

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JORG LEHNERT,
WERNER GROH,
MICHAEL SCHOPS,
and HERMANN WEIZENEGGER

Appeal 2008-3690
Application 10/271,595
Technology Center 1700

Decided: September 4, 2008

Before BRADLEY R. GARRIS, THOMAS A. WALTZ, and
KAREN M. HASTINGS, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 16, 17, and 20-32. We have jurisdiction under 35 U.S.C. § 6.

We REVERSE and ENTER A NEW GROUND OF REJECTION.

Appellants claim a process for producing a laminate which comprises applying a nonwoven layer to a glass fiber layer, bonding the layers by needling, and applying a resin binder solely to the glass fiber layer away from the nonwoven layer using a rotating roll whereby sufficient amounts of the resin binder penetrates into the glass fiber layer and “wherein none or only insignificant amounts of the binder resin enter the nonwoven synthetic fiber layer, which is essentially free of said resin binder” (claim 16).

Representative claim 16, the sole independent claim on appeal, reads as follows:

16. A process for producing a laminate comprising at least two layers, at least one layer comprising a nonwoven made from synthetic organic fibers and an outer layer comprising at least one layer of glass fibers, said process comprising:

- (a) applying a nonwoven made from synthetic organic fibers to a layer comprising glass fiber preconsolidated with a resin;
- (b) bonding the layers by needling in the direction of the layer comprising glass fibers such that some of the synthetic fibers penetrate the glass fiber layer and emerge from the outer surface of the glass fiber layer;
- (c) applying a resin binder solely to the side of the glass fiber layer away from the nonwoven synthetic fiber layer using a rotating roll whereby sufficient amounts of the resin binder penetrates [sic] into the glass fiber layer to secure the synthetic fibers within and on the surface of the glass fiber layer and wherein none or only insignificant amounts of the binder resin enter the nonwoven synthetic fiber layer, which is essentially free of said resin binder; and
- (d) drying the laminate.

The references set forth below are relied upon by the Examiner as evidence of obviousness:

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Faust	4,175,154	Nov. 20, 1979
Greiser	5,017,426	May. 21, 1991
Randall	5,342,680	Aug. 30, 1994
Plötz	WO 200109428	Feb. 8, 2001
Otaguro	JP 05004433	Feb. 23, 1993

Merriam-Webster ON-Line Dictionary, www.m-w.com/cgi-bin/dictionary?-book=Dictionary&va=calendar (June 20, 2005).

The claims on appeal are rejected under 35 U.S.C. § 103(a) as follows:

- 1) claim 16, 17, 20, and 23-29 are rejected over Plötz in view of the Merriam-Webster Online Dictionary, Otaguro, and Faust;
- 2) claims 21, 31, and 32 are rejected over the first mentioned references and further in view of Randall; and
- 3) claims 22 and 30 are rejected over the first mentioned references and further in view of Greiser.

These rejections cannot be sustained for the reasons set forth below.

Step (c) of independent claim 16 requires:

(c) applying a resin binder solely to the side of the glass fiber layer away from the nonwoven synthetic fiber layer using a rotating roll whereby significant amounts of the resin binder penetrates [sic] into the glass fiber layer to secure the synthetic fibers within and on the surface of the glass fiber layer and wherein none or only insignificant amounts of the binder resin enter the nonwoven synthetic fiber layer, which is essentially free of said resin binder;

With respect to this step, the Examiner correctly finds that Plötz teaches applying to the glass fiber layer a resin binder such as acrylate, urea, and melamine resins (Plötz 6, last full para; Ans.

3, 5). The Examiner also finds that Plötz teaches applying the resin binder by using a rotating roll in the form of a calender coater (Ans. 3-4). This second finding is erroneous.

In fact, Plötz does not disclose any mechanism by which to apply the above-mentioned binder. The calender disclosure of Plötz relates to applying a coating material such as polyvinyl chloride rather than binder (para. bridging 6-7, first full para. on 7). Therefore, the Examiner has erred in finding that Plötz discloses applying a resin binder using a rotating roll as required by step (c) of claim 16.

A more significant deficiency in the Examiner's unpatentability determination involves the claim 16, step (c), requirement that "none or only insignificant amounts of the binder resin enter the nonwoven synthetic fiber layer." The Examiner acknowledges that Plötz is silent regarding how much, if any, binder resin is present in the nonwoven layer (Ans. para. bridging 3-4). Nevertheless, the Examiner concludes that it would have been obvious for an artisan to limit the amount of binder which penetrates into the nonwoven layer in order to improve the sound dampening properties of this layer in view of the Otaguro reference (*id.*).

In this latter regard, the Examiner acknowledges that "Otaguro does not teach the exclusion of binder from such a non-woven, synthetic layer" (Ans. sentence bridging 9-10). Notwithstanding this deficiency, the Examiner believes an obviousness conclusion is proper because "the claims as currently

drafted do not exclude ‘insignificant amounts’ of binder” and because “such small amounts of binder that do not effect [sic., affect] the sound-dampening properties of the laminated assembly are deemed to constitute ‘insignificant amounts’ of binder” (Ans. 10, first full sentence). In essence, therefore, it is the Examiner’s position that it would have been obvious to limit the amount of binder in Plötz’s nonwoven layer to “such small amounts of binder that do not effect [sic., affect] the sound-dampening properties” (*id.*) and that such small amounts of binder “are deemed to constitute ‘insignificant amounts’ [as recited in claim 16]” (*id.*).

In an attempt to reinforce the above-discussed obviousness position, the Examiner finds that “the original disclosure [of the subject Specification] fails to quantify the scope of ‘insignificant amounts’” (Ans. 8). This finding is correct, and Appellants do not argue otherwise in the record before us. Consistently, our independent study reveals that Appellants’ Specification provides no standard for measuring the degree of scope encompassed by the claim 16 phrase “insignificant amounts.”

It is well established that, when an imprecise word of degree, (e.g., “insignificant”) is used in a claim, a determination must be made as to whether the Specification provides some standard for measuring that degree in order to thereby decide whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the Specification.

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Seattle Box Co. v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826 (Fed. Cir. 1984).

On this record, it is undisputed that Appellants' Specification provides no standard for measuring the degree of scope encompassed by the claim 16 phrase "insignificant amounts." This circumstance leads us to determine that one with ordinary skill in this art would be unable to ascribe a reasonably definite meaning to this claim phase. It is appropriate to remind both the Examiner and Appellants that, if no reasonably definite meaning can be ascribed to terms in a claim, the subject matter does not become obvious — the claim becomes indefinite. *See In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). This is because the patentability analysis of such a claim would necessarily involve speculation and assumption with regard to the metes and bounds of the claim, and a § 103 rejection must not be based on such speculation and assumption. *See In re Steele*, 305 F.2d 859, 862-63 (CCPA 1962).

Here, the Examiner's obviousness position is premised on the speculative assumption that "small amounts of binder that do not effect [sic., affect] the sound-dampening properties . . . are deemed to constitute 'insignificant amounts' of binder" (Ans. 10). For this reason and because of the Examiner's incorrect finding discussed above (i.e., that the resin binder of Plötz is applied using a calender), the § 103 rejection of independent claim 16 is improper and cannot be sustained. Likewise, the § 103 rejections

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of the dependent claims on appeal also are improper and cannot be sustained.

We reverse, therefore, each of the § 103 rejections advanced by the Examiner in this appeal.

NEW GROUND OF REJECTION

Claims 16, 17, and 20-32 are hereby rejected under the second paragraph of 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which Appellants regard as their invention.

As fully detailed above, one having ordinary skill in this art would be unable to ascribe a reasonably definite meaning to the independent claim 16 phrase “insignificant amounts” because the Specification provides no standard for measuring the degree of scope encompassed by this phrase. Analogous reasoning also applies to the claim 16 phase “essentially free of said resin binder.” Specifically, we find that the Specification provides no standard for measuring the degree of scope encompassed by the phrase “substantially free,” and accordingly an artisan would be unable to ascribe a reasonably definite meaning to this phrase. Under these circumstances, independent claim 16 as well as the other appealed claims which depend therefrom fail to comply with the second paragraph of § 112.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides “[a] new ground of

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rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record.

CONCLUSION

The decision of the Examiner is reversed.

A new ground of rejection is made.

REVERSED
37 C.F.R. § 41.50(b)

ls/cam

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