

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte OSAMU OZAWA and TETSU KITAMI

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Appeal No. 94-3296  
Application No. 07/878,499<sup>1</sup>

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ON BRIEF

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Before CAROFF, GARRIS, and PAK, Administrative Patent Judges.  
PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's refusal to allow claims 6 through 9, which are all of the claims remaining in the application. Claims 1 through 5 have been canceled.

The present invention is directed to a hose useful for the transport of refrigerants. See specification, page 1. The hose has a core tube, a reinforcing layer over the core tube and a cover tube over the reinforcing layer. See specification,

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<sup>1</sup> Application for patent filed May 5, 1992.

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pages 6 and 7. The cover tube is made with a vulcanizate of particular rubber compositions having high weather and moisture resistance. See specification, pages 2, 3 and 7 through 15. The resistance to both weather and moisture allows the particular rubber compositions to be used as a material for the cover tube of the hose useful for the transport of refrigerants. Id.

Claim 6 is representative of the subject matter on appeal and reads as follows:

6. A hose for use in the transport of refrigerants and having high resistance to weather and moisture, said hose having at least a core tube, a reinforcing layer over said core tube and a cover tube over said reinforcing layer, at least said cover tube being formed from a vulcanizate of a rubber composition comprising a first copolymer rubber having an isobutylene unit and a p-halogenated methylstyrene unit, a second copolymer rubber having an isobutylene unit, a p-halogenated methylstyrene unit and a p-methylstyrene unit or a mixture of said copolymer rubbers, and wherein the proportion of said p-halogenated methylstyrene unit in said first copolymer rubber and the proportion of the sum of p-halogenated methylstyrene unit and p-methylstyrene unit in said second copolymer unit is 1-20 percent by weight of the respective copolymer rubbers.

The references of record relied on by the examiner are:

Kitami et al. (Kitami '036)	4,880,036	Nov. 14, 1989
Kitami et al. (Kitami '736)	4,905,736	Mar. 06, 1990

European Patent Application having a publication number of 0 344 021, Powers et al., Nov. 29, 1989 (hereinafter referred to as "Powers").<sup>2</sup>

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<sup>2</sup> This European Patent Application is referred to as "Exxon Chemical Co." by both the examiner and appellants.

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Claims 6 through 9 stand rejected under 35 U.S.C. § 103 as unpatentable over either Kitami '736 or Kitami '036 in view of Powers. We reverse.<sup>3</sup>

Appellants do not dispute that the Kitami references disclose the claimed hose except for a cover tube made up of the claimed vulcanizate. See the Brief and Reply Brief in their entirety. Nor do appellants dispute that the Powers reference discloses the claimed vulcanizate. See the Brief, page 8. Appellants, however, disagree with the examiner's contention that it would have been obvious to one of ordinary skill in the art to employ the vulcanizate of the Powers reference to form the cover tube of the Kitami references' refrigerant transport hose. *Id.* The dispositive question is, therefore, whether making the cover tube of the Kitami references' refrigerant transport hose with the vulcanizate described in the Powers reference would have been obvious to one of ordinary skill in the art.

We answer this question in the negative. As correctly observed by appellants, neither the Kitami references nor the

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<sup>3</sup> Although it appears that the examiner has altered the § 103 rejection based on both the Kitami references and the Powers reference to the § 103 rejection based on either the Kitami references in view of the Powers reference (compare the final rejection with the Answer), we observe no difference in the results.

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Powers reference discloses that the vulcanizate of the Powers reference is useful for making the cover tube of a refrigerant transport hose. Nor is there any recognition in either the Kitami references or the Powers reference that the vulcanizate of the Powers reference has the properties required for forming the cover tube of a refrigerant transport tube. While, as indicated by the examiner at pages 3 and 4 of the Answer, the Kitami references recognize that rubbers useful for making the cover tube of a refrigerant transport hose need both high moisture and ozone resisting properties, the examiner has not proffered any evidence that the vulcanizate of the Powers reference has a high moisture resisting property. The fact that the Powers reference discloses its vulcanizate as comparable to one of the rubbers disclosed in the Kitami references in terms of an ozone resisting property does not indicate that they are comparable to each other in terms of a moisture resisting property. Thus, there simply is

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no suggestion whatsoever to employ the vulcanizate of the Powers reference for forming the cover tube of the Kitami references' refrigerant transport hose.

The decision of the examiner is reversed.

REVERSED

MARC L. CAROFF	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
BRADLEY R. GARRIS	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
CHUNG K. PAK	)	
Administrative Patent Judge	)	

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APPLICATION NO. 07/878,899

APJ PAK

APJ GARRIS

APJ CAROFF

DECISION: REVERSED

Typed By: Jenine Gillis

**DRAFT TYPED:** 30 Nov 98

**FINAL TYPED:**