

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MICHAEL B. DOOLIN,  
GREGORY F. NIECKARZ, and JOHAN J. RERING

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Appeal 2008-5810  
Application 11/014,481  
Technology Center 1700

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Decided: December 18, 2008

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Before EDWARD C. KIMLIN, CHARLES F. WARREN, and  
PETER F. KRATZ, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

**DECISION ON APPEAL**

This is an appeal from the final rejection of claims 16-35. Claim 16 is illustrative:

16. A product comprising a wood and/or wood containing substrate which is adhered together through use of an adhesive system consisting essentially of a mixture of:

- a) a melamine-formaldehyde resin;

- b) a phenol-formaldehyde resin; and
- c) an emulsion of a cross linkable polyvinyl acetate resin, wherein the adhesive mixture is cured with an acid.

The Examiner relies upon the following references as evidence as obviousness:

Alderson	2,532,983	Dec. 05, 1950
Nishioka	3,915,919	Oct. 28, 1975
Adler	4,043,952	Aug. 23, 1977

Appellants' claimed invention is directed to a product wherein wood substrates are adhered to each other by the use of a particular adhesive system. The adhesive system consists essentially of the recited resins.

Appealed claims 16-23 and 25-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Alderson in view of Nishioka. Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the stated combination of references further in view of Adler.

With the exception of separately rejected claim 24, Appellants do not present an argument that is reasonably specific to any particular claim on appeal. Accordingly, claims 16-23 and 25-35 stand or fall together.

We have thoroughly reviewed each of Appellants' arguments for patentability. However, we are in complete agreement with the Examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the Examiner's rejections.

There is no dispute that Alderson, like Appellants, discloses a wood product comprising wood substrates adhered together with an adhesive

composition comprising the presently claimed polyvinyl acetate resin and melamine-formaldehyde resin (Alderson, col. 4, Example 4). As acknowledged by the Examiner, Alderson does not exemplify an adhesive composition comprising a phenol-formaldehyde resin in admixture with a melamine-formaldehyde resin. Accordingly, the Examiner cites Nishioka for teaching the compatibility of melamine-formaldehyde resins and phenol-formaldehyde resins as binders in a gypsum composition. Since calcium sulfate is a component of gypsum, and calcium sulfate may be present in the adhesive compositions of Alderson, the Examiner concludes that it would have been obvious for one of ordinary skill in the art to include a phenol-formaldehyde resin in the adhesive composition of Alderson.

We agree with the Examiner that Nishioka evidences the obviousness of using a melamine-formaldehyde resin and a phenol-formaldehyde resin in the same adhesive binding composition. However, we find that Alderson, standing alone, provides substantial evidence for the obviousness of the claimed adhesive composition for wood substrates. Alderson expressly teaches that the melamine-formaldehyde resin of Examples 4 and 5 can be replaced with aldehyde resols made from various phenols, including phenol. In particular, Alderson discloses that “any condensation product of an aldehyde with a phenol” can be used as a substitute for the melamine-formaldehyde resin (col. 6, ll. 70-71). Consequently, based on Alderson alone, we are convinced that it would have been obvious for one of ordinary skill in the art to modify the exemplified adhesive composition of Alderson by adding a phenol-formaldehyde resin in admixture with a melamine-formaldehyde resin. It is well-settled that it is a matter of obviousness for the skilled artisan to combine two or more materials when each is taught by

the prior art to be useful for the same purpose. *In re Kerkhoven*, 626 F.2d 846, 850 (CCPA 1980).

Appellants make reference to “the synergistic effect of the claimed adhesive mixture as illustrated in the Examples of the present application, which compare the physical properties of Douglas Fir billets made with the individual resins, with those made with the three component mixture of the present invention, at various pHs.” (App. Br. 10, first para.). However, it is incumbent upon Appellants to set forth an analysis of the specification data which demonstrates that it represents a comparison with the closest prior art,<sup>1</sup> and that the results would be considered truly unexpected by one of ordinary skill in the art.<sup>2</sup> It is not for this Board to independently ferret out objective evidence in the Specification and interpret it in a light most favorable to Appellants. Consequently, in the absence of the requisite analysis of the data by Appellants, the *prima facie* case of obviousness established by the applied prior art has not been rebutted by Appellants.

As for separately argued claim 24, which recites aluminum chloride as the acid used to cure the adhesive, we agree with the Examiner that Adler establishes the obviousness of using either aluminum chloride or an organic acid to cure a formaldehyde polycondensation resin, such as a phenol-formaldehyde resin and a melamine-formaldehyde resin. Appellants’ argument that Adler does not teach or suggest an adhesive for wood in wood substrates misses the thrust of the Examiner’s rejection. The issue is the obviousness of using aluminum chloride to cure a composition comprising

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<sup>1</sup> *In re Johnson*, 747 F.2d 1456, 1461 (Fed Cir. 1984).

<sup>2</sup> *In re Merck & Co., Inc.*, 800 F.2d 1091, 1099 (Fed. Cir. 1986).

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formaldehyde polycondensation resins of the type recited in claim 16 on appeal.

#### CONCLUSION

In conclusion, based on the foregoing, the Examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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