Art Unit 3103

Paper No. 13

Appeal No. 93-2635

PSB

ON BRIEF

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte Ludwig Stadelmann

Application for Patent filed September 20, 1991, Serial No. 762,976. Frictional Damper.

Norman J. Latker et al. for Appellant.

Primary Examiner - George E. A. Halvosa.

Before Parsons, Frankfort and Staab, Examiners-in-Chief.

Frankfort, Examiner-in-Chief.

This is a decision on appeal from the final rejection of claims 1 and 2 and from the examiner's refusal to allow claims 4, 5 and 8 through 12, which were substituted in part for finally rejected claims 3, 6 and 7 by an amendment filed on November 9, 1992. Upon reconsideration the examiner has allowed claims 8, 9, 10 and 12, hence the appeal as to these claims is

dismissed. Only claims 1, 2, 4, 5 and 11 remain for our consideration in this appeal.

Appellant's invention relates to a friction damper. An adequate understanding of the invention can be had from a reading of claim 1, which is illustrative of the subject matter on appeal and which reads as follows:

1. A frictional damper, in particular for washing machines with spinning action, comprising a substantially circular cylindrical housing (1) and a tappet (2) which is coaxially displaceable inside the housing (1) and extends out of it with one end, another end being provided with an approximately cylindrical friction piston (13), the friction piston (13) having at least one approximately circular cylindrical support segment (18, 19) and bracing flanges (14 to 17) radially extending beyond the support segment (18, 19) and axially limiting the support segment (18, 19) at fixed distances, a friction coating (20, 21) made of an elastically resilient material being disposed on the support segment (18, 19) and between the bracing flanges (14 to 17) and being elastically pressed against an inner wall (36) of the housing (1), and a grease storage chamber (23, 23') being formed on the friction piston (13), wherein the grease storage chamber (23, 23') is formed internally of the friction piston (13) and is connected by way of at least one grease channel (34) axially spaced apart from the friction coating (20, 21) and the support segment (18, 19) with a grease chamber (22) formed at the outer circumference of the friction piston (13) at a location spaced apart from the friction coating (20, 21) by at least one of the bracing flanges (14 to 17) and open towards the inner wall (36) of the housing (1).

The prior art references of record relied upon by the examiner as evidence of obviousness are:

Johnson	4,552,344	Nov. 12, 1985
Bauer et al. (Bauer '008)	4,946,008	Aug. 7, 1990
Bauer et al. (Bauer '297)	5,085,297	Feb. 4, 1992 (filed July 11, 1990)

Claims 1, 2, 4, 5 and 11 stand rejected under 35 U.S.C. 103 as being unpatentable over Bauer '008 in view of Bauer '297, and also alternatively as being unpatentable over Bauer '297 in view of Bauer '008.

Claims 1, 2, 5 and 11 stand additionally rejected under 35 U.S.C. 103 as being unpatentable over Bauer '008 in view of Johnson.

Rather than reiterate the examiner's reasoning for these rejections and the conflicting viewpoints of the appellant and the examiner regarding the rejections, we make reference to pages 3 through 7 of the examiner's answer and to appellant's main and reply briefs for a complete exposition thereof.

OPINION

In reaching our conclusion on the obviousness issues raised in this appeal, we have carefully considered appellant's specification and claims, the applied references, and the respective positions of the appellant and the examiner. Upon evaluation of all of the evidence before us, we make the determination that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness of any of the claims on appeal. Our reasoning for this determination follows.

The law followed by our court of review, and thus by this board, is that

> [a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.

In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). See also In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1984) ("In determining whether a case of prima facie obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.")

In the present case, Bauer '008 discloses a frictional damper of the general type claimed by the appellant, but with a grease storage chamber or reservoir (22) in the form of an annular groove formed in the outer wall of the friction piston (13) at a location spaced apart from the friction coatings (20, 21) by at least one of the bracing flanges (15, 16). See Figures 1 and 2 of Bauer '008 and column 2, lines 40-51, thereof. As the examiner has recognized, Bauer '008 lacks a grease storage chamber formed internally of the friction piston and a grease channel axially spaced apart from the friction coating areas of the piston and in communication with the grease chamber (22) on

the outside surface of the piston, as set forth in appellant's claims on appeal. To overcome this deficiency in Bauer '008, the examiner turns to Bauer '297 and notes that the friction damper shown therein discloses a grease storage chamber (23) of comparatively large volume formed internally of the friction piston (13) and grease channels (34, 42) to connect the storage chamber with the surface of the friction coatings (20, 21). In the examiner's view, the Bauer '297 reference

> suggests to one having ordinary skill in the art the desirability of having a reservoir, or storage chamber, to provide a 'comparatively [sic, comparatively] large... volume" of lubricant for the same purpose intended by the applicant (Answer, page 4).

The examiner concludes that with "the motivation" found in Bauer '297, the person of ordinary skill in the art would have found it obvious to have provided Bauer '008 with an insert body forming a storage chamber within the piston for storage of a comparatively large volume of lubricant to be communicated through at least one grease channel with the grease chamber (22) therein.

What the examiner fails to recognize is that Bauer '297 is an improvement of Bauer '008 and includes all of the structure found in Bauer '008. Note column 1, lines 28-36, of Bauer '297 and see the grease chamber (22) on the outer surface of the friction piston and the extension tube (37) shown in Figure 2 of

Bauer '297. Thus, in our view what the person of ordinary skill in the art would have been led to do by the teachings of Bauer '297 is merely to modify Bauer '008 so as to arrive at exactly that which is shown in Figure 2 of Bauer '297, and nothing more. There is clearly nothing in the combined teachings of the two applied Bauer patents which would appear sufficient to suggest to one of ordinary skill in the art the particular modification urged by the examiner in his rejection. We find this to be the case whether we look at Bauer '008 in view of Bauer '297 or vice versa. Since we find nothing in the teachings of the applied prior art itself which would have suggested the claimed subject matter to the person of ordinary skill in the art, we are constrained to reverse the examiner's rejections of claims 1, 2, 4, 5 and 11 under 35 U.S.C. 103 based on the Bauer patents.

We turn next to the examiner's rejection of claims 1, 2, 5 and 11 under 35 U.S.C. 103 as being unpatentable over Bauer '008 in view of Johnson. Like the appellant, we find this rejection to be deficient because we perceive no teaching, suggestion or incentive in the applied references which would have made obvious the examiner's proposed modification of Bauer '008. Bauer '008 relates to a frictional damper which provides grease lubrication, via an external grease storage groove (22), for the frictional coatings (20, 21) thereon. Johnson, on the

other hand, relates to a hydropneumatic suspension unit which includes a single chamber gas spring (60) for supporting a portion of the sprung mass of the vehicle (10) therein, with a barrier fluid sealed piston (62) in a cylinder (64) cooperating with the road arm bore (130) to seal the mechanically operated gas spring. Seals (66, 68) located adjacent respective ends of the piston (62) on the outer surface thereof define an oil space (94) therebetween. This space is in communication with an oil chamber (82) within piston (62). A spring loaded piston (96) is provided in a bore (98) of piston (62) and operates to pressurize the oil in chamber (82) and space (94) to a level which is 130 psi above the gas pressure in gas spring (60). While such oil does lubricate the seals, its main function is to preload the seals so as to prevent escape of gas from the gas spring (60). As Johnson notes in column 3, lines 62-64,

> [s]ince oil exposed seals are easier to seal than seals exposed to gas the resultant barrier fluid piston defines a superior dynamic gas sealing system.

While these patents do individually show certain generalized structural aspects of the appellant's claimed invention when considered at a simplified conceptual level, as the examiner has done in his rejection at pages 5 and 6 of the answer by relating both of the applied references to lubrication of a

piston sliding in a cylinder, when the Bauer '008 and Johnson teachings are considered collectively, it does not appear to us that they would have, by themselves, suggested their combination to a person of ordinary skill in the art, as proposed by the examiner, so as to yield the particular frictional damper grease lubrication arrangement defined in appellant's claims 1 and 11 on appeal. The dissimilar objectives and environment of Johnson as compared to Bauer '008, coupled with the lack of any teaching or incentive in the references themselves for making the modification urged by the examiner, leads us to the conclusion that the rejection is not well founded.

A rejection based on §103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, the examiner has the initial duty of supplying the factual basis for the rejection he advances. He may not, because he doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. See In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). In the present case, absent appellant's disclosure, we see no cogent reason for combining Bauer '008 and Johnson in the manner proposed by

the examiner to arrive at appellant's claimed invention. Accordingly, we will not sustain the examiner's rejection of claims 1, 2, 5 and 11 under 35 U.S.C. 103 based on Bauer '008 and Johnson.

Based on the foregoing, the decision of the examiner is reversed.

REVERSED

Marion Parsons, Jr.
Examiner-in-Chief

Charles E. Frankfort
Charles E. Frankfort
Examiner-in-Chief

Lawrence J. Staab
Lawrence J. Staab
Examiner-in-Chief

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Browdy and Neimark
419 Seventh Street, N.W.
Washington, D.C. 20004