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

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DURWARD GOMEZ
and STEVEN BORCHARDT

Appeal 2007-0629
Application 10/419,765
Technology Center 1700

Decided: May 16, 2007

Before THOMAS A. WALTZ, CATHERINE Q. TIMM, and JEFFREY T. SMITH, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 30-39. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

I. BACKGROUND

The invention relates to padding for use as acoustical insulation in automobiles. Claim 30 is illustrative of the subject matter on appeal:

30. A moldable and acoustically tunable gradient density padding material of enhanced acoustical performance in frequencies of from about 100 to 2500 Hz for use in an automobile, comprising:

a single layer of nonwoven material having an air flow resistance of about 200 to 4000 MKS Rayls, at least about 65% thermosplastic fibers, and a weight of about 0.5 to 9 oz/ft^2, said nonwoven material having at least one surface thereof processed to avoid complete melting of the fibers at an outermost surface thereof and to form an increased density portion which constitutes from about 5 to 80% of the thickness of the nonwoven material.

The Examiner relies on the following prior art references to show unpatentability:

Fleming, Jr.	US 3,660,222	May 2, 1972
Vair, Jr.	US 6,217,691	Apr. 17, 2001
Aneja	US 6,602,581 B2	Aug. 5, 2003

Celanese Acetate, *Complete Textile Glossary*, polypropylene fiber entry (2001)

Claims 30-35, 38, and 39 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Vair as evidenced by Complete Textile Glossary. To reject claim 36, the Examiner adds Aneja. To reject claim 37, the Examiner adds Fleming.

II. DISCUSSION

A. Issue

The Examiner finds that while Vair does not explicitly teach the claimed air flow resistance of 200-4000 MKS Rayls as required by claim 30, it is reasonable to presume that the property is inherent (Answer 5). The Examiner further finds that avoidance of complete melting of the fibers as required by claim 30 inherently occurs in Vair (Answer 4).

Appellants contend that the Examiner has not adequately supported these findings under the theory of inherency and, therefore, the Examiner has failed to show that each and every limitation is taught or suggested in the prior art (Br. 9-18).

The dispositive issue, therefore, is: Does the Examiner's technical reasoning support a reasonable belief of inherency with regard to the air flow resistance property and/or the properties flowing from an avoidance of complete melting?

B. Principle of Law

Where the Examiner has reason to believe that a claimed property may, in fact, be an inherent characteristic of the prior art product, an Examiner possesses the authority to require applicant to prove that the subject matter shown to be in the prior art does not in fact possess the property. *In re Best*, 562 F.2d 1252, 1254-55, 195 USPQ 430, 433 (CCPA 1977). However, before applicant can be put to this burdensome task, the Examiner must provide enough evidence or scientific reasoning to establish that the Examiner's belief that the property is inherent is a reasonable belief.

Ex parte Levy, 17 USPQ2d 1461, 1464-65 (BPAI 1990); *Ex parte Skinner*, 2 USPQ2d 1788, 1789 (BPAI 1986).

C. Analysis

The Examiner finds that it is reasonable to presume that the air flow resistance properties of the Vair mat are within the claimed range on the basis that Vair uses like materials, i.e., a nonwoven mat of thermoplastic fibers having integral skin layers (Answer 5). We cannot agree that this is enough to establish that the air flow resistance property is inherently, i.e., necessarily, within the claimed range.

Vair describes a method of making meltblown fibrous insulation from a nonwoven mat (Vair, col. 1, ll. 5-10). Vair is silent with regard to the air flow resistance value of the mat. Vair describes a process of forming the mat by air laying a nonwoven mat 30 of meltblown thermoplastic fibers and passing the mat to nip roll station 44 where a skin is formed on one or both surfaces of the mat (Vair, col. 6, ll. 1-5; Figs. 4-5). To form the skin, "the mat **30** is passed between upper and lower heated, smooth surfaced, cylindrical stainless steel nip rolls **54** and **56** (e.g. heated to a temperature ranging from about 150° F. and about 350° F. and preferably about 240° F.)." (Vair, col. 6, ll. 5-10). Vair discloses that "[a]s the upper major surface of the mat **30** is brought into contact with the heated cylindrical surface of the nip roll **54**, the thermoplastic fibers at and immediately adjacent the upper major surface of the mat **30** are melted by the heat from the nip roll to form a thin melt layer on the upper major surface of the mat **30**." (Vair, col. 6, ll. 10-15). This melt layer cools and solidifies into skins 24 and 26, preferably air permeable skins, integral with the fibrous core of the mat 30.

The heated nip rolls 54 and 56 may be spaced apart so that the mat 30 is subjected to little or no compression when passing between the heated nip rolls 54 and 56 or the mat may be compressed between about 25-50% of its final thickness, the compression serving to bring more of the mat fibers into contact with the heated surface of the rolls resulting in more coextensive and uniform thin melt layers (Vair, col. 6, ll. 27-44).

Appellants apply heat and pressure to form a gradient density padding material (Specification ¶ 31). Appellants disclose that the air flow resistance is dependent upon the amount of heat and pressure applied (Specification ¶ 31-32). Further the heat and pressure applied avoids complete melting of the fibers at the outermost surfaces to prevent the resulting gradient density material from including a non-flexible, brittle outermost surface (Specification ¶ 33).

The mere fact that Vair uses like materials, i.e., a nonwoven thermoplastic mat that has skin layers, does not provide sufficient evidence that the mat of Vair would necessarily have an air flow resistance within the claimed range. It may be *possible* to obtain the claimed air flow resistance depending on what heat and pressure is applied by the nip rolls of Vair, but that is not enough to support a finding of inherency. Vair's description of heat and pressure are broad and, in fact, encompass applying no pressure at all. Without pressure there would appear to be no gradient density generated.

In general, a limitation is inherent if it is the "natural result flowing from" the explicit disclosure of the prior art. *Schering Corp. v. Geneva Pharms*., 339 F.3d 1373, 1379, 67 USPQ2d 1664, 1669 (Fed.Cir. 2003).

"Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing *may* result from a given set of circumstances is not sufficient." *Mehl/Biophile Intl Corp. v. Milgraum*, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305 (Fed. Cir. 1999)(*quoting In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981)).

Moveover, we cannot say that the evidence supports the Examiner's finding that Vair's surface layer does not melt. The temperature range disclosed by Vair is for thermoplastics in general and is not specific to polypropylene. We cannot say that the Examiner's citation of the melting temperature in the Complete Textile Glossary and reasoning which focuses on the preferred temperature of 240° F, a temperature which is not disclosed as specific to polypropylene, overcomes the express disclosure in Vair of melting the surface of the mat. Furthermore, it appears from Appellants' Specification that melting the surface changes the properties of the skin as it makes it brittle. There appears to be a structural difference between melted and non-melted surfaces.

D. Conclusion

We find that the Examiner's technical reasoning does not support a reasonable belief of inherency with regard to the air flow resistance property and the avoidance of complete melting.

All of the claims depend from claim 30. Moreover, none of the other references cure the defects discussed above. Therefore, with regard to all the rejections, the findings of the Examiner are insufficient to establish a prima facie case of obviousness.

III. DECISION

With respect to the decision of the Examiner rejecting claims 30-39 under 35 U.S.C. § 103(a), we REVERSE.

REVERSED

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