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**Datasheet for the decision
of 21 March 2007**

Case Number: T 0001/06 - 3.3.07

Application Number: 99935050.7

Publication Number: 1153657

IPC: B01J 27/10

Language of the proceedings: EN

Title of invention:

Method of reaction in water catalyzed by Lewis acid

Applicant:

Japan Science and Technology Agency

Opponent:

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Headword:

-

Relevant legal provisions:

EPC Art. 111(1), 113(1)

EPC R. 67, 68(2)

Keyword:

"Remittal (yes) - sole ground for refusal removed by the amended claims"

"Procedural violation - (no)"

Decisions cited:

T 0139/87, T 0615/95

Catchword:

-



Case Number: T 0001/06 - 3.3.07

D E C I S I O N
of the Technical Board of Appeal 3.3.07
of 21 March 2007

Appellant:
(Applicant)

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Decision under appeal:

**Decision of the Examining Division of the
European Patent Office posted on 1 July 2005
refusing European application No. 99935050.7
pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: S. Perryman
Members: G. Santavicca
F. Rousseau

Summary of Facts and Submissions

I. The appeal lies from a decision of the Examining Division refusing European patent application 1 153 657 (application No. 99 935 050.7), which originates from International application PCT/JP99/04200, originally published under International publication number WO-A-00/07719, claiming a priority in Japan of 4 August 1998. The application as published contained 7 claims, independent Claims 1 and 7 reading as follows:

"1. A method of reaction in water catalyzed by a Lewis acid for an organic synthesis reaction method by using a metal compound stable in water and functioning as a Lewis acid and employing water as a part or all of a solvent, wherein the hydrolysis constant (pKh) of the metal ion of the metal compound is within a range: $4.3 \leq \text{pKh} \leq 10.1$ and the water exchange rate constant (WERC) thereof is $3.2 \times 10^6 \text{M}^{-1} \text{sec}^{-1}$ or more."

"7. An aqueous system Lewis acid catalyst used for the method in any of claims 1 to 5."

II. The decision under appeal was based on a set of freshly amended Claims 1 to 6 enclosed in the applicants' letter dated 30 December 2004 as the sole request. Independent Claims 1, 4 and 6 read as follows:

"1. A method of identifying an aqueous system Lewis acid catalyst, for an organic synthesis reaction, said method comprising taking a metal compound which is stable in water and determining that the hydrolysis constant (pKh) of the metal ion of the metal compound is within a range: $4.3 \leq \text{pKh} \leq 10.1$ and the water

exchange rate constant (WERC) thereof is $3.2 \times 10^6 \text{M}^{-1} \text{sec}^{-1}$ or more."

"4. A method of conducting an aldol reaction, which comprises:

the use of a metal compound stable in water and functioning as a Lewis acid as a catalyst; and the use of water as a part or all of a solvent, wherein the hydrolysis constant (pKh) of a metal ion of the metal compound is within a range: $4.3 \leq \text{pKh} \leq 10.1$ and the water exchange rate constant (WERC) thereof is $3.2 \times 10^6 \text{M}^{-1} \text{sec}^{-1}$ or more, and wherein the metal compound is a trifluoromethane sulfonate or perchlorate of iron (II) ion, copper (II) ion, lead (II) ion, zinc (II) ion or cadmium (II) ion."

"6. An aqueous system Lewis acid catalyst used in the method defined in any one of claims 4 or 5."

III. The sole ground for refusal in the decision under appeal was the lack of novelty of the subject-matter of Claim 6. In particular, the Examining Division held that the subject-matter of Claim 6 was anticipated by the disclosure of D3, which disclosed the use of zinc trifluoromethane sulfonate in aqueous solution, and by that of D6 as well, which disclosed the use of an aqueous solution of zinc perchlorate.

In a separate part of the decision under appeal (Point III, made up of about three pages), which does not belong to the decision, the Examining Division for the very first time raised objections against the freshly amended claims filed with letter dated 30 December 2004, *inter alia* as follows: Claim 4 added

subject-matter beyond that of the application as originally filed; the subject-matter of Claims 1 to 3 did not involve an inventive step; and so did also that of Claim 4, albeit on different grounds, also based on a new prior art D10.

The Examining Division also expressed the view that if those objections were not overcome, an interlocutory revision consequential to any amendments to Claim 6 would not be considered.

- IV. On 12 September 2005, the applicants lodged an appeal against that decision and paid the fee for appeal. In their statement setting out the grounds of appeal, received on 11 November 2005, the appellants enclosed three sets of amended claims as, respectively, the Main Request, Auxiliary Request 1 and Auxiliary Request 2, as well amended page 14 of the description. As regards the Main Request, independent Claim 1 was identical to Claim 1 filed with letter dated 30 December 2004, whereas independent Claim 4 had been amended to include, in addition to the Aldol reaction, the Mannich and allylation reactions. As to Auxiliary Request 1, compared with the Main Request, in Claim 1 the expression "for an organic synthesis reaction" had been specified as "for the Aldol, Mannich or allylation reactions". As regards, Auxiliary Request 2, compared to Auxiliary Request 1, the method of Claim 1 included the limiting feature of Claim 2 of Auxiliary Request 1, i.e. "for the Aldol reaction". In order to overcome the grounds of refusal, the appellants had deleted entirely Claim 6 in all of the sets of the amended claims.

V. In a communication dated 15 February 2007, the Board gave its preliminary view on the appeal. In particular, the Board made the point that although the sole ground of refusal in the decision under appeal had been removed by the deletion of former Claim 6, the sets of claims on file appeared still to raise issues under Articles 123(2) (Fair basis) and 84 EPC (Clarity). These new issues, however, might suitably be considered by the Examining Division on remittal to safeguard the right of appeal, if the appellants so desired. A date was set for oral proceedings and the appellants were asked to state whether they chose remittal of the case to the Examining Division for consideration of all outstanding questions or whether they wanted the oral proceedings before the Board to take place and the Board itself to consider particular issues.

VI. In reply to that communication of the Board, the appellants chose remittal of the case back to the Examining Division on the basis set out in the statement of grounds for appeal and on that basis withdrew their request for oral proceedings (letter dated 6 March 2007).

VII. The arguments of the appellants, as far as they are relevant to the present decision, can be summarised as follows:

- (a) In order to overcome the grounds of refusal, Claim 6 had been deleted entirely.
- (b) Amended claims embodied this amendment as well as further amendments which were based on the application as filed.

(c) Since the sole cause for refusal had been removed, interlocutory revision of the decision was compulsory.

(d) Instead, the Examining Division raised new objections against Claims 1 to 5, together with new prior art, without giving the applicants the chance to have those matters considered at first instance, thus committing a procedural violation.

VIII. The appellants requested that the impugned decision be set aside and, in view of the removal of the sole cause for refusal (Claim 6), that the case be remitted to the Examining Division for considerations of all of the outstanding issues, in particular those raised for the first time in a separate part (III) of the decision, in relation to the claims submitted with the statement setting out the grounds of appeal (Claims 1 to 5 according to the Main request, Claims 1 to 5 according to Auxiliary Request 1 or Claims 1 to 4 according to Auxiliary Request 2).

Reasons for the Decision

1. The appeal is admissible.

2. *Remittal*

2.1 The sole ground for refusal in the decision under appeal was the lack of novelty of the subject-matter of Claim 6 filed with letter dated 30 December 2004.

- 2.2 Claim 6 has been deleted from all the sets of amended claims put forward, namely the Main Request, Auxiliary Request 1 and Auxiliary Request 2 submitted with the statement setting out the grounds of appeal, so that the sole ground for refusal in the decision under appeal, namely lack of novelty of Claim 6 over D3 and D6 no longer applies to the various sets of claims now requested.
- 2.3 Irregularities other than those that gave rise to the contested decision do not preclude rectification of the decision (T 139/87 in OJ 1990, 68, as well as the further decisions mentioned under the second paragraph of Point VII.D.12 in the Case Law of the Boards of Appeal of the EPO, 4th edition, 2001).
3. Therefore, since the examination has to be continued on a new basis according to the above requests, and since the outstanding issues such as fair basis, clarity, novelty and inventive step of the further subject-matter have not been dealt with in the decision under appeal, the Board consequently considers it appropriate to remit the case to the Examining Division for further prosecution, in the exercise of its discretion under Article 111(1) EPC, so that the appellants have the opportunity of arguing the new issues raised in two instances, if necessary.

4. *Alleged procedural violation*

The Board does not see here any case for there being a procedural violation which would make it equitable to reimburse the appeal pursuant to Rule 67 EPC, given that the appellants did have the opportunity to comment before the Examining Division on the sole ground of refusal, lack of novelty of former Claim 6. The necessity to file an appeal emerged exclusively from the substance of the decision, i.e. it would have been necessary in any case to remove this ground of refusal.

5. *New objections raised for the first time only in a separate part of the decision*

In a separate part of the decision under appeal (Point III.), the Examining Division mentioned the existence of several further objections under Articles 123(2) and 56 EPC against the claims then on file and made any interlocutory revision conditional on the removal of the said objections.

As has already been remarked in decision T 615/95 of 16 December 1997 (not published in the OJ EPO), point 14, an Examining Division's decision should not be supplemented by annexes dealing with issues having no relation to the issues dealt with in the reasons for this decision. Instead, the decision should be confined to grounds of objection on which the applicants have been afforded an opportunity to comment in the examination proceedings. However, as the separate statement was here clearly not part of the reasons for the decision, the Board does not consider that there has been a violation of the requirements of

Article 113(1) or Rule 68(2) EPC. Thus, the presence of this additional matter in the text of the decision, however undesirable, does in this case not amount to a substantial procedural violation for the purposes of Rule 67 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chairman:

T. Buschek

S. Perryman