The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 PETER H. MARKUSCH and RALF GUETHER

Appeal No. 2006-0441
Application No. 09/809,604

ON BRIEF

Before KIMLIN, WARREN and JEFFREY T. SMITH, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 2-14 and 19-32. Claim 2 is illustrative:

> 2. An improved polyurethane geotextile composite comprising a geotextile impregnated with an unfilled polyurethane composition comprising a reaction product of:
>
> a) a liquid polyisocyanate having an isocyanate content of at least 10% by weight and represented by the formula $Q(NCO)_n$ in which n represents a number from 2 to about 5 and Q represents an aliphatic hydrocarbon group containing from 2 to about 18 carbon atoms, a cycloaliphatic hydrocarbon group containing from 4 to about 15

carbon atoms, an araliphatic hydrocarbon group containing from 8 to 15 carbon atoms, or an aromatic hydrocarbon group containing from 6 to about 15 carbon atoms,

b) an isocyanate reactive component comprising one or more high molecular weight polyether polyols having from 2 to 6 hydroxyl groups and a number average molecular weight of at least 250 to 8,000 and 0 to 10% by weight of a low molecular weight diol or triol having an equivalent weight of 31 to 99, and

c) an organometallic catalyst,

wherein the isocyanate reactive component b) contains no more than 0.1% by weight water prior to reaction with the liquid polyisocyanate a).

The examiner relies upon the following reference in the rejection of the appealed claims:

Markusch et al. (Markusch) 6,187,892 Feb. 13, 2001

Appellants' claimed invention is directed to a geotextile composite comprising the recited polyurethane composition impregnated in a geotextile.

Appealed claims 2, 5-11 and 21 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Markusch. Claims 12-14, 19-22 and 25-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Markusch. In addition, claims 3, 4, 23 and 24

stand rejected under 35 U.S.C. § 102(e) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Markusch.

We have thoroughly reviewed the respective positions advanced by appellants and the examiner. In so doing, we find ourselves in agreement with the appellants that the examiner has not established a prima facie case of anticipation or obvious under Section 102 and Section 103, respectively. Accordingly, we will not sustain the examiner's rejections.

The fatal flaw in the examiner's rejections is that Markusch does not describe, within the meaning of Section 102, a polyurethane impregnated in a geotextile, and does not teach or suggest for purposes of Section 103 such an impregnated geotextile. As emphasized by appellants, Markusch expressly discloses that "[t]he viscosity of the reacting adhesives is sufficiently high so that the compositions do not soak into porous substrates and thus remain on the surface of the substrate where they maintain their effectiveness as adhesive layers" (column 2, lines 13-16). Consequently, Markusch provides a clear teaching that the polyurethane does not impregnate a porous substrate due to its high viscosity.

While acknowledging the reference disclosure, “the Examiner maintains that while it may be that the polyurethane composition remains on the surface of the substrate after coating, upon the application of pressure, the polyurethane composition would inherently impregnate and/or soak into any of the porous textile substrates taught by Markush et al.” (Page 7 of answer, first paragraph, emphasis added). However, it is well settled that a determination of inherency cannot be established by probabilities or possibilities, but it is incumbent upon the examiner to establish the inevitability of the inherency based upon factual evidence or persuasive scientific reasoning. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981); In re Wilding, 535 F.2d 631, 635-36, 190 USPQ 59, 63-64 (CCPA 1976). In the present case, the examiner has not cited factual evidence to support the conclusion of inherency. The examiner explains that Markusch teaches that the adhesive polyurethane composition is applied by known methods and, therefore, “asserts that immersing or flooding a porous textile with the adhesive composition alone or in combination with the application of pressure would inherently meet the recited impregnate limitations” (page 7 of answer, second paragraph). However, the examiner’s reasoning is specifically rebutted by the disclosure of Markusch that the

adhesive does not soak the porous substrate but remains on its surface. As a result, it cannot be gainsaid that Markush fails to describe impregnating a textile substrate with the adhesive for purposes of Section 102, and we find no teaching or suggestion in the reference which would have motivated one of ordinary skill in the art to modify the viscosity of the polyurethane composition such that it can impregnate a textile substrate. The examiner has cited no reference which provides the requisite evidence that one of ordinary skill in the art would have found it obvious to modify the adhesive composition of Markusch for impregnating textile substrates.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN Administrative Patent Judge	)	
CHARLES F. WARREN Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JEFFREY T. SMITH Administrative Patent Judge	)	

ECK:hh

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