

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. 42

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RICHARD L. HEINECKE and BRUCE KNOBBE

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Appeal No. 2002-1444  
Application No. 09/004,564

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ON BRIEF

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Before ABRAMS, NASE, and BAHR, Administrative Patent Judges.  
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 7, 8, 13, 14, 20 and 21, which are all of the claims pending in this application.

We REVERSE.

### BACKGROUND

The appellants' invention relates to a gate valve. An understanding of the invention can be derived from a reading of exemplary claim 20, which appears in the appendix to the Brief.

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

Peterson	4,221,307	Sep. 9, 1980
Heinecke	5,464,035	Nov. 7, 1995

Claims 7, 8, 13, 14, 20 and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Peterson in view of Heinecke.

Claims 7, 8, 13, 14, 20 and 21 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Heinecke in view of Peterson.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the Answer (Paper No. 39) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 38) and Reply Brief (Paper No. 40) 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 references, and to the

respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

Both of the rejections are under 35 U.S.C. § 103. The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, e.g., In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a prima facie case of obviousness, it is incumbent upon the Examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion, or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellant's disclosure. See, e.g., Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988).

The first rejection is that claims 7, 8, 13, 14, 20, and 21 are unpatentable over Peterson in view of Heinecke. It is the examiner's view that Peterson discloses all of the subject matter recited in independent claims 20 and 21 except for the liners comprising "a non-metallic laminate formed by a flexible layer of plastic material" (see Answer, page 3). However, the examiner asserts that Heinecke teaches a non-metallic laminate 32 formed by a flexible layer of plastic material in contact with a gate 36 (see

Answer, page 3), and takes the position that it would have been obvious to one of ordinary skill in the art to replace the steel liner portion 24 of Peterson with the plastic liner of Heinecke in order to make the layer 24 of Peterson “less susceptible to abrasion and corrosion” (Answer, pages 3 and 5), and also because it would be “simpler” (Answer, page 3).

Peterson discloses a gate valve having a valve body including a plurality of walls defining a chamber. Two of these walls are disposed opposite one another and each includes an aperture that can be closed by a valve gate reciprocally operating between the walls. Peterson provides a seal which engages opposite sides of the valve gate to prevent foreign matter from entering the valve body. The seal comprises a liner panel (guide plate) 24, which is normally of steel (column 3, line 5), backed by a resilient compressible sheet 22, which urges it into contact with the valve gate. There is no teaching that element 24 is flexible. Thus, with regard to the language of claims 20 and 21, Peterson fails to disclose a liner panel that is “a non-metallic laminate formed by a flexible layer of plastic material” (emphasis added), wherein the elastomeric material urges the flexible layer of plastic material into sealing engagement with the gate.

In the gate valve structure disclosed by Heinecke the valve body is sealed around the valve by a pair of liner panels 32 which, although not stated in the specification, apparently are made of plastic, inasmuch as the cross-hatching used in Figure 2 so indicates. There is no teaching in Heinecke that the plastic liner panels are

flexible, and they are not backed by a layer of elastomeric material and do not constitute one layer of a multilayered seal.

The appellant points out on page 9 of the Brief that the claims require the liner panels to comprise a “flexible layer of plastic material,” and argues that such is not taught by either of the references. The Examiner’s response to this is to assert that the liner panels 24 of Peterson and 32 of Heinecke inherently would be “flexible” because they are “long” and “thin” (Answer, pages 5-6). We do not agree, for there is no evidence in either of the references to support this conclusion. Therefore, we agree with the appellants that even if the references were combined in the manner proposed by the examiner, the resulting structure would not meet the terms of the claims.

Further, even assuming, *arguendo*, that the plastic liners 32 of Heinecke are flexible, we fail to perceive any teaching, suggestion or incentive in either reference which would have led one of ordinary skill in the art to modify the Peterson valve by replacing the steel guide plate 24 with a plastic guide plate, other than the hindsight acquired by one who first reviewed the appellants’ disclosure. In this regard, the evidence adduced by the examiner does not provide reasons why one of ordinary skill in the art would be motivated to make this modification, that is, replace the metal portion of the Peterson liner with plastic material while retaining the elastomeric portion. In particular, there is no evidence to support the examiner’s conclusion that to do so would result in less abrasion and corrosion and would make the seal more simple, as

he has contended. From our perspective, if proper suggestion to combine the references were found to exist, the result would be to substitute the entire seal of Heinecke for the entire seal of Peterson, which would not meet the terms of the claims.

It therefore is our conclusion that the teachings of Peterson taken in view of those of Heinecke do not establish a prima facie case of obviousness with regard to the subject matter recited in independent claims 20 and 21. This being the case, we will not sustain this rejection of claims 7, 8, 13, 14, 20 and 21.

Claims 7, 8, 13, 14, 20, and 21 also stand rejected over Heinecke in view of Peterson. In this rejection, the examiner asserts that Heinecke includes each of the claimed limitations except for the layer of elastomeric material, but opines that it would have been obvious to one of ordinary skill in the art to modify Heinecke by adding this feature to back the liner 32 "to provide a better seal" (Answer, page 4). As was the case with the first rejection of these claims, this rejection also is based upon the presumption that the liners of both references are flexible (Answer, pages 4 and 6), a conclusion which we found above not to be supported by any evidence. The present rejection thus fails at this point. Furthermore, as above, we do not agree that suggestion exists to combine the references in the manner proposed by the examiner.

We therefore conclude that the teachings of Heinecke taken in view of those of Peterson also fail to establish a prima facie case of obviousness with regard to the subject matter of independent claims 20 and 21, and we will not sustain this rejection of

claims 7, 8, 13, 14, 20 and 21.

CONCLUSION

Neither rejection is sustained.

The decision of the examiner is reversed.

NEAL E. ABRAMS  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

JENNIFER D. BAHR  
Administrative Patent Judge

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