

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 28

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEPHEN J. MILLER

Appeal No. 97-0268
Application No. 07/991,872¹

ON BRIEF

Before KIMLIN, GARRIS, and WARREN, Administrative Patent Judges.
GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the refusal of the examiner to allow claims 32-37, 39 and 40 as amended subsequent to the final rejection. The only other claims remaining in the application, which are claims 1-31, stand withdrawn from further consideration by the examiner.

¹ Application for patent filed December 16, 1992.

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The subject matter on appeal relates to a dehydrogenation catalyst which comprises an intermediate pore size zeolite having a silica to alumina mole ratio of at least 30 and less than 500. Further details of this appealed subject matter are set forth in representative independent claim 32 which reads as follows:

32. A dehydrogenation catalyst which comprises:

(a) platinum or palladium;

(b) an intermediate pore size zeolite having a silica to alumina mole ratio of at least 30 and less than 500 and crystallite size less than 10 microns; and

(c) an alkali content wherein the alkali to aluminum ratio in the zeolite is between about 1 and about 5 on a molar basis.

The reference relied upon by the examiner as evidence of obviousness is:

Miller et al. (Miller) 5,169,813 Dec. 8, 1992

All the claims on appeal are rejected under 35 U.S.C.

§ 103 as being unpatentable over Miller.²

² The appealed, claims will stand or fall together: see page 3 of the brief and 37 CFR 1.192(c)(7)(1995). Accordingly, we will focus upon claim 32, the sole independent claim before us, in assessing the merits of the examiner's rejection.

For the reasons set forth in the answer and below, we will sustain this rejection.

Miller discloses a catalyst for reforming processes including dehydrogenation (e.g., see lines 8-20 in column 1). This catalyst, like that defined by appealed independent claim 32, comprises a noble metal such as platinum or palladium (e.g., see line 15-17 in column 3 and lines 28 - 30 in column 14), an intermediate pore size crystalline silicate such as zeolite (e.g., see line 18 in column 3, lines 3-6 in column 13 and the paragraphs bridging column 13 and 14), having a silica to alumina ratio of at least 200 (e.g., see line 19 in column 3), a crystallite size of less than 10 microns (e.g., see lines 64 and 65 in column 3) and an alkali to alumina ratio between 1 and 5 parts on a molar basis (e.g., see lines 44-47 in column 4). Thus, Miller discloses a class of catalyst which includes a dehydrogenation catalyst that corresponds to the catalyst defined by the independent claim on appeal.

The appellant argues that "one of ordinary skill in the art would not find Appellant's light paraffin dehydrogenation catalyst obvious in view of the Miller '813 catalyst" (brief, page 7). This argument is unpersuasive for a number of reasons.

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In the first place, it is appropriate to clarify that appealed claim 32 contains no limitation concerning "light paraffin" and thus unquestionably encompasses a catalyst for

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dehydrogenation of the type disclosed by Miller. Secondly, the appellant's nonobviousness position, with respect to the here

claimed silica to alumina mole ratio specifically, is unpersuasive because it is contrary to patentee's express teaching of a ratio range which overlaps that defined by the independent claim on appeal. Ex parte Lee, 31 USPQ2d 1105, 1107

(Bd. Pat. App. & Int. 1993). Indeed with regard to this ratio,

the Miller disclosure of values within the here claimed range is

considered to be an anticipation of this claimed range. Ex parte

Lee, 31 USPQ2d at 1106. Finally, concerning this last mentioned point, we emphasize that the question raised by the appellant as to whether the Miller reference teaches away from the here claimed ratio is simply inapplicable to an anticipation analysis. Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522 (Fed. Cir. 1998).

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For the reasons set forth above and in the answer, the examiner's § 103 rejection of the claims on appeal as being unpatentable over Miller is hereby sustained.

The decision of the examiner is affirmed.

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

AFFIRMED

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EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
BRADLEY R. GARRIS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
CHARLES F. WARREN)	
Administrative Patent Judge)	

BRG/jlb

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