner's concern that the drawings may be somewhat ambiguous in showing this shape involves, at most, relatively minor drawing informalities. While any such informalities would certainly be deserving of appropriate correction, they have no meaningful bearing on the enablement issue presented in this appeal.

Thus, the examiner's determination that the appellants' disclosure of the valve disk would not have enabled a person of ordinary skill in the art to make and use the claimed

invention without undue experimentation is not well founded. Accordingly, we

shall not sustain the standing 35 U.S.C. § 112, first paragraph, rejection of claims 1 through 8.

The 35 U.S.C. § 112, second paragraph, rejection of claims 1 through 8 rests on the examiner's conclusion that independent claims 1 and 6, and claims 2 through 5, 7 and 8 which depend therefrom, are rendered indefinite by the recitations in claims 1 and 6 that the disk or disk portion has the shape of a diagonal cross-section of a round rod. For the reasons discussed above, however, the examiner's concerns about the clarity of this definition of the shape of the disk or disk portion are unfounded.

Accordingly, we shall not sustain the standing 35 U.S.C. § 112, second paragraph, rejection of claims 1 through 8.

Finally, we shall not sustain the standing 35 U.S.C. § 102(b) rejection of claims 1, 2 and 5 through 8 as being anticipated by Miyairi or the standing 35 U.S.C. § 103 rejection of claims 3 and 4 as being unpatentable over Miyairi.

As pointed out above, independent claims 1 and 6 require a butterfly valve disk or disk portion having the shape of a diagonal cross-section of a round rod. In short, Miyairi's disclosure of butterfly valve disk 3, in all its various embodiments, simply does not teach, and would not have suggested, a butterfly valve disk having this shape.

Appeal No. 97-2602
Application 08/422,795

In summary and for the above reasons, the decision of the examiner to reject claims 1 through 8 is reversed.

REVERSED

IRWIN CHARLES COHEN))
Administrative Patent Judge))
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)) BOARD OF PATENT
WILLIAM F.PATE, III))
Administrative Patent Judge)) APPEALS AND
))
)) INTERFERENCES
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JOHN P. McQUADE))
Administrative Patent Judge))

Appeal No. 97-2602
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JPM/pgg

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