

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

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte

YOICHI TAGUCHI, AKIHIRO OISHI,
ISAO SHIBUYA, and TOHRU TSUCHIYA

Appeal No. 1999-1729
Application No. 08/527,217

Heard : November 29, 2001

Before GARRIS, LIEBERMAN and TIMM, Administrative Patent Judges.

LIEBERMAN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 1 through 3 which are all the claims pending in this application.

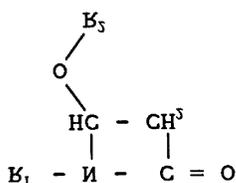
THE INVENTION

The invention is directed to a method for the preparation of a class of beta-lactam compounds of a specific formula. Additional limitations are described in the following illustrative claims.

THE CLAIMS

Claim 1 is illustrative of appellants' invention and is reproduced below.

A method for the preparation of a β -lactam compound represented by the formula



in which R¹ is a monovalent hydrocarbon group selected from the group consisting of alkyl groups having 1 to 20 carbon atoms, cycloalkyl groups having 3 to 20 carbon atoms, aryl groups having 6 to 20 carbon atoms and aralkyl groups having 7 to 20 carbon atoms, and R² is a monovalent hydrocarbon group selected from the group consisting of alkyl groups having 1 to 20 carbon atoms and cycloalkyl groups having 3 to 20 carbon atoms, which comprises the steps of:

(a) mixing an isocyanate compound represented by the formula



in which R¹ has the same meaning as defined above, and a vinyl ether compound represented by the formula



in which R² has the same meaning as defined above, to form a reaction mixture; and

(b) bringing the reaction mixture under a superatmospheric pressure of at least 2000 atmospheres.

THE REJECTION

Claims 1 through 3 stand rejected under 35 U.S.C. § 112, first paragraph, for failure to teach how to use the invention.

OPINION

We have carefully considered all of the arguments advanced by the appellants and the examiner and agree with the appellants that the rejection of the claims under § 112 is not well founded. Accordingly, we reverse this rejection.

Rejection under 35 U.S.C. § 112

It is the examiner's position that, "[t]he specification is extremely vague," and no information is forthcoming as to, "1) how to convert these intermediates to final products, 2) what these 'derivatives' and 'antibiotics' look like, and 3) for the 'derivatives', what use they have." See Answer page 4. We disagree that these requirements, as stated by the examiner, are necessary to teach, "how to use" within the meaning of the statute, 35 U.S.C. § 112.

The claimed subject matter before us is not directed to a class of novel β -lactam compounds, but to a process for providing, "a simple and efficient method for the synthetic preparation of a β -lactam compound." See specification, page 2.

We find that the invention is directed to a method for the preparation of a β -lactam compound, "having usefulness as an intermediate of β -aminoacid derivatives and certain antibiotics having a chemical structure resembling that of penicillin." See

specification, page 1. It is further stated that, “β-lactam ring forms the principal skeletal structure of a large number of antibiotics including penicillin as a typical example to play a core role in the physiological activity thereof.” Id. Moreover, we find that the β-lactam compound prepared in Example 1, “was found to have strong antibacterial activity,” which evidences that the compound was tested for pharmacological activity.

It is well settled that, “tests evidencing pharmacological activity may manifest a practical utility even though they may not establish a specific therapeutic use,” and hence are sufficient to satisfy the utility requirement. See Nelson v Bowler, 626 F.2d 853, 856, 206 USPQ 881, 883 (CCPA 1980). “Knowledge of the pharmacological activity of any compound is obviously beneficial to the public. It is inherently faster and easier to combat illnesses and alleviate symptoms when the medical profession is armed with an arsenal of chemicals having known pharmacological activities. Since it is crucial to provide researchers with the incentive to disclose pharmacological activities in as many compounds as possible, we conclude that adequate proof of any such activity constitutes a showing of practical utility.” Id.

Based upon the above findings, we are satisfied that the how to use requirement of the statute, 35 U.S.C. § 112, has been complied with by the disclosure of the specification.

DECISION

The rejection of claims 1 through 3 under 35 U.S.C. § 112, first paragraph, for failure to teach how to use the invention is reversed.

The decision of the examiner is reversed.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
PAUL LIEBERMAN)	APPEALS
Administrative Patent Judge)	AND
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CATHERINE TIMM)	
Administrative Patent Judge)	

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