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**D E C I S I O N**  
of 25 March 2003

**Case Number:** T 0279/00 - 3.3.4

**Application Number:** 93918065.9

**Publication Number:** 0658211

**IPC:** C12P 41/00

**Language of the proceedings:** EN

**Title of invention:**

Enzymatic asymmetric reduction process to produce  
4 H-thieno(2,3-6)thio pyrane derivatives

**Patentee:**

Avecia Limited

**Opponent:**

KANEKA CORPORATION

**Headword:**

Asymmetric reduction process/AVECIA LTD

**Relevant legal provisions:**

EPC Art. 54(3), 123(2)

**Keyword:**

"Main request, novelty Article 54(3) (no) "

"Auxiliary requests, allowability of amendments (no) "

**Decisions cited:**

J 0022/86, G 0009/91, G 0002/98, T 0514/88, G 0002/88,  
G 0006/88

**Catchword:**

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Case Number: T 0279/00 - 3.3.4

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.4  
of 25 March 2003

**Respondent:**  
(Opponent)

KANEKA CORPORATION  
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**Representative:**

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**Appellant:**  
(Proprietor of the patent)

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**Representative:**

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**Decision under appeal:**

Interlocutory decision of the Opposition Division  
of the European Patent Office posted 21 January  
2000 concerning maintenance of European patent  
No. 0 658 211 in amended form.

**Composition of the Board:**

**Chairman:** U. M. Kinkeldey  
**Members:** M. R. J. Wieser  
V. Di Cerbo

## Summary of Facts and Submissions

I. The appeal was lodged by the patent proprietors (appellants) against the interlocutory decision of the opposition division, whereby the European Patent No. 658 211 was maintained in amended form. The patent had been opposed by one party under Article 100(a) on the grounds of lack of inventive step (Article 56 EPC), and Article 100(b) on the ground of lack of sufficient disclosure (Article 83 EPC). After the expire of the opposition period, lack of novelty (Article 54 EPC) has been raised as new ground of opposition.

II. The opposition division decided that claim 3 of the patent as granted was not novel under Article 54(3) EPC in the light of document

(6) EP-A-0 590 549

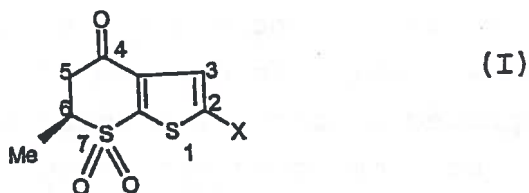
but, that the grounds for opposition did not prejudice the maintenance of the patent as amended according to auxiliary request (C).

III. The appellants requested that the decision under appeal be set aside and the patent be maintained on the basis of the main request (claims 1 to 10 as granted), or on the basis of claims 1 to 10 of auxiliary request 1 ("alternative claims G"), or on the basis of claims 1 to 10 of auxiliary request 2 ("alternative claims F"), both filed on 11 January 2001.

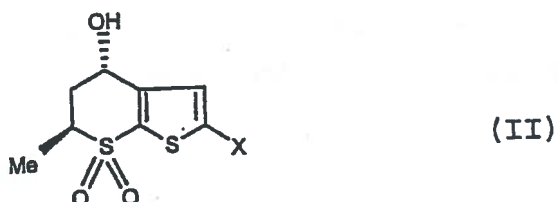
The respondents requested that the appeal be rejected as being inadmissible, or that it be dismissed. Oral proceedings were requested in case the Board did not follow these requests.

IV. Claims 1 to 4 as granted read:

"1. A process in which a compound of formula



in which X is hydrogen or a group of formula -SO<sub>2</sub>NH<sub>2</sub> is converted into a compound of formula



by contacting it with an enzymic reduction system in which more of the trans 4S 6S isomer is produced than of the 4R 6S isomer.

2. A process as claimed in claim 1 in which the enzymic reduction system is provided as whole or broken cells of a suitable microorganism.

3. A process as claimed in Claim 1 or 2 in which at least 90% of the product is the 4S, 6S isomer.

4. A process as claimed in any preceding claim in which the pH is 2 to 5."

Claim 1 of auxiliary request (C) was a combination of claims 1 and 4 as granted.

V. Claim 1 of the two auxiliary requests differed from claim 1 as granted in their final part, following formula (II), which read:

Auxiliary request 1 ("alternative claims G"):

"..by contacting it to reduce isomerisation at the 6-position at a pH at most 6 with an enzymic reduction system in which more of the trans 4S 6S isomer is produced than of the cis 4R, 6S isomer."

Auxiliary request 2 ("alternative claims F"):

"..by contacting it at a pH of 2 to 6 in an aqueous medium to reduce isomerisation at the 6-position with an enzymic reduction system in which more of the trans 4S 6S isomer is produced than of the cis 4R, 6S isomer."

