

**Internal distribution code:**

- (A) [ ] Publication in OJ  
(B) [ ] To Chairmen and Members  
(C) [X] To Chairmen  
(D) [ ] No distribution

**Datasheet for the decision  
of 26 August 2011**

**Case Number:** T 0825/09 - 3.3.08

**Application Number:** 00956165.5

**Publication Number:** 1109915

**IPC:** C12N 15/54

**Language of the proceedings:** EN

**Title of invention:**

Nucleotide sequences for the tal gene

**Patentee:**

Evonik Degussa GmbH  
National University of Ireland

**Opponent:**

BASF SE

**Headword:**

tal gene/EVONIK

**Relevant legal provisions:**

EPC Art. 52, 84, 123(2)(3), 111(1), 113  
EPC R. 27, 99(2), 101  
RPBA Art. 12(4)

**Relevant legal provisions (EPC 1973):**

EPC Art. 54(3)(4)

**Keyword:**

"Admissibility of the appeal - yes"  
"Fresh objections and new evidence - not admitted"  
"Amended claims - admitted"  
"Articles 123(2)(3), 84, 52 - yes"  
"Novelty - yes"  
"Remittal - yes"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 0825/09 - 3.3.08

**DECISION**  
of the Technical Board of Appeal 3.3.08  
of 26 August 2011

**Appellants:**  
(Patent Proprietors)

Evonik Degussa GmbH  
Rellinghauser Straße 1-11  
D-45128 Essen (DE)

National University of Ireland  
Galway (IE)

**Representative:**

Bender, Heiko  
Evonik Degussa GmbH  
DG-IPM-PAT  
Postcode 84/339  
Rodenbacher Chaussee 4  
D-63457 Hanau (DE)

**Respondent:**  
(Opponent)

BASF SE  
D-67056 Ludwigshafen (DE)

**Representative:**

Maiwald, Walter  
Maiwald Patentanwalts GmbH  
Elisenhof  
Elisenstrasse 3  
D-80335 München (DE)

**Decision under appeal:**

Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
on 23 January 2009 concerning maintenance of  
the European patent No. 1109915 in amended  
form.

**Composition of the Board:**

**Chairman:** M. Wieser  
**Members:** M. R. Vega Laso  
C. Heath

## Summary of Facts and Submissions

- I. European patent No. 1 109 915 with the title "Nucleotide sequences for the tal gene" was granted on European patent application No. 00 956 165.5 (published as WO 01/04325) which had been filed as PCT/EP00/06304 on 5 July 2000, claiming the priority of the previous US patent applications Nos. 60/142,915 (filed on 9 July 1999) and 09/531,266 (filed on 20 March 2000). The patent was granted with 19 claims.
- II. The patent was opposed on the grounds for opposition under Article 100(a) and (c) EPC 1973, in particular that the subject-matter of claims 1 to 14 was not patentable (Article 52 and Rule 23(c) EPC 1973) and lacked novelty (Article 54 EPC 1973), that the subject-matter of claims 14 to 19 lacked an inventive step (Article 56 EPC 1973), and that the subject-matter of claims 1 to 19 extended beyond the content of the application as filed.
- III. In an interlocutory decision under Articles 101(3)(a) and 106(2) EPC posted on 23 January 2009, the opposition division found that the subject-matter of claims 1, 9, 11, 13 and 14 of the main request (claims as granted) lacked novelty in view of document (6) (see paragraph XIV below). The subject-matter of claims 1 to 12 according to the first auxiliary request filed during the oral proceedings was considered to lack an inventive step because it was obvious in view of document (2), either alone or in combination with document (5). However, claims 1 to 10 according to the second auxiliary request filed during the oral proceedings were found to meet the requirements of

- the EPC. Accordingly, the opposition division decided that the patent could be maintained on the basis of these claims and a description adapted thereto which was filed also at the oral proceedings.
- IV. The patent proprietors (appellants) and the opponent each lodged an appeal against the interlocutory decision of the opposition division.
- V. Together with their statement of grounds of appeal, the appellants filed two sets of claims as, respectively, first and second auxiliary request. The claims as granted remained as the main request.
- VI. The opponent filed a statement of grounds of appeal together with additional documentary and experimental evidence.
- VII. Each party was given the opportunity to reply to the grounds of appeal of the other party. Together with their reply, the appellants submitted three sets of claims as fresh auxiliary requests 1 to 3 which replaced the auxiliary requests previously on file. The opponent submitted comments and further evidence.
- VIII. The appellants filed additional experimental evidence. Further observations and documentary evidence were submitted by the opponent on 29 June 2010.
- IX. By letter dated 11 October 2010, the opponent withdrew its appeal.
- X. The parties were summoned to oral proceedings. In a communication under Article 15(1) of the Rules of

Procedure of the Boards of Appeal (RPBA) attached to the summons, the board commented on some of the issues to be discussed during the oral proceedings, *inter alia* procedural issues concerning the admissibility of the appeal and the fresh objections and evidence submitted in appeal proceedings, as well as substantial issues concerning the requests then on file.

- XI. The appellants replied to the communication and filed further evidence. No reply was received from the respondent (opponent).
- XII. Oral proceedings were held on 26 August 2011. Although duly summoned, the respondent was not represented. After discussion of procedural and substantial issues, the appellants replaced all the sets of claims previously on file by a set of amended claims (labelled "Hauptantrag") as its main (and sole) request.
- XIII. Independent claims 1, 7, 9, 10, 11 and 12 of the main request read:
- "1. A polynucleotide from coryneform bacterium encoding a polypeptide having the enzymatic activity of a transaldolase, said polynucleotide being selected from among:
- (a) the polynucleotide which codes for a polypeptide having an amino acid sequence which is identical to the amino acid sequence of SEQ ID NO.2,
- (b) the polynucleotide which is complