

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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte BRIAN G. RANDALL AND GARY A. RICARDS

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Appeal No. 2003-1885  
Application No. 09/837,226

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HEARD: January 8, 2004

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Before WARREN, WALTZ, and DELMENDO, Administrative Patent Judges.  
WALTZ, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on an appeal from the primary examiner's final rejection of claims 1 through 28, which are the only claims pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to a gypsum board having improved moisture-tolerance, where the gypsum board has a core of set gypsum faced with at least one coated fibrous mat, and the coating of this mat comprises a dried aqueous mixture of a combination of a mineral pigment, an inorganic adhesive binder

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and a polymer latex binder (Brief, page 2). Representative independent claim 1 is reproduced below:

1. A moisture-tolerant structural panel comprising

(1) a gypsum core; and

(2) a coated mat comprising fibers adhered to at least one surface of said gypsum core;

the coated mat having a coating comprising a combination of (i) a mineral pigment, (ii) an inorganic adhesive binder and (iii) a polymer latex adhesive binder.

The examiner has relied upon the following references as evidence of obviousness:

Ramig, Jr. et al. (Ramig)	3,945,965	Mar. 23, 1976
Gay et al. (Gay)	5,112,678	May 12, 1992
Randall	5,342,680	Aug. 30, 1994
Green et al. (Green)	5,397,631	Mar. 14, 1995
Jaffee	5,772,846	Jun. 30, 1998

Claims 1, 2, 4-11, 13-15, 17, 18 and 21-27 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Green in view of Gay (Answer, page 3). Claims 3 and 12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Green in view of Gay and Jaffee (Answer, page 5). Claim 16 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Green in view of Gay and Randall (*id.*). Claims 19, 20 and 28 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Green in view of Gay and Ramig (Answer, page 6).

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We reverse all of the rejections on appeal essentially for the reasons stated in the Brief, Reply Brief, and those reasons set forth below.

#### **OPINION**

The examiner finds that Green discloses a fibrous mat faced gypsum board coated with a water resistant coating, where the fibrous mat may be glass fibers applied to one or both surfaces of the gypsum core (Answer, page 3). The examiner finds that Green does not teach the water resistant coating as recited in the claims on appeal (Answer, page 4). However, the examiner applies Gay for the teaching of a water resistant coating utilized to impregnate fiber mat-faced gypsum boards, where the coating comprises a polymer latex binder, a second binder, and a mineral pigment (*id.*, citing the abstract of Gay). The examiner further finds that the coating of Gay is taught to be water resistant, dimensionally stable, and economically practical, as well as useful as an underlayment of facer material (*id.*). From these findings, the examiner concludes that it would have been obvious to one of ordinary skill in the art "to utilize the water resistant coating taught in Gay on the mat-faced gypsum board taught in Green because said coating is water resistant, dimensionally stable, economical

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and can be used as an underlayment or facer material." Answer, page 4; see also page 8.

When combining the teaching of two or more references, the burden is on the examiner to establish a motivation, reason, or suggestion for combining the teachings of the references. See *In re Mayne*, 104 F.3d 1339, 1342, 41 USPQ2d 1451, 1454 (Fed. Cir. 1997). The examiner may establish this motivation, reason, or suggestion by showing that the combination is suggested by the teachings of the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved. See *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996). In this appeal we determine that the examiner has failed to establish a convincing motivation, reason or suggestion for combining Green and Gay as proposed in the rejections on appeal.<sup>1</sup>

As correctly argued by appellants (Brief, page 10; Reply Brief, pages 1-2), the examiner's finding that the abstract of Gay teaches a water resistant coating utilized to impregnate fiber mat-

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<sup>1</sup>The Ramig, Randall and Jaffee references, cited by the examiner to show various features of several dependent claims (Answer, pages 5-6), do not remedy the deficiencies discussed below with respect to the combination of Green and Gay.

faced gypsum board is in error, as apparently admitted by the examiner (Answer, page 9). "Where the legal conclusion [of obviousness] is not supported by facts it cannot stand." *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967). Appellants also correctly argue that the examiner has not established motivation for the proposed combination of Green and Gay (Brief, pages 9-11; Reply Brief, page 6). Although the examiner is correct that the gypsum board of Green can be characterized as a facer or support surface for building construction, which is the same general use as taught by Gay (Answer, page 8; see Green, col. 11, ll. 19-35), we determine that the examiner has not established the requisite motivation or suggestion for the proposed combination of references. Gay teaches the advantage of his non-porous mat in that it is "an economical and weather resistant coating composition" (col. 2, ll. 61-63).<sup>2</sup> However, Green also teaches water resistant properties as well as "significant economic ... advantages" over products currently available (col. 5, ll. 44-48). Accordingly, the examiner has not

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<sup>2</sup>The "dimensionally stable" advantage cited by the examiner (Answer, pages 4 and 8) is merely the result of using glass mats (see Gay, col. 1, ll. 49-51). Since the preferred fibrous mat of Green is a fiber glass mat (col. 6, ll. 35-37), the product of Green would also have been "dimensionally stable."

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established why one of ordinary skill in this art would have desired the water resistant coating of Gay in place of the water resistant coating of Green. See *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Additionally, Green teaches that there are numerous commercially available resins which are claimed to be effective in forming water resistant coatings but there are significant differences in water-resistant characteristics depending on the particular resin (col. 9, ll. 3-20; see the comparison at col. 13, l. 61-col. 14, l. 21 and Table 1). Therefore it appears that the substitution of one water resistant coating for another would not be predictable in this art, especially where, as here, the ingredients of the coating composition are not the same or similar.

For the foregoing reasons and those stated in the Brief and Reply Brief, we determine that the examiner has not established a *prima facie* case of obviousness. Therefore we reverse all of the rejections on appeal.

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The decision of the examiner is reversed.

**REVERSED**

CHARLES F. WARREN	)	
Administrative Patent Judge	)	
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	)	
	)	
	)	BOARD OF PATENT
THOMAS A. WALTZ	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
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ROMULO H. DELMENDO	)	
Administrative Patent Judge	)	

TAW/jrg

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BANNER & WITCOFF  
1001 G STREET N W  
SUITE 1100  
WASHINGTON, DC 20001