VI. Besides the document mentioned in section (II) above, the following documents are mentioned in this decision:

(7) JP-257822/92, (28 September 1992) priority document of document (6)

(8) GB-9218502, (28 August 1992) first priority document of the patent in suit

(19) GB-9303824, (25 February 1992) second priority document of the patent in suit

VII. The arguments presented by the appellants can be summarised as follows:

The opposition was admissible as factual and legal grounds supported by substantial reasoning why the appealed decision should have been set aside had been provided. The ground of opposition under Article 100(a)

in combination with Article 54 EPC had been introduced by the opponents in an abusive way and should not have been admitted by the Opposition Division. Claim 3 of the claims as granted was entitled to the earliest priority date, which meant that document (6) did not belong to the state of the art under Article 54(3) EPC, which document, moreover, was not novelty destroying for the subject-matter of claim 3.

The claims of the auxiliary requests were based on the application as originally filed and met the requirements of Article 123(2) EPC.

VIII. The arguments presented by the respondents can be summarised as follows:

The appeal had to be rejected as being inadmissible since the notice of appeal did not meet the requirements of Rule 64(b) EPC, as it made not clear the extent to which amendment of the decision was requested. Moreover, also the requirements of Article 108 EPC, third sentence, were not met. The written statement setting out the grounds of appeal was so unclear, that it was impossible to identify the requests to which the arguments raised referred to.

Claim 3 of the main request, which was only entitled to the filing date of the opposed patent, lacked novelty over document (6), which belonged to the state of the art under Article 54(3) EPC.

Claim 1 of both auxiliary requests could not be derived from the original application, contrary to the requirements of Article 123(2) EPC.

IX. The Board informed the parties in a communication about their preliminary opinion concerning the allowability of the ground of opposition under Articles 100(a) and

54 EPC, and with regard to the appellants auxiliary requests in the light of the requirements of Article 123(2) EPC.

- X. With letter of 5 March 2003 the appellants withdrew their request for oral proceedings.

### **Reasons for the Decision**

#### 1. *Admissibility of the appeal*

- 1.1 According to Rule 64(b) EPC, "the notice of appeal shall contain .. a statement identifying the decision which is impugned and the extent to which amendment or cancellation of the decision is requested."

Appellants notice of appeal, filed 20 March 2000, defines in the head of the letter the number (patent and application number), the proprietor and the title of the patent under consideration, and furthermore stated: "..hereby appeals against the interlocutory decision in opposition proceedings , dated 21<sup>st</sup> January 2000, insofar as it is adverse to the patentee in rejecting claims as granted and alternative claims presented in the proceedings and in any other respect."

Thus, the requirements of Rule 64(b) EPC are met.

- 1.2 Article 108 EPC, third sentence reads: "Within four months after the date of notification of the decision, a written statement setting out the grounds of appeal must be filed."

The board agrees insofar with the respondents, which objected that they could not relate the arguments raised to the requests, as the structure of appellants

letter is to some extent unclear. The appellants explained this lack of clarity by the fact, that it was not clear at the day of filing the letter, if the opponents had filed an appeal, and if therefore the amended claims as maintained by the opposition division were at issue in the appeal proceedings.

The Board is satisfied that the appellant's submission contains statements in which specific aspects of the impugned decision are mentioned and the respective reasons of the opposition division are discussed (priority right and novelty of claims 3 and 4 of the main request, publication date of document (4), inventive step of the main request and of auxiliary request (C)). According to case law of the Boards of Appeal (see decision J 22/86, OJ EPO 1987, 280, point 2 of the reasons), the statement setting out the grounds of appeal, even if it does not contain a full reasoning with respect to each and every ground, nevertheless meets the minimum requirement of Article 108 EPC, if it includes the legal and factual reasons why the decision under appeal should be set aside with respect to at least one ground.

Therefore, the requirements of Article 108 EPC are met.

- 1.3 As the requirements of Articles 106 to 108, Rules 1(1) and 64 EPC are met, the appeal is admissible.

*The main request*

2. *Articles 54(3) and (4) EPC*

- 2.1 Lack of novelty has not been raised as ground of opposition by the respondents within the nine month opposition period, but has been introduced later, i.e. with a letter filed 18 November 1998, seventeen month after expiry of the opposition period, in response to



auxiliary requests filed by the appellants on 25 March 1998. Document (6) has been introduced into the opposition proceeding at the same date.

The appellants requested that lack of novelty, which should not have been considered by the opposition division in first place, shall not be at issue before the board of appeal.

2.2 The board draws the parties attention to the Enlarged Board of Appeal Decision G 9/91, OJ EPO 1993, 408.

Point 16, fifth sentence of the Reasons for the Decision reads:

"Thus, an Opposition Division may, in application of Article 114(1) EPC, of its own motion raise a ground for opposition not covered by the statement pursuant to Rule 55(c) EPC or consider such a ground raised by the opponent (or referred to by a third party under Article 115 EPC) after the expiry of the time limit laid down in Article 99(1) EPC. At the same time, the Enlarged Board would like to emphasise that the consideration of grounds not properly covered by the statement pursuant Rule 55(c) EPC, as an exception to the principle established by the Board in paragraph 6 above, should only take place before the Opposition Division in cases where, prima facie, there are clear reasons to believe that such grounds are relevant and would in whole or in part prejudice the maintenance of the European Patent."

As the opposition division, after thorough consideration (see point (7) of the reasons for the decision of the opposition division), made use of its discretion in accordance with Article 114(1) EPC and decided to introduce into the proceedings a new ground

of opposition, i.e. lack of novelty under Articles 100(a) and 54 EPC, this ground is subject to the proceedings before the board of appeal.

- 2.3 Claim 3 refers to "a process as claimed in claims 1 or 2 in which at least 90% of the product is the 4S, 6S isomer".

Both priority documents contain the sentence: "Preferably at least 60% and more preferably at least 80% of the product is the trans isomer" (documents (8) and (19), page 3, lines 23 to 25). In a table on page 7 of both documents, two specific microorganisms are indicated which produce 95% of the trans isomer (*Neurospora crassa* IMI 19419 and *Pichia haplophila* CBS 2008), and one microorganism producing 92% thereof (*Lactobacillus plantarum* NCIMB 40027).

According to the decision of the Enlarged Board of Appeal G 2/98, OJ EPO 2001, 413 (see headnote), "the requirements for claiming priority of "the same invention" referred to in Article 87(1) EPC, means that priority of a previous application in respect of a claim in a European patent application in accordance with Article 88 EPC is to be acknowledged only if the skilled person can derive the subject-matter of the claim directly and unambiguously, using common general knowledge, from the previous application as a whole."

Claim 3 refers to a process in which at least 90% of the product is the 4S, 6S isomer. Thus, the claim covers any value between 90% and the theoretical value of 100%. The cited passages in the priority documents are no basis for the general term used in claim 3. Neither of the two priority documents (8) and (19) allows a skilled person to directly and unambiguously derive therefrom a process bringing about these results. Therefore, the subject-matter of claim 3 is

not entitled to either of the two priority dates claimed. The relevant date for establishing the state of the art for claim 3 is the filing date of the European patent application, 20 August 1993.

- 2.4 Document (6) discloses a process, in which a compound of formula (I) is reduced to a compound of formula (II) (corresponding to the formulas according to claim 1 of the main request under consideration), by the action of a microorganism (see claim 1). On page 8 in table 1, it discloses a list of microorganisms to be used in the claimed process. Among these, *Candida tropicalis* IFO 0589 produces 90% of the trans isomer of (II). Document (6) has a European filing date of 25 September 1993 and claims priority from document (7), 28 September 1992. As the above cited passages of document (6) appear word for word in the priority document (7) (see claim 1 and table 1 on page 13), document (6), with regard to claim 3 of the main request, belongs to the state of the art under Article 54(3) EPC.
- 2.5 Document (6) discloses the subject-matter of claim 3, being "a process as claimed in claims 1 or 2 in which at least 90% of the product is the 4S, 6S isomer", and is therefore detrimental to the novelty of said claim under Article 54(3) EPC.

*The auxiliary requests 1 and 2*

3. *Article 123(2) EPC*

Claim 1 of both auxiliary requests contains the term "to reduce isomerisation at the 6-position". This words are not to be found in the application as originally filed.

Article 123(2) EPC requires that a European patent application or a European patent may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. According to established case law of the Boards of Appeal, the content of an application comprises the whole disclosure that is directly and unambiguously derivable from this application including information which is implicitly apparent to a person skilled in the art reading the application. The gist of Article 123(2) EPC is that the public must not be taken by surprise by claims which could not directly and unambiguously have been expected on the basis of the original disclosure in the application as filed (cf inter alia T 514/88 OJ EPO 1992, 570; points 2.2 and 2.7 of the reasons for the decision).

The appellants argue, that the reduction of isomerisation at the 6-position is a novel technical effect, resulting from the process according to claim 1 of both auxiliary requests. They conclude that the introduction of this effect "should be unobjectionable on the basis of decisions G 2/88 and G 6/88".

The Board does not share this opinion. Point (iii) of the order of G 2/88 OJ 1990, 93 (which is identical to the order of G 6/88) reads:

"A claim to the use of a known compound for a particular purpose, which is based on a technical effect which is described in the patent, should be interpreted as including that technical effect as a functional technical feature and is accordingly not open to objection under Article 54(1) EPC provided that such technical feature has not previously been made available to the public".

The above situation does not apply to claim 1 of both auxiliary requests, which does not refer to a (new) use of a known compound, but to a process, the enzymatic asymmetric reduction of a keto-compound, carried out under specific process parameters, pH-value, in order to obtain a high yield of the desired end product, the preferred isomer of the produced alcohol. The newly introduced technical effect introduced into claim 1, "to reduce isomerisation at the 6-position", cannot be clearly and unambiguously derived from the application as originally filed.

Therefore, the European patent according to auxiliary requests 1 and 2 has been amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. Both auxiliary requests are not allowable under Article 123(2) EPC.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairwoman:

P. Cremona



U. M. Kinkeldey

