

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

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ROBERT JAMES MONSON

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Appeal 2006-2612  
Application 10/225,316  
Technology Center 1700

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Decided: September 20, 2006

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Before GARRIS, KRATZ, and JEFFREY T. SMITH, *Administrative Patent Judges*.

KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the Examiner's Final Rejection of claims 1-16 and 21. We have jurisdiction pursuant to 35 U.S.C. § 134.

Appellant's claimed invention is directed to a shock isolator including elastomeric sidewalls forming a cavity, a base member secured to a first end of the sidewalls (first base end), and a pressure equalizer. Appellant discloses that the shock isolator functions as a support for a load while providing vibration and shock attenuation benefits. *See*, for example, page 4, lines 20-24 of Appellant's Specification. Claim 1 is reproduced below.

A shock isolator for simultaneously isolating shocks and for supporting a static load comprising:

a set of elastomer side walls forming a cavity therein, said side walls having a central axis, a first base end, and a second base end, said first base end and said second base end centrally positioned with respect to each other so that line parallel to said central axis and extending through said first base end does not extend through said second base end and vice versa;

a first base member, said first base member secured to said first base end of said side walls to thereby encapsulate the cavity within the side walls; and

a pressure equalizer, said pressure equalizer venting a fluid from the cavity within the side walls as the shock isolator is compressed and allowing the fluid to enter the cavity within the side walls as the shock isolator returns to an uncompressed state to thereby prevent a fluid pressure differential across the side walls from inhibiting an elastomeric response of the shock isolator.

The Examiner relies on the following prior art reference as evidence that is used in rejecting the appealed claims:

Landi

US 5,180,619

Jan. 19, 1993

Claims 1-4, 7-9, and 21 stand rejected under 35 U.S.C. § 102(b) as anticipated by Landi. Claims 5, 6 and 10-16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Landi.

## OPINION

Based on our review of the evidence of record and the respective positions of Appellant and the Examiner as furnished in the Briefs and the Answer, we affirm the rejection of claims 1-4 and 21 under 35 U.S.C. § 102 for essentially for the reasons stated in the Answer as well as those reasons set forth below. However, we reverse the Examiner's § 102 rejection of claims 7-9; and we reverse the Examiner's obviousness rejection of claims 5, 6, and 10-16 essentially for the reasons stated in the Briefs, as further noted below.

We start with the § 102 rejection of claims 1-4 and 21.

Appellant argues claims 1-4 as a group. Thus, we select claim 1 as representative of this group of commonly rejected claims. The Examiner has found that Landi describes a structure, useful as a shock isolator, that includes elastomeric side walls defining a cavity, a first base member secured to a base end thereof to encapsulate a cavity within the side walls, and a pressure equalizer, as required by representative claim 1. *See* the Answer at page and the referred to portions of Landi. The Examiner has reasonably determined that the side walls of Landi have first and second base ends centrally positioned with respect to each other such that "a line parallel to said central axis and extending through said first base end does not extend through said second base end and vice versa," as required by appealed claim 1. *See* pages 4 and 8 of the Answer and the sections of Landi referred to by the Examiner. Based on those factual determinations of the

Examiner, the Examiner finds that representative claim 1 reads on the subject matter described by Landi and that Landi describes that the product structure is useful as a shock isolator.

Appellant maintains that Landi does not disclose a structure with sidewall base ends positioned relative to a central axis, as called for in representative claim 1. In this regard, Appellant urges that the central axis the Examiner refers to at page 8 of the Answer in explaining how Landi meets the claimed subject matter does not correspond to Appellant's central axis (33, Fig.'s 1 and 2), as referred to at page 6, lines 4 and 5 of Appellant's Specification. However, such an argument is unpersuasive of any reversible error in the Examiner's anticipation rejection because representative claim 1 does not limit the claimed sidewall axis to an orientation as disclosed in Appellant's Specification. Rather, representative claim 1 merely notes that the sidewalls have a central axis without specifying a particular plane carrying the axis or another geometric reference so as to limit the claimed subject matter to the disclosed axis as depicted in several of Appellant's drawing figures.

Nor does Appellant limit the relative disposition of the sidewall axis by specifying a particular functionality in representative claim 1 that would require a particular orientation of the claimed structure. Thus, Appellant's contention concerning the shear or tension mode operation discussed in Appellant's Specification is unavailing as a patentable distinction over Landi. When the claim does not recite allegedly distinguishable features, Appellant cannot rely on them to establish patentability. *See In re Self*, 671 F.2d 1344, 1350-1351, 213 USPQ 1, 7 (CCPA 1982).

Appellant expresses disagreement with the Examiner's anticipation determination based on the claim 1 requirement for a pressure equalizer. Appellant (Br., 10) asserts that the perforations/openings in the core (and/or facing material) of Landi would not release fluid at a sufficiently rapid rate during compression and allow fluid entry during expansion in a manner so as to prevent a fluid pressure differential forming across the sidewalls such that an elastomeric response of the shock isolator would be inhibited. We are not persuaded by this argument.

