

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.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. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAINER AUTENRIETH
and
ANDREAS CHRISTEN

Appeal No. 2002-1612
Application No. 09/048,984

HEARD: February 4, 2003

Before KIMLIN, PAK and MOORE, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 3 and 5, all the claims remaining in the present application.

Claim 1 is illustrative:

1. Reformation reactor, comprising a reaction chamber through which a gas stream to be reformed is flowed and into which a charge of a reformation catalyst material is loaded; a catalyst supply container; a loading channel connecting the

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catalyst supply container with the reaction chamber, the catalyst supply containing being configured such that additional catalyst material is automatically supplied from the supply container into the reaction chamber at a catalyst inlet location between the reaction chamber and the loading channel, and a gas-permeable, heat-conducting reaction guide plate operatively mounted beneath the catalyst inlet location directly downstream of the loading channel such that the additional catalyst material from the supply container enters on one side of the reaction guide plate and the gas stream entering into the reaction chamber is directed toward an opposite side of the reaction guide plate, wherein the loading channel terminates at a location in the reaction chamber which is spaced from a gas inlet through which the gas stream to be reformed by the reformation catalyst material in a portion of the reaction chamber enters into the reaction chamber.

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

Zenz	3,770,388	Nov. 06, 1973
Yoshikawa	5,478,531	Dec. 26, 1995

Appellants' claimed invention is directed to a reformation reactor which comprises, inter alia, a guide plate (9) that is located below the loading channel (7) which supplies catalyst material to the reaction chamber. The guide plate is situated such that the "catalyst material from the supply container enters on one side of the reaction guide plate and the gas stream entering into the reaction chamber is directed toward an opposite side of the reaction guide plate" (claim 1). According to appellants, the guide plate "prevents complete subjection of the unformed catalyst material 2a entering the reaction chamber 1

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with the gas stream containing hydrogen and thus prevents the danger of overheating at the catalyst inlet location 8 by the exothermal formation reaction" (page 6 of Brief, first paragraph).

Appealed claims 1 and 5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Zenz. Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Zenz in view of Yoshikawa.

Upon careful consideration of the opposing arguments presented on appeal, it is our judgment that the examiner has not established a prima facie case of anticipation or obviousness within the meaning of §§ 102 and 103, respectively. Accordingly, we will not sustain the examiner's rejections.

We consider first the examiner's rejection of claims 1 and 5 under 35 U.S.C. § 102. Zenz, in disclosing a granular bed filter reactor, does provide the broad teaching that the reactor may contain catalytic medium to perform reactive functions with a fluid stream passing therethrough. Zenz fails to provide any description of a reformation reactor, in particular. As for the claimed guide plate, the examiner relies upon the reference description of a louver 15 and screen 16. However, although we do not subscribe to appellants' reasoning that the louver and

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screen of Zenz is not directly downstream of the loading channel, as claimed, we do note that the louver and screen of Zenz do not function such that the catalyst material enters on one side of the guide plate. We interpret the claim language "catalyst material . . . enters on one side of the reaction guide plate" in light of the specification drawing as requiring that the catalyst material come in contact with one side of the guide plate which is opposite the side which contacts the entering gas stream. Consequently, when we consider the claimed invention as a whole and the Zenz disclosure as a whole, we find that Zenz fails to describe the claimed reformation reactor within the meaning of 35 U.S.C. § 102. Accordingly, we cannot sustain the examiner's rejection. As for the examiner's rejection of claim 3 under 35 U.S.C. § 103, which cites Yoshikawa for the added limitations of claim 3, we find that Yoshikawa does not remedy the basic deficiency of Zenz described above.

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

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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CHUNG K. PAK)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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)	
JAMES T. MOORE)	
Administrative Patent Judge)	

ECK:clm

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Crowell & Moring LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300