

**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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MICHAEL R. WILLIAMS

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Appeal No. 97-3210  
Application No. 08/386,388<sup>1</sup>

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ON BRIEF

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Before ABRAMS, PATE and CRAWFORD, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

**DECISION ON APPEAL**

This is an appeal from the decision of the examiner finally rejecting claims 1 and 2, which constitute all of the claims of record in the application.

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<sup>1</sup>Application for patent filed February 10, 1995.

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The appellant's invention is directed to a sealing arrangement. The subject matter before us on appeal is illustrated by reference to claim 1, which has been reproduced in an appendix to the Brief.

**THE REFERENCES**

The references relied upon by the examiner to support the final rejection are:

Ruhe <i>et al.</i> (Ruhe) 1975	3,892,416	Jul. 1,
Redder <i>et al.</i> (Redder) 1982	4,346,801	Aug. 31,

**THE REJECTIONS**

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Redder.

Claims 1 and 2 also stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ruhe.

The rejections are explained in the Examiner's Answer.

The opposing viewpoints of the appellant are set forth in the Brief.

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**OPINION**

In reaching our decision on the issues raised in this appeal, we have carefully assessed the claims, the prior art applied against the claims, and the respective views of the examiner and the appellant as set forth in the Answer and the Brief. As a result of our review, we have determined that neither of the rejections should be sustained. Our reasoning in support of this conclusion follows.

Both of the rejections are under Section 102. It is axiomatic that anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of the claimed invention. See *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed sub nom., *Hazeltine Corp. v. RCA Corp.*, 468 U.S. 1228 (1984).

The sealing system to which the appellant's claims are directed is for the purpose of providing a seal between a pair of circular contact surfaces on first and second connection members. Claim 1 recites a generally ring-shaped primary seal

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adapted to be positioned within the inner diameter of the contact surfaces and forming a seal to prevent leakage of internal pressure into the area outside of the primary seal between the first and second connection members, and

a generally ring-shaped secondary barrier seal positioned concentrically around said primary seal and between said first and second connection member contact surfaces to prevent entry of external pressure to the area encompassed by the secondary barrier seal . . . .

Redder discloses a rotating shaft assembly that interfaces with a stationary support structure, upon which the shaft bearings are mounted. A system is provided lubricating the bearings by the periodic injection of lubricant under pressure, which includes a rotating metal ring seal 19 mounted on the rotating shaft and a stationary metal ring seal 20 mounted on the stationary member. The annular edges of the two ring seals are in sliding contact, and they prevent the escape of lubricant between the rotating and stationary portions of the machine. The examiner has designated seals 19 and 20 as the claimed primary seal, and seal 34 as the secondary seal ring.

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The examiner also has dismissed the functional limitations regarding preventing leakage of internal or external pressure as not being worthy of patentable weight because they are not expressed in "means" format. We do not agree, and we point out that these limitations set forth a function which the reference apparatus must be structurally capable of performing (see, e.g. *In re Venezia*, 530 F.2d 956, 959, 189 USPQ 149, 151-152 (CCPA 1976)), and such functional statements must be given full weight and may not be disregarded in evaluating the patentability of the claims (see, e.g. *Ex parte Bylund*, 217 USPQ 492, 498 (Bd. App. 1981)).

Seal 34 is downstream of seal rings 19 and 20 insofar as the flow of lubricant is concerned, and is mounted on the rotating element. It is described as "resilient . . . preferably made of a foamed plastics material," and is deformable under pressure to allow lubricant to pass through into a gap between the rotating and stationary elements (column 4, line 42 *et seq.*). Claim 1 requires that the secondary seal deflect when subjected to internal pressure,

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which is the case with Redder ring 34. However, claim 1 further requires that the secondary seal function to "prevent entry of external pressure to the area encompassed by the secondary seal between the first and second connection members." Notwithstanding the prior statement that this functional language is of no consequence, the examiner nevertheless expresses the opinion that "the seal [34] will prevent entry of at least atmospheric pressure (an external pressure)" (Answer, page 5). We agree with the appellant that there is no evidence to support this conclusion, and it is here that the Section 102 rejection based upon Redder fails.

Redder does not explicitly teach that seal 34 prevents entry of external pressure and, in our view, to conclude that such inherently is the case is speculative in view of the fact such a function is not necessary to the operation of the disclosed system, and the fact that the seal is designed to prohibit the passage of lubricant, not gas. We also cannot agree with the examiner that "atmospheric pressure" constitutes "external pressure" in the context of the appellant's invention. All of the subject matter recited in

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claim 1 therefore is not found in Redder, and this rejection of claim 1 and, it follows, of dependent claim 2, cannot be sustained.

The second Section 102 rejection is based upon Ruhe, which discloses a sealing member for flanged joints. The examiner considers metal collar 2 and outer ring 4 to be the primary sealing members and elastic sealing ring 3 to be the secondary seal. The examiner admits that collar 2 and ring 4 are not explicitly disclosed as being sealing members but concludes "they will and do perform a sealing action, thereby they are seals" (Answer, page 6). Here, again, the examiner has resorted to speculation in the making of a rejection. Neither "centering collar portion 2," which is of aluminum, nor "outer ring 4," which is provided with a gap in its periphery, are described as performing a sealing function (column 2). The only element so described is sealing ring 3, as to which the patent states "the sealing effect is produced by an elastic or plastic deformation of the seal ring 3" (column 2, lines 56-58). From our perspective, therefore, this reference discloses only one sealing element, and thus fails to anticipate claim 1.

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The rejection of claims 1 and 2 as being anticipated by  
Ruhe also cannot be sustained.

**SUMMARY**

Neither rejection is sustained.

The decision of the examiner is reversed.

**REVERSED**

NEAL E. ABRAMS	)	
Administrative Patent Judge)	)	
)	)	
)	)	
WILLIAM F. PATE, III	)	BOARD OF PATENT
Administrative Patent Judge)	)	APPEALS AND
)	)	INTERFERENCES
)	)	
MURRIEL E. CRAWFORD	)	
Administrative Patent Judge)	)	

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