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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 48

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKANAO TAKETOMI, TOSHIAKI SAKAGUCHI
and HIDENORI KUMOBAYASHI

Appeal No. 1996-2919
Application No. 08/139,861

ON BRIEF

Before KIMLIN, WALTZ and KRATZ, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 3-26, all the claims remaining in the present application. A copy of claim 23 is appended to this decision.

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

Tenud	4,021,480	May 03, 1977
Sayo et al. (Sayo)	4,916,252	Apr. 10, 1990

Appellants' claimed invention is directed to a process for preparing a optically active carnitine ester in accordance with formula (I). The process entails asymmetrically hydrogenating the ester halide of formula (II) in the presence of a ruthenium-optically active phosphine complex defined by formulae (III), (IV), (VI) and (VII). The ruthenium-optically active phosphine complex serves as a catalyst for the reaction. The optically active carnitine ester is an intermediate in the production of optically active carnitine, which has medicinal uses.

The present application is a continuation of U.S. Application No. 07/455,023, filed December 22, 1989. An appeal was taken to this Board in the parent application and, in a decision dated August 24, 1993, the Board affirmed the examiner's rejection under 35 U.S.C. § 103 over prior art that is presently applied by the examiner. However, the present claims on appeal are narrower in scope than those before the Board in the parent application, and the present record

contains declaration evidence submitted by appellants that was not considered in the prior appeal.

Appealed claims 3-26 stand rejected under 35 U.S.C. § 103 over Tenud in view of Sayo.

We have thoroughly reviewed the respective positions advanced by appellants and the examiner. In so doing, we find that appellants' evidence of nonobviousness outweighs the examiner's evidence of obviousness. Accordingly, we will not sustain the examiner's rejection.

To the extent it would have been obvious for one of ordinary skill in the art to utilize the catalysts disclosed by Sayo in the reaction of Tenud, we find that appellants' declaration evidence, particularly the Kumobayashi Declaration of

January 30, 1995 and the Second Supplemental Declaration of November 3, 1995, places of record evidence of unexpected results that has not been adequately refuted by the examiner. The Kumobayashi Declaration executed January 30, 1995 demonstrates that a catalyst of the appealed claims provides 99% conversion for the reaction in comparison with two other catalysts of Sayo which result in conversions of only 3%.

While the declarant characterizes these results as "unexpected" (page 5 of Declaration), the examiner dismisses the probative value of the Declaration as only the result of "routine experimentation to determine the best catalyst for the hydrogenation of carnitine" (page 4 of Answer). However, the examiner misapplies the applicable law. It is well settled that when a reference discloses that a number of different compounds are effective for a particular purpose, an applicant has the opportunity to demonstrate with objective evidence that a selection of a particular compound disclosed by the reference give unexpected results relative to the other reference compounds. Character-izing an applicant's discovery as merely the product of routine experimentation avoids the issue of whether the applicant's discovery would have been unexpected to one of ordinary skill in the art. In the present case, the examiner has not set forth a rationale why the marked superiority for the claimed catalyst demonstrated in the Declaration would have been considered expected by one of ordinary skill in the art.

Appellants' Reply Brief was accompanied with a SECOND SUPPLEMENTAL DECLARATION executed by Mr. Kumobayashi on

October 24, 1995. According to appellants, "routine experimen-tation would have led one to use the Sayo catalyst with the Sayo substrate rather than the present substrate in the Tenud reaction, and, thus, routine experimentation would not have led one to the present invention" (sentence bridging pages 2 and 3 of Reply Brief). In a paper dated November 27, 1995, the examiner stated that the Reply Brief and the Declaration "have been entered and considered but no further response by the Examiner is deemed necessary." However, the examiner's failure to substan-tively consider the merits of the Declaration, in and of itself, constitutes reversible error.

We also note that appellants provide separate arguments for claims 11-13, 14-19, 20 and 21, 22, 24, and 26 (pages 23 and 24 of principal brief). The examiner's failure to respond to these separate arguments also constitutes reversible error.

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

REVERSED

EDWARD C. KIMLIN)
Administrative Patent Judge)

THOMAS A. WALTZ Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
PETER F. KRATZ Administrative Patent Judge	)	

ECK:clm

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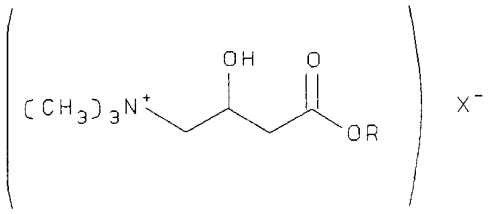
Washington, DC 20037-3202

APPENDIX

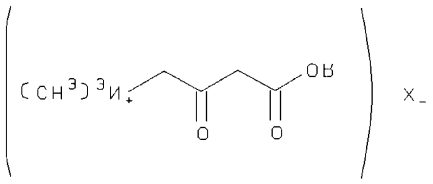
23. A process for preparing an optically active carnitine ester represented by formula (I):



(I)

wherein R represents a lower alkyl group having two or more carbon atoms; and X represents a halogen atom,

which process consists essentially of asymmetrically hydrogenating a (-trimethylammonium-3-oxabutanoic ester halide represented by formula (II):



(II)

wherein R and X are as defined above,

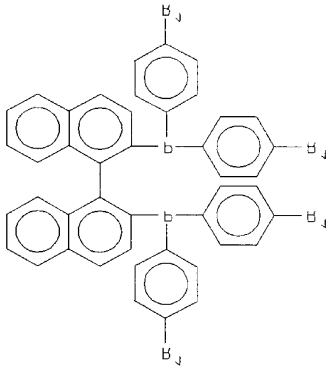
in the presence of a ruthenium-optically active phosphine complex as a catalyst,

and then recovering the optically active carnitine ester represented by formula (I) which has been formed, wherein said ruthenium-optically active phosphine complex is selected from the group consisting of a compound represented by formula (III):

$$Ru_xH_yCl_z(R^1\text{-BINAP})_2(Q)_p \qquad \text{(III)}$$

wherein R^1-BINAP represents a tertiary phosphine represented by formula

(IV):



(IA)

R^1 represents a hydrogen atom, a methyl group or a t-butyl group;

Q represents a tertiary amine; y is 0, x represents 2, z represents 4, and p represents 1;

a compound represented by formula (VI):

$$Ru(R^1\text{-BINAP})(OCR^2)_2 \quad (VI)$$

wherein R^1-BINAP is as defined above; and R^2 represents a lower alkyl group or a trifluoromethyl group; and a compound represented by formula (VII):

$$[Ru(R^1\text{-BINAP})MC1_k]_R X^1_m \quad (VII)$$

wherein R^1-BINAP is as defined above; M represents Zn, Al, Ti or Sn; X^1 represents $N(C_2H_5)_3$ or CH_3CO_2; in the case that X^1 represents $N(C_2H_5)_3$, R is 2 and m is 1, and when M represents Zn, then k is 4, when M represents A1, then k is 5, and when M represents Ti or Sn, then k is 6; and in the case that X^1 represents CH_3CO_2, R is 1 and m is 2, and when M represents Zn, then k is 2, when M represents A1, then k is 3, and when M represents Ti or Sn, then k is 4.