

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(2) is not binding precedent of the Board.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. 10

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte RONALD D. OLINGER  
and MICHAEL B. GUIDRY

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Appeal No. 1997-3614  
Application No. 08/433,272<sup>1</sup>

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ON BRIEF

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Before JOHN D. SMITH, PAK, and TIMM, Administrative Patent  
Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

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<sup>1</sup> Application for patent filed May 2, 1995

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This is a decision on an appeal from the examiner's final rejection of claims 1 through 28 which are all of the claims pending in the application.

Claims 1 and 28 are representative of the subject matter on appeal and read as follows:

1. In the method wherein impure vinyl chloride containing a contaminating amount of monovinyl acetylene is contacted with catalyst comprising ferric chloride to produce purified vinyl chloride containing a reduced amount of monovinyl acetylene, the improvement wherein the catalyst is a catalyst system in which the ferric chloride is carried on an alumina substrate and wherein the impure vinyl chloride and substantially anhydrous hydrogen chloride are mutually contacted with the catalyst system.

28. In the method wherein impure vinyl chloride containing a contaminating amount of butadiene, monovinyl acetylene, or both butadiene and monovinyl acetylene, is contacted with catalyst comprising Lewis Acid to produce purified vinyl chloride containing a reduced amount of butadiene or monovinyl acetylene or both butadiene and monovinyl acetylene, the improvement wherein the catalyst is a catalyst system in which the Lewis Acid is carried on an alumina substrate and wherein the impure vinyl chloride and substantially anhydrous hydrogen chloride are mutually contacted with the catalyst system.

As evidence of obviousness, the examiner relies on the following prior art:

Gause et al. (Gause) 1964	3,142,709	Jul. 28,
McFadden 1973	3,723,550	Mar. 27,

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Claims 1 through 28 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Gause and McFadden.

We reverse.

The examiner's rejection is premised upon obviousness of using the alumina substrate mentioned in McFadden as a support for ferric chloride used in Gause's vinyl chloride purification process. See Answer, pages 3 and 4. However, the fatal flaw in the examiner's rejection is that there is no suggestion to use alumina as an inert support for a dehydrating agent. As correctly pointed out by appellants, Gause discloses using ferric chloride as a dehydrating agent in its vinyl chloride purification process. See column 2, lines 56-61. Although McFadden mentions alumina, it states that alumina is known to be used as an inert support for a catalyst. See column 1, lines 19-25. On this record, the examiner simply fails to proffer any evidence that one of ordinary skill in the art would have been led to use alumina as a support for a dehydrating agent. Accordingly, we are constrained to reverse the examiner's decision rejecting

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claims 1 through 28 under 35 U.S.C. § 103 over the applied prior art.

OTHER ISSUE

According to appellants at pages 1 and 2 of the specification, the claimed vinyl purification process was known except for using alumina as an inert support for a Lewis Acid catalyst, such as ferric chloride. Appellants also acknowledge at page 2 of the specification that it was known that ferric chloride, a known contaminant to a purified vinyl chloride stream, has a tendency to be carried over into the treated (purified vinyl chloride) stream. There appears to be some recognition in the art of a need to affix ferric chloride to a carrier or a support material to prevent it from contaminating the treated stream. The prior art, namely McFadden, relied upon by the examiner refers to U.S. Patent 3,125,609 at column 1, lines 19-25. According to McFadden, this U.S. Patent recognizes using "cupric chloride [Lewis Acid catalyst] supported on an inert substrate such as alumina," in a vinyl chloride purification process. In other words, the U.S. Patent in question teaches, or would have suggested,

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using alumina as an inert support for a Lewis Acid catalyst in a vinyl purification process.

Upon return of this application, it is ordered that the examiner is to:

- (1) Review U.S. Patent 3,125,609 and appellants' admission at pages 1 and 2 of the specification; and
- (2) Determine whether U.S. Patent 3,125,609 alone, or together with appellants' admission, affects the patentability of the claimed subject matter.

#### CONCLUSION

In view of the foregoing, the decision of the examiner is reversed and the application is returned to the examiner for appropriate action consistent with the above instruction.

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

REVERSED and REMANDED

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John D. Smith	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
Chung K. Pak	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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Catherine Timm	)	
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