

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AN-HSIANG WU, CHARLES A. DRAKE
and RALPH J. MELTON

Appeal No. 1999-1861
Application No. 08/695,482

ON BRIEF

Before KIMLIN, PAK and TIMM, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-37, all the claims in the present application. Claim 1 is

Appeal No. 1999-1861
Application No. 08/695,482

composition comprises a ZSM-5 zeolite and a metal selected from the group consisting of nickel, palladium, molybdenum, gallium, platinum, and combinations of any two or more thereof; and said zeolite is treated with an acid before being incorporated with said metal.

The examiner relies upon the following references as evidence of obviousness:

Nemet-Mavrodin et al. (Nemet-Mavrodin)	4,922,051	May 1, 1990
Rodewald	5,220,086	Jun. 15, 1993

Appellants' claimed invention is directed to a process for converting a hydrocarbon feed to an olefin and a C₆ to C₈ aromatic hydrocarbon. The process entails contacting the feed with a catalyst composition comprising a ZSM-5 zeolite and one of the recited metals, e.g., nickel. The catalyst is prepared by treating the zeolite with an acid before the metal is incorporated therein.

Appealed claims 1-37 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nemet-Mavrodin in view of Rodewald.

Upon careful consideration of the opposing arguments presented on appeal, we concur with appellants that the examiner

Appeal No. 1999-1861
Application No. 08/695,482

Nemet-Mavrodin, the primary reference, fails to disclose treating the zeolite with an acid before incorporating the metal component. Indeed, in order to obtain the desired alpha value of greater than 5 and less than 33, which is a measure of the catalyst's acidity, Nemet-Mavrodin teaches that the catalyst can be deactivated (deacidified) by subjecting it to steaming, coking or high temperature calcination. While the examiner relies upon Rodewald for its disclosure of subjecting a zeolite catalyst to an acid treatment, the alpha values exemplified by Rodewald are 628 and 1800, which are well above the alpha value range of 5-33 desired by Nemet-Mavrodin (see TABLE I of Rodewald). Consequently, we agree with appellants that Rodewald would have provided no motivation or suggestion for modifying the catalyst preparation of Nemet-Mavrodin by adopting the acid treatment of Rodewald. In addition, as noted by appellants, Rodewald does not teach incorporating a metal into the catalyst after the acid treatment, as required by the appealed claims.

Appeal No. 1999-1861
Application No. 08/695,482

In conclusion, based on the foregoing, the examiner's
decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
)	
)	
)	
)	
CHUNG K. PAK)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
CATHERINE TIMM)	
Administrative Patent Judge)	

ECK:clm

Appeal No. 1999-1861
Application No. 08/695,482

Richmond, Phillips, Hitchcock
& Fish
P.O. Box 2443
Bartlesville, OK 74005