

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte WOLFGANG REIN, DAVID ROTH, JONATHAN DOUGLAS

Appeal No. 2006-1275
Application No. 10/691,954

ON BRIEF

Before CRAWFORD, BAHR, and LEVY, Administrative Patent Judges.
CRAWFORD, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 and 10 to 17. Claims 2 to 9 are objected to and claims 18 and 19 have been cancelled.

The appellants' invention relates to a piston having a patterned coating applied to the piston skirt for directional lubrication flow and/or lubrication retention as well as a method of applying the coating to the piston (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references

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

Schenkel	4,987,865	January 29, 1991
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The rejections

Claims 1, 10, 12 to 14, 16 and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Schenkel.

Claims 11 and 15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schenkel.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (mailed November 15, 2005) for the examiner's complete reasoning in support of the rejections, and to the brief (filed September 30, 2005) and reply brief (filed January 18, 2006) for the appellants' arguments thereagainst.

OPINION

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

We turn first to the examiner's rejection of claims 1, 10, 12 to 14, 16 and 17 under 35 U.S.C. § 102(b). We initially note that to support a rejection of a claim under 35 U.S.C. § 102(b), it must be shown that each element of the claim is found, either expressly described or under principles of inherency, in a single prior art reference. See Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

The examiner's findings in regard to this rejection can be found on pages 3 to 5 of the answer.

The appellants argue that Schenkel does not describe a coating bonded on the skirt in which the coating has a "plurality of recesses formed thereon."

The examiner states:

. . . Schenkel discloses a coating (28) having a plurality of recesses (26) formed thereon so as to define a predetermined pattern of recesses (saw tooth pattern, col. 2 and ll.43) on the surface of the skirt (14). The **recesses are formed on both the skirt and the coating** because the coating takes the shape of the recesses (ridges and valleys) as they are applied on the surface of the skirt, as shown on figures 2 and 3)[answer at page 6].

We find that Schenkel discloses that the piston skirt includes a plurality of pointed ridges 24 separated by valleys 26 for engaging the cylinder (col. 1, lines 42 to 45) and that these pointed ridges 24 and valleys 26 define a saw tooth-like finish (col. 2, lines 42 to 43). In order to further reduce friction between the skirt and the cylinder, the skirt is coated with a fluorocarbon polymer and this fluorocarbon coating follows the contour of

the pointed ridges 24 and valleys 26 such that the profile of the ridges and valleys remains after the coating process (col. 3, lines 5 to 12).

In our view, the ridges or recesses are formed on the skirt itself not on the coating. As such, we agree with the appellants that Schenkel does not describe a piston skirt having a coating which has recesses formed thereon as required by claim 1.

Therefore, we will not sustain the rejection as it is directed to claim 1 or claim 10 dependent thereon. We will likewise not sustain this rejection of claims 12 to 14 and 16 and 17 because each of claims 12 and 16, from which claims 14 and 17 depend, recite that the coating on the skirt has a plurality of recesses formed thereon.

We will also not sustain the rejection of claims 11 and 15, which are dependent on claims 1 and 12 respectively, under 35 U.S.C. § 103 as being unpatentable over Schenkel because we agree with the appellants that Schenkel does not disclose or suggest a coating on a piston skirt which has a plurality of recesses formed thereon.

The decision of the examiner is reversed.

REVERSED

MURRIEL E. CRAWFORD
Administrative Patent Judge

JENNIFER D. BAHR
Administrative Patent Judge

STUART S. LEVY
Administrative Patent Judge

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BLISS MCGLYNN, P.C.
BLISS WEST BIG BEAVER ROAD
SUITE 600
TROY, MI 48084

Comment [jvn1]: Type address

MEC/lg

