

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MASAHIRO SATOU

Appeal No. 2000-1472
Application No. 08/855,104

HEARD: February 13, 2001

Before FRANKFORT, GONZALES, and LAZARUS, Administrative Patent Judges.

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1 through 5, which are all of the claims pending in this application.¹

¹ Claim 1 was amended subsequent to the final rejection. See Paper No. 8. While the examiner has approved entry of the

Appeal No. 2000-1472
Application No. 08/855,104

We REVERSE.

The appellant's invention is directed to a variable rate, hydraulic shock absorber. See specification, p. 1. A copy of the claims under appeal is set forth in the appendix to the appellant's brief (Paper No. 14).

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Ivers et al. (Ivers)	4,972,929	Nov. 27, 1990
Axthammer (Published British application)	2,157,808	Oct. 30, 1985

Additionally, the examiner relies on the admitted prior art (APA) illustrated in Figure 2 of the appellant's drawings.

Claims 1 through 4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Axthammer.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Axthammer in view of Ivers or the APA.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (Paper No. 15) for

amendment after final rejection, we note that this amendment has not been clerically entered.

Appeal No. 2000-1472
Application No. 08/855,104

the examiner's complete reasoning in support of the rejections, and to the brief for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

The § 102(b) rejection

We will not sustain the 35 U.S.C. § 102(b) rejection of claims 1 through 4 based on Axthammer.

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. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2

Appeal No. 2000-1472
Application No. 08/855,104

USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827
(1987).

With reference to the embodiment illustrated in the appellant's Figures 3 through 5, independent claim 1 requires a piston 26 dividing a cylinder 22 into first and second fluid chambers 27 and 28, a first and second series of apertures 42 and 45 extending through the piston from one fluid chamber to the other, and **a first plate type valve 43 for controlling the flow through the first series of apertures** and **a second plate type valve 46 for controlling the flow through the second series of apertures**, each of the plate type valves having a plurality of separate plates in stacked abutting relation to the respective series of apertures on opposite sides of the piston and to each other and biased by their interaction to positions **preventing flow through the respective series of apertures**, at least one of the plate type valves comprising a shim 49 interposed between the plates for controlling the preload at which the one plate type valve **opens to permit flow through the respective series of apertures**, the shim being an annular member having an outer diameter that is not greater

Appeal No. 2000-1472
Application No. 08/855,104

than the outer peripheral edges **of the series of apertures with which it is associated.**

Before addressing the examiner's rejections based upon prior art, it is an essential prerequisite that the claimed subject matter be fully understood. Analysis of whether a claim is patentable over the prior art under 35 U.S.C. §§ 102 and 103 begins with a determination of the scope of the claim. The properly interpreted claim must then be compared with the prior art. In determination of the scope of the claim "resort must be had in the first instance to the words of the claim" and words "'will be given their ordinary and accustomed meaning, unless it appears that the inventor used them differently.'" Envirotech Corp. v. Al George, Inc., 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984). It is equally "fundamental that claims are to be construed in the light of the specification and both are to be read with a view to ascertaining the invention." United States v. Adams, 383 U.S. 39, 49, 148 USPQ 479, 482 (1966). Accordingly, we will initially direct our attention to the appellant's claim 1,

Appeal No. 2000-1472
Application No. 08/855,104

which is the only independent claim on appeal, to derive an understanding of the scope and content thereof.

According to the words of the claim, a valve is "associated" with a particular series of apertures only if it controls the flow of fluid through that particular series of apertures and in order to control the flow through the series of apertures the valve must be capable of preventing flow until it opens. Thus, we understand the language "preventing flow through the respective series of apertures" as meaning that no fluid passes through the series of apertures when the valve associated with that series of apertures is in abutting relation to the apertures. This interpretation is consistent with the specification which teaches that the "valve plates 43 are held in abutment with the piston 26" and are illustrated as completely closing the apertures 42 and that "the valve element 43 is free of the end of the apertures 45 so that it will not affect the flow therethrough." See specification p. 5.

Our interpretation is also consistent with the appellant's argument on page 3 of the brief and the argument

Appeal No. 2000-1472
Application No. 08/855,104

made by the appellant's counsel at the telephonic oral hearing held on February 13, 2001, to the effect that to control the flow through the apertures in the piston, the valve must completely close the apertures.

Turning now to the merits of the § 102 rejection of claims 1 through 4, at page 3 through 5 of the answer, the examiner determined that both Figures 2 and 3 of Axthammer disclose each and every element of appealed claim 1. With reference to Figure 2, the examiner describes the reference as teaching a piston 118 dividing a cylinder 110 into first and second fluid chambers 12a and 12b, a first and second series of apertures 120 and 122 extending through the piston from one fluid chamber to the other, a first plate type valve (shown by plates 124b1, 124b2, 124b3, 124a, 124c1 and 124c2) for controlling the flow through the first series of apertures and a second plate type valve (shown in Fig. 2 located above annular channel 146) for controlling the flow through the second series of apertures, each of the plate type valves being biased to positions preventing flow through the respective series of apertures, and at least one of the plate

Appeal No. 2000-1472
Application No. 08/855,104

type valves including a shim (non-planar valve plate 124a). As to the language in claim 1 describing the shim as an annular member having an outer diameter that is not greater than the outer peripheral edges of the series of apertures with which it is associated, the examiner notes that "shim" 124a does not extend beyond the left most portion of aperture 122.

With reference to Figure 3, the examiner describes Axthammer as disclosing a piston 218 dividing a cylinder 210 into first and second fluid chambers 12a and 12b, a first and second series of apertures 220 and 222 extending through the piston from one fluid chamber to the other, a first plate type valve (shown by plates 224b1, 224b2, 224a, 224c1, 224c2 and 224c3) for controlling the flow through the first and second series of apertures and a second plate type valve (shown in Fig. 3 located above apertures 220 and 222) for controlling the flow through the first and second series of apertures, at least one of the plate type valves comprising a shim 224a interposed between the plates for controlling the preload at which the one plate type valve opens to permit flow through

Appeal No. 2000-1472
Application No. 08/855,104

the respective series of apertures, the shim being an annular member having an outer diameter that is not greater than the outer peripheral edges of the series of apertures with which it is associated. As to the language of claim 1 requiring that each of the plate type valves be biased to positions preventing flow through the respective series of apertures, the examiner determined that the language "preventing flow through the respective series of apertures" merely connotes that the flow through the apertures is hindered to some extent and, thus, the second plate type valve (shown in Fig. 3 located above apertures 220 and 222) does "prevent" flow through the apertures 220 and 222. See answer, p. 7.

Considering first the rejection based on Figure 2 of Axthammer, we find no evidence supporting the examiner's determination that "shim" 124a is "associated" with aperture 122 (see answer, p. 8) as required by claim 1. A valve is "associated" with a particular series of apertures only if it controls the flow of fluid through that particular series of apertures, supra. We find no teaching in Axthammer that the plates 124b1, 124b2, 124b3, 124a, 124c1 and 124c2 control the

Appeal No. 2000-1472
Application No. 08/855,104

flow of fluid through the aperture 122. Thus, the fact that the "shim" 124a is shorter than the outer edge of aperture 122 is of no moment. Rather, we agree with the appellant's argument (brief, p. 3) that the plates 124b1, 124b2, 124b3, 124a, 124c1 and 124c2 are solely associated with aperture 120 (i.e., the valve is biased to prevent flow through the aperture 120 and opens to permit flow through the aperture 120) and that the shim element 124a is disposed radially outwardly of the aperture 120. Hence, the claim does not read on the embodiment shown in Figure 2 of Axthammer.

As to the rejection based on Figure 3 of Axthammer, we find no evidence supporting the examiner's determination that "shim" 224a is "associated" with aperture 222 (see answer, p. 8) as required by claim 1. Once again, a valve is "associated" with a particular series of apertures only if it controls the flow of fluid through that particular series of apertures, i.e., the valve must be capable of preventing flow, supra. We find no teaching in Axthammer that the plates 224b1, 224b2, 224a, 224c1, 224c2 and 224c3 are capable of preventing the flow of fluid through the aperture 222. Thus,

Appeal No. 2000-1472
Application No. 08/855,104

the fact that the "shim" 224a is shorter than the outer edge of aperture 222 is of no moment. Hence, the claim does not read on the embodiment shown in Figure 3 of Axthammer.

In view of the above, we will not sustain the rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by Axthammer.

Claims 2 through 4 are dependent on claim 1 and contain all of the limitations of that claim. Therefore, we will also not sustain the rejection of claims 2 through 4 under 35 U.S.C.

§ 102(b) as being anticipated by Axthammer.

The § 103(a) rejection

Since neither Ivers nor the APA cures the above noted deficiencies of Axthammer with respect to the subject matter recited in independent claim 1, we also will not sustain the standing 35 U.S.C. § 103(a) rejection of dependent claim 5.

CONCLUSION

In summary, the examiner's decision to reject claims 1 through 4 under 35 U.S.C. § 102 and claim 5 under 35 U.S.C. § 103 is reversed.

Appeal No. 2000-1472
Application No. 08/855,104

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED

CHARLES E. FRANKFORT)	
Administrative Patent Judge)	
)	
)	
)	
)	
JOHN F. GONZALES)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
RICHARD B. LAZARUS)	

Appeal No. 2000-1472
Application No. 08/855,104

Administrative Patent Judge)

JG/RWK

ERNEST A. BEUTLER
ATTORNEY AT LAW
A PROFESSIONAL CORPORATION
500 NEWPORT CENTER DRIVE
SUITE 945
NEWPORT BEACH, CA 92660