

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RONALD J. BAILEY, FRED L. LINT,  
JAMES A. SIGLER and PAMELA K. SNYDER

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Appeal No. 98-1022  
Application 08/380,796<sup>1</sup>

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ON BRIEF

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Before FRANKFORT, PATE and STAAB, *Administrative Patent Judges*.

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final

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<sup>1</sup> Application for patent filed January 30, 1995. According to appellants, the application is a division of Application 08/123,846, filed September 9, 1993, now U.S. Patent No. 5,408,704, issued April 25, 1995.

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rejection of claims 27, 29-31, 37-39 and 42. Claims 32-36 have been objected to as depending from rejected claims and indicated as being allowable if rewritten in independent form to include the limitations of the claims from which they depend. Claims 41 and 43-47, the only other claims pending in the application, have been allowed.

Appellants' invention pertains to a module for a low volume waste handling system (claims 27, 29, 30 and 31), and to a rotational molded or blow molded vacuum tank therefor (claims 37-39 and 42). Independent claims 27 and 37 are illustrative of the appealed subject matter and read as follows:

27. An integral module for a low volume human waste handling system comprising a vacuum tank and a vacuum pump, the vacuum pump having an inlet directly connected to an outlet from said vacuum tank; said vacuum tank of rotational molded or blow molded plastic having flat walls, said flat walls having no continuous flat surface of greater than about 80 square inches in area.

37. A rotational molded or blow molded vacuum tank of plastic having flat walls, said flat walls having no continuous flat surface of greater than about 80 square inches in area.

The single reference of record relied upon by the examiner in support of the rejection is:

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Sigler et al. (Sigler)                    4,819,279                    Apr. 11, 1989

Claims 27, 29-31, 37-39 and 42 stand rejected under 35  
U.S.C. § 103 as being unpatentable over Sigler.

Sigler discloses a low volume human waste handling system comprising a vacuum tank 15 (Figures 12-14) of blow molded plastic (column 9, lines 32-33). As can be seen in Figures 12-14, the tank 15 is circular in cross section and elongated in the dimension 88, with end walls joined to the curved side wall by rounded transition portions. In addition, the end walls are penetrated by first, second and third ports 91-93. The tank also may be provided with an optional fourth port 94. The examiner concedes that Sigler does not disclose that the tank has flat walls, with said flat walls having no continuous flat surface of greater than about 80 square inches in area, as called for in each of the independent claims.

Nevertheless, the examiner has taken the position that

[t]he claimed shape . . . of the vacuum tank walls is of no patentable significance since such are merely choices in design resulting in no new and/or unexpected results. It is well within the realm of the ordinary artisan to adjust the size, capacity,

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shape, or thickness of a fluid tank to achieve a desired effect, such as saving space or increasing strength. Such would require only routine skill in the art and each such change would not provide basis for an additional patent. [Answer, page 5.]

We will not sustain this rejection.

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 177-78 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968). In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. *Id.*

In the present case, the examiner has failed to advance any factual basis to support the conclusion that it would have been obvious to one of ordinary skill in the art to provide the tank 15 of Sigler with flat walls, with said flat walls "having no continuous flat surface of greater than about 80

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square inches in area", as called for in each of the independent claims on appeal. The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification (see *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). The examiner points to nothing in the prior art, and we are aware of nothing, that contains such a suggestion.

As to the examiner's theory that the shape and size of the claimed invention is nothing more than a matter of design choice, we observe that an objective of appellants' invention is to provide a low volume tank having flat walls so that it will not take up a lot of room in the limited amount of space available in a small boat or RV (specification, paragraph spanning pages 1 and

2). To that end, appellants' specification (page 8) states:

The vacuum tank 14 according to the present

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invention is also particularly configured for low volume configuration. . . . [I]t is made with flat walls. . . .

Manufacture of the tank 14 with flat walls is possible because according to the invention it has been recognized that if the amount of any continuous (uninterrupted) flat surface is kept at 80 square inches or less in area there will be no visible deflection of a one quarter inch wall thickness high density polypropylene tank.

Thus, the shape and size limitations in question are clearly disclosed in the appellants' specification as solving a particular problem. As such, these claim limitations may not be dismissed as obvious matters of design choice without supporting evidence. *Compare In re Kuhle*, 526 F.2d 553, 555, 188 USPQ 7, 9 (CCPA 1975) (use of particular connection in lieu of those used in reference held to be obvious matter of design choice within

the skill in the art *where particular connection solves no stated problem*).

The decision of the examiner is reversed.

*REVERSED*

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CHARLES E. FRANKFORT	)	
Administrative Patent Judge	)	
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	)	
	)	
WILLIAM F. PATE, III	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
LAWRENCE J. STAAB	)	
Administrative Patent Judge	)	

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Nixon and Vanderhye  
1100 North Glebe Road  
8th Floor  
Arlington, VA 22201