In this regard, representative claim 1 is not restricted to a pressure equalizer that is capable of preventing a pressure differential forming when the shock isolator is exposed to a particularly high rate of compression or expansion. Nor is the pressure equalizer of representative claim 1 required to possess a specified high fluid flow capacity. Rather, all that representative claim 1 requires is that the pressure equalizer is capable of venting fluid from the cavity during a compression, including even a slowly applied and/or small compression, and is capable of allowing fluid to enter the cavity during a return to an uncompressed condition in a manner such that the build up of an elastomeric response inhibiting fluid pressure differential can be avoided.

Appellant refers to col. 4, ll. 44-47 of Landi in the Reply Brief as suggesting a different type of fluid flow (throttling) than that required by Appellant's claimed device. We disagree because that portion of the Landi disclosure merely recites one option for the perforation sizes and, even if that option for hole sizes were selected, representative claim 1 would read thereon because the inhibition of an elastomeric response by a fluid pressure differential, as referred to in claim 1, is not tied into any particular

compression rate (force of compression). Thus, we agree with the Examiner that the claimed pressure equalizer reads on the perforated core and/or facings of Landi that allow for the escape and ingress of air (fluid) upon compression and expansion of the material (cushion) of Landi.

Regarding separately argued independent claim 21, Appellant's principal argument relates to the pressure equalizer feature thereof. However, for reasons analogous to those discussed above, Appellant's contentions that the perforations of Landi would not function to limit elastomeric response as called for in claim 21 is not persuasive. In particular, and as noted above with regard to claim 1, claim 21 does not specify a particular compression rate or pressure that the claimed pressure equalizer is capable of equalizing without limiting the elastomeric response of the elastomeric shell. Thus, we agree with the Examiner that the claimed pressure equalizer reads on the perforated honeycomb shell and sheet facing materials of Landi that provide for the egress of air during compression and the return of air during the return of a honeycomb cell to an uncompressed state.

Accordingly, we shall affirm the Examiner's anticipation rejection of claims 1-4 and 21.

However, our disposition of the Examiner's anticipation rejection of claims 7-9 is another matter. In this regard, dependent claims 7 and 9 require that the pressure equalizer comprises a valve in a normally closed position and claim 8 requires that the shock isolator includes a column of pressurized fluid that supports an object until a pressure change in the fluid triggers the pressure equalizer. In addressing those claim features, the Examiner maintains that the perforations of Landi act as a valve (claims 7

and 9) and that air contained within the core cells of Landi is a pressurized fluid until a pressure change in the fluid triggers the equalizer. That explanation of Landi falls short in establishing a *prima facie* case of anticipation. This is so because the Examiner has not fairly explained how the open perforations of Landi qualify as a normally closed valve as required by claims 7 and 9. Also, the Examiner has not satisfactorily explained how air that is located in the perforated cells of Landi comprises a pressurized column of fluid for supporting an object, as required by claim 8.

Accordingly, we reverse the Examiner's anticipation rejection of claims 7-9.

Concerning the Examiner's § 103(a) rejection of claims 5, 6 and 10-16, the Examiner takes the position that it would have been obvious to one of ordinary skill in the art at the time of the invention to have employed tetrahedron-shaped cells in place of the hexagonal shaped cells of the honeycomb structure of Landi. This is because a mere change in shape is generally recognized as being obvious according to the Examiner.

The Examiner has the initial burden of establishing a *prima facie* case of obviousness. *See In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). Here, the Examiner does not explain how the applied prior art itself would have fairly suggested Appellant's claimed invention to one of ordinary skill in the art. *See In Rinehart*, 531 F.2d at 1051, 189 USPQ at 147. Instead, the Examiner merely relies upon a *per se* rule that a change in shape is within the skill of the art.

As stated by the Federal Circuit in *In re Ochiai*, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995), "reliance on *per se* rules of obviousness is legally incorrect and must cease." Moreover, Landi (col. 3,

ll. 3-33) discloses a particular manner of forming the honeycomb network structure thereof including the use of compression bonded sheets of thermoplastic to form a honeycomb network and using S-shaped wall segments. The Examiner's suggestion to change the entire shape of the cells of Landi amounts to more than just a change in shape but a change in the fundamental way the honeycomb panel of Landi would be put together or would operate, as basically argued by Appellant (Br. 16).

In this regard, the Examiner has not established how tetrahedral shape walls and an apex base would have been recognized as a workable alternative, much less have been suggested as an alternative, to the honeycomb core structure formed of S-shaped wall segments and top and bottom core facing sheets used by Landi. Therefore, the *per se* rule relied upon by the Examiner does not furnish a relevant teaching related to the perforated honeycomb structure of Landi that would have led one of ordinary skill in the art to jettison the construction techniques disclosed therein in favor of employing disparate tetrahedral shape sidewalls and an apex base end as required by the appealed claims subject to this obviousness rejection.

On this record, we reverse the Examiner's obviousness rejection.

## CONCLUSION

The decision of the Examiner to reject claims 1-4 and 21 under 35 U.S.C. § 102(b) as anticipated by Landi is affirmed. The decision of the Examiner to reject claims 7-9 under 35 U.S.C. § 102(b) as anticipated by Landi and to reject claims 5, 6 and 10-16 under 35 U.S.C. § 103(a) as unpatentable over Landi is reversed.

## AFFIRMED-IN-PART

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