

The opinion in support of the decision being entered today is not binding precedent of the Board.

Paper 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte JOHNNY D. MASSIE, II, JEAN M. MASSIE,  
DONALD W. STAFFORD and PETER E. WALLIN

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Appeal 1997-2589  
Application 08/423,481<sup>1</sup>

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Before: WILLIAM F. SMITH, Administrative Patent Judge,  
McKELVEY, Senior Administrative Patent Judge, and  
LORIN, Administrative Patent Judge.

McKELVEY, Senior Administrative Patent Judge.

**MEMORANDUM OPINION and ORDER**  
**Decision on appeal under 35 U.S.C. § 134**

The appeal is from a decision of the Primary Examiner rejecting claims 1-2, 5-6 and 9-10. Applicants have withdrawn the appeal as to claims 9-10. We reverse as to claims 1-2 and 5-6 and dismiss the appeal as to claims 9-10.

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<sup>1</sup> Application for patent filed 19 April 1995. The real party in interest is Lexmark International, Inc.

**A. Findings of fact**

The record supports the following findings by a preponderance of the evidence.

The claims

1. The claims remaining on appeal are claims 1-2 and 5-6.
2. The claims stand or fall together (Appeal Brief, page 3).
3. Claim 1 reads as follows (indentation, paragraph numbering and **bold** added):

An endless developer member comprising

- (1) an inner conductive member and
- (2) an outer semiconductive member on said inner member,

said outer member being a polyurethane formed by the reaction of

- (a) a polycaprolactone ester toluene diisocyanate urethane prepolymer with
- [b] a trifunctional polyether polyol

[c] at stoichiometry of about 95 percent alcohol functional groups to isocyanate functional groups,<sup>[2]</sup> said polyurethane having **a conductive filler of ferric chloride.**

Examiner's Rejection

4. The sole rejection remaining on appeal is that claims 1-2 and 5-6 are said to be unpatentable under 35 U.S.C. § 103 over Wilson and Baker.

5. In a light most favorable to the examiner, Wilson can be said to describe an endless developer member which is the same as that of applicants' claim 1, differing solely in that it does not contain ferric chloride.

6. In fact, Wilson describes the use of a complex of ethylene glycol or an oligoethylene glycol with an ionizable zinc halide salt (col. 5, lines 46-53).

7. Wilson also describes the prior art use of a similar complex with sodium iodide, lithium iodide and sodium thiocyanate (col. 4, lines 39-47).

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<sup>2</sup> In the Appeal Brief (page 4), applicants explain that a "stoichiometry of about 95 percent alcohol functional groups to isocyanate functional groups" means "that there be 0.95 OH group to 1 NCO group." An OH group is an alcohol group. An NCO group is an isocyanate group.

8. In a light most favorable to the examiner, Baker can be said to describe the use of "metallic halide" conductive fillers in endless developer members. In particular, Baker describes the use of copper II chloride (col. 1, line 48).

Applicants' arguments

9. Applicants maintain that the examiner's rejection is not proper because:

- a. one has to pick and choose among numerous alternatives to arrive at using a caprolactone ester toluene diisocyanate;
- b. Wilson does not describe the use of a hydroxyl (OH) to isocyanate (NCO) group ratio of 95 to 100; and
- c. Wilson and Baker does not describe the use of ferric chloride as a conductive member.

The examiner's arguments

10. With respect to applicants' argument (c), supra, the examiner acknowledges that Baker does not describe the use of ferric chloride (Examiner's Answer, page 4). Nevertheless, the examiner reasons that (emphasis added):

it would have been obvious to a person of ordinary skill in the art to which this invention pertains, given the teaching of Wilson \*\*\* and Baker \*\*\* to optimize polyurethane elastomer composition[s] for desired application and physical properties and conductivity for desired application by choosing \*\*\* [a] transition metal halide salt as conductivity control agent such as ferric chloride.

**B. Discussion**

The examiner's finding that one skilled in the art would have been able to "optimize" "properties" by selecting ferric chloride is clearly erroneous and is not supported by any evidence which has been called to our attention. The manifest principal difficulty with the examiner's reasoning is that it is based on impermissible hindsight. On the basis of the examiner having failed to establish the obviousness of the use of ferric chloride in applicants' combination, it becomes unnecessary for us to address other arguments made by applicants in support of their appeal.

**C. Summary**

The rejection of claims 1-2 and 5-6 as being unpatentable under 35 U.S.C. § 103 over Wilson and Baker is reversed.

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The appeal is dismissed as to claims 9-10.

**REVERSED-IN-PART and DISMISSED-IN-PART**

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WILLIAM F. SMITH,	)	
Administrative Patent Judge	)	
	)	
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_____	)	
FRED E. McKELVEY, Senior	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
_____	)	
HUBERT C. LORIN	)	
Administrative Patent Judge	)	

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