

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JAY D. STRADINGER and MARK A. PONDELICK

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Appeal No. 2002-0998  
Application 09/296,139

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ON BRIEF

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Before ABRAMS, FRANKFORT, and McQUADE, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 3, 5 through 14, 16 and 17, all of the claims remaining in this application. Claims 4 and 15 have been canceled.

Appellants' invention relates to a vacuum waste tank formed of thermoplastic material and used in a vacuum drainage system.

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In such a system, a vacuum pump generates a continuous negative pressure in the range of 10-25 inches of Hg in the collection tank and collection drain pipe to thereby pull liquid through the drain pipe and into the tank. In the past, such vacuum collection tanks were formed of steel, however, appellants note that those tanks were overly costly to fabricate, overly heavy for certain applications, required expensive treatment to resist corrosion, and quickly conducted the outside temperature to the stored liquid. While acknowledging that certain plastic materials are known for having better weight, insulative, and corrosion-resistance characteristics than steel, appellants urge that such materials have not heretofore been used in vacuum waste tanks. In forming a vacuum waste tank of thermoplastic material (e.g., polypropylene) having particular characteristics appellants have overcome the problems of the prior art by recognizing the need for a thermoplastic material having a flexural modulus of at least 175,000 psi and a wall thickness of at least 0.4 inches capable of resisting a continuous external pressure loading resulting from a negative pressure in the collection tank in the range of 10-25 inches of Hg. Independent

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claims 1 and 9 are representative of the subject matter on appeal and a copy of those claims can be found in the Appendix to appellants' brief.

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

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|-------------------------|-----------|---------------|
| McGouran Jr. (McGouran) | 4,911,326 | Mar. 27, 1990 |
| Wagner                  | 5,234,286 | Aug. 10, 1993 |
| Sabo                    | 5,806,702 | Sep. 15, 1998 |

In the final rejection (Paper No. 15), claims 1 through 3, 5 through 7 and 9 through 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sabo in view of McGouran, while claims 8, 16 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sabo, McGouran and Wagner.

In the answer, the examiner notes (page 2) that the rejection of claims 1-3, 5-14, 16 and 17 stand or fall together, but only repeats the rejection of claims 1 through 3, 5 through 7 and 9 through 14 under 35 U.S.C. § 103(a).<sup>1</sup>

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<sup>1</sup>While the examiner has not expressly repeated all of the rejections applicable to the claims before us on appeal in the examiner's answer (Paper No. 18), it is clear from a review of

(continued...)

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Rather than attempt to reiterate the examiner's commentary with regard to the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellants regarding those rejections, we make reference to the final rejection (Paper No. 15, mailed August 22, 2001) and the examiner's answer (Paper No. 18, mailed April 9, 2002) for the reasoning in support of the rejections, and to appellants' brief (Paper No. 17, filed January 29, 2002) and reply brief (Paper No. 19, filed June 3, 2002) for the arguments thereagainst.

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<sup>1</sup>(...continued)

the final rejection, appellants' brief (Paper No. 17) and the totality of the examiner's answer that the rejections as stated in the final rejection are those that are before us for consideration on appeal. We are at a loss to understand why all of the applicable prior art references and rejections were not repeated in the examiner's answer. Normally, rejections of claims which are not repeated in the examiner's answer are considered to have been withdrawn by the examiner. See, for example, Ex parte Emm, 118 USPQ 180 (BdApp 1957). In the present case, we note that appellants' grouping of the claims as set forth on page 4 of the brief in no way relieves the examiner of the obligation to expressly state in the examiner's answer exactly what references and rejections are applicable to the appealed claims.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims<sup>2</sup>, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determinations which follow.

Looking at page 4 of the brief, we note that appellants have indicated that claims 1 through 3, 5 through 14, 16 and 17 "stand or fall together." Thus, we focus our discussion below on independent claims 1 and 9, and consider that the remaining claims before us on appeal will stand or fall with their respective independent claim.

In his rejection of independent claims 1 and 9 the examiner

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<sup>2</sup>Claims 16 and 17 depend directly or indirectly from canceled claim 15. During any further prosecution of the application, both the examiner and appellants would be well served to address this problem, which has existed since the amendment filed May 19, 2000 directed cancellation of claim 15.

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urges (final rejection, page 2) that Sabo "discloses the claimed invention but does not disclose that the chamber is air tight, that the thermoplastic material of the tank has a flexural modulus of at least 175,000 psi, or that the material can resist a load of approximately 10 to 25 inches of Hg." The examiner then contends that McGouran teaches that it is known to provide an underground tank with an air tight chamber, and concludes that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention "to provide the tank of Sabo with the chamber being air tight, as taught by McGouran, Jr., in order to properly seal the chamber and prevent fluids or gases to [sic] contaminate the contents of the tank."

In accounting for the other differences identified above as lacking in Sabo, the examiner further contends that it would have been obvious to one of ordinary skill in the art to form the plastic tank of Sabo from thermoplastic material having a flexural modulus of at least 175,000 psi and capable of resisting loading of approximately 10 to 25 inches of Hg, "in order to give the tank the desired strength and since it has been held that 'where the general conditions of the claims are disclosed in the prior art, it is not inventive to discover the optimum or

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workable ranges by routine experimentation'" (final rejection pages 2-3), citing In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Sabo discloses a ribbed storage tank (10) constructed of polyethylene and used for wastewater storage or as a temporary holding tank for runoff from drainage systems. The tank includes a floor insert (56) to which is mounted a pump (64) and piping (66). A cover (76) is secured to the top of tank (10), "thus sealing the tank and securing the contents" (col. 3, lines 43-44). Sabo says nothing about being a vacuum waste tank or being used in a vacuum waste drainage system, and does not appear to have a vacuum intake formed in the chamber as required in claims 1 and 9 on appeal, which vacuum intake is expressly set forth in claim 1 as being adapted for fluid communication with the vacuum source mentioned in the preamble of claim 1.

As for McGouran, this patent discloses a containment system useful for storing materials such as gasoline, wherein there is a primary storage container (18) enclosed by a secondary containment vessel (12) constructed of polymer concrete and including a base section (14) and a removable cover panel (16).

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Leak detectors (20) are provided in the open space between the primary storage tank (18) and the containment vessel. McGouran notes that a seal or gasket (27) is provided between the removable cover panel (16) and the base of the containment vessel to provide a substantially fluid/air-tight seal (col. 4, lines 35-40). However, like Sabo, McGouran says nothing about being a vacuum waste tank or being used in a vacuum waste drainage system and clearly has no vacuum intake like that set forth in claims 1 and 9 on appeal.

Having reviewed the patents to Sabo and McGouran, we share appellants' view (brief, pages 5-10) that there is no motivation or suggestion in the combined teachings of the applied references for modifying the wastewater tank of Sabo in the manner urged by the examiner. More particularly, we agree with appellants that, absent hindsight gained from first having read appellants' disclosure and claims, there would be no motivation for modifying the Sabo tank to have an air-tight chamber or for use under vacuum conditions of 10 to 25 inches Hg by forming the tank of a thermoplastic material having a flexural modulus of at least 175,000 psi and a wall thickness of at least 0.4 inches.

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Moreover, we fully agree with appellants' arguments and comments set forth in the reply brief filed June 3, 2002. The examiner's cursory statements and bald conclusions set forth in what is termed the "RESPONSE TO ARGUMENT" section of the answer clearly fail to meaningfully address the points of argument raised by appellants in their brief.

Since it is our determination that the teachings and suggestions found in Sabo and McGouran would not have made the subject matter as a whole of independent claims 1 and 9 on appeal obvious to one of ordinary skill in the art at the time of appellants' invention, we must refuse to sustain the examiner's rejection of those claims under 35 U.S.C. § 103(a). It follows that the examiner's rejection of dependent claims 2, 3, 5 through 7 and 10 through 14 under 35 U.S.C. § 103(a) based on the combined teachings of Sabo and McGouran also will not be sustained.

We have additionally reviewed the examiner's rejection of claims 8, 16 and 17 under 35 U.S.C. § 103(a) set forth in the final rejection. However, we find nothing in Wagner which would change our view as expressed above, i.e., nothing which would

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supply that which we have indicated to be lacking in the basic combination of Sabo and McGouran. Thus, the examiner's additional rejection of dependent claims 8, 16 and 17 under 35 U.S.C. § 103(a) will also not be sustained.

In view of the foregoing, the examiner's decision rejecting claims 1 through 3, 5 through 14, 16 and 17 of the present patent application under 35 U.S.C. § 103(a) is reversed.

REVERSED

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|-----------------------------|---|-----------------|
| NEAL E. ABRAMS              | ) |                 |
| Administrative Patent Judge | ) |                 |
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|                             | ) | BOARD OF PATENT |
| CHARLES E. FRANKFORT        | ) |                 |
| Administrative Patent Judge | ) | APPEALS AND     |
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|                             | ) |                 |
| JOHN P. McQUADE             | ) |                 |
| Administrative Patent Judge | ) |                 |

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