

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 43

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte GREGORY J. ANDERSON and JOHN M. ZIMMEL

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Appeal No. 95-3218  
Application No. 08/100,696<sup>1</sup>

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HEARD: December 11, 1998

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Before WINTERS, JOHN D. SMITH and WALTZ, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal pursuant to 35 U.S.C. § 134 from the final rejection of claims 1 through 11.

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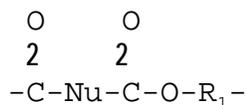
<sup>1</sup> Application for patent filed July 30, 1993. According to the appellants, the application is a continuation of Application No. 07/918,948, filed July 22, 1992, now abandoned, which is a continuation of Application No. 07/502,980, filed March 30, 1990, now abandoned.

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Claim 1 is representative and is reproduced below:

1. A solvent free, moisture curable urethane hot melt adhesive composition having thermal stability that can be extruded to form an initially high green strength hot melt bond and can moisture-cure to an adhesive bond, which composition comprises:

(a) about 5-80 wt-% of a polyester polyether copolymer comprising a polymer having the formula:



wherein Nu is a predominately cyclic nucleus and R<sub>1</sub> is randomly selected from either a C<sub>2-6</sub> alkylene or an amorphous, long-chain polyether subunit comprising a polyoxyalkylene group; and

(b) about 20-95 wt-% of a polyisocyanate prepolymer comprising the reaction product of:

(i) a polyol; and  
(ii) a polyfunctional isocyanate having an isocyanate functionality of about two or more wherein said polyfunctional isocyanate is present in a concentration sufficient to form said polyisocyanate prepolymer and provide free isocyanate functionality to cure said adhesive composition through reaction with moisture.

The reference of record relied upon by the examiner is:

Merton et al. (Merton)                      4,430,479                      Feb. 7,  
1984

A reference relied upon by appellants is:

Encyclopedia of Chemical Technology, Kirk-Othmer, Fourth Edition  
Vol. 1, pp. 461-463, copyright 1978.

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The appealed claims stand rejected for obviousness  
(35 U.S.C. § 103) over Merton.

We reverse.

The subject matter on appeal is directed to a hot melt adhesive composition comprising a polyester polyether copolymer component and a polyisocyanate prepolymer component. Importantly, the composition is defined by the preambular language of the appealed claims as a "solvent free, moisture curable" hot melt that "can be extruded to form an initially high green strength hot melt bond and can moisture-cure to an adhesive bond."

As evidence of obviousness of the claimed invention, the examiner relies on Merton. Merton discloses a solvent based heat activatable adhesive composition which, according to the examiner, may be comprised of the identical two components required by the appealed composition. The examiner acknowledges that the Merton composition, as formulated, is not initially solvent free. However, the examiner contends that once Merton's adhesive composition is applied to a substrate and the solvent is removed, Merton's adhesive is then a solvent free heat activatable moisture curable

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adhesive which "reads on" the adhesive composition of the claimed invention. See the examiner's answer at page 5, lines 4-8. To support this argument the examiner refers to the disclosure of Merton at column 2 lines 36-44 which states

The adhesive compositions of the present invention may be preapplied to substrates well in advance (i.e., about 60 days) of the actual bonding operation. The fact that the composition is then simply heat reactivated when it is desired to perform the bonding operation permits bonding at the worksite to be accomplished without the presence of flammable solvents common to solvent-based adhesives or the employment of often inconvenient water-based adhesives.

We cannot agree with the examiner that all the limitations of the appealed claims are found in the reference, i.e., that the claimed composition "reads on" something disclosed or suggested in the reference. First, the adhesive of Merton is only in a solvent free state when it exists as a dried film bonded to a substrate. Clearly such a adhesive/substrate composite structure cannot fairly be said to be a hot melt adhesive. As emphasized throughout appellants' brief, hot melt adhesives are defined in the art as "100% nonvolatile thermoplastic materials that can be heated to a melt and then applied as a liquid to an adherend."

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See the first full paragraph, at page 461 of the Kirk-Othmer publication cited by appellants.

Secondly, Merton provides no indication that a dried adhesive film preapplied and bonded to a substrate can be subsequently extruded to form a hot melt bond and can be subsequently moisture cured to an adhesive bond. Indeed, it would be highly speculative to suggest that a preapplied adhesive film that had dried and cured for about 60 days, as taught by Merton at column 3, lines 36-38, could subsequently further "moisture-cure to an adhesive bond" or that the polyfunctional isocyanate would then be present "in a concentration sufficient" to "cure the adhesive composition through reaction with moisture" as specified and required by the appealed claims. Accordingly, we cannot sustain the stated rejection of the appealed claims based on disclosures in Merton.

One final point remains. At the oral hearing, a question was raised as to whether the claim language defining the copolymer component as a polyester polyether is an accurate and definite description of this component when  $R_1$  is a  $C_{2-6}$  alkylene. We decline to exercise our discretion to state a

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new rejection of the claims pursuant to our authority under 37 CFR § 1.196(b). We trust that the appellants and the examiner will review and resolve this matter, upon return of this application to the examiner, prior to issuance of the application.

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The decision of the examiner is reversed.

REVERSED

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JOHN D. SMITH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
THOMAS A. WALTZ	)	
Administrative Patent Judge	)	

jrg

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**JENINE GILLIS**

Appeal No. 95-3218

Serial No. 08/100,696

Judge JOHN D. SMITH

Judge WALTZ

Judge WINTERS

Received: 12/16/98

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DECISION: REVERSED

Send Reference(s): Yes No  
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Remanded: Yes No

Brief or Heard

Group Art Unit: 1501

Index Sheet-2901 Rejection(s): \_\_\_\_\_

Acts 2: \_\_\_\_\_

Palm: \_\_\_\_\_

Mailed:

Updated Monthly Disk (FOIA): \_\_\_\_\_

Updated Monthly Report: \_\_\_\_\_

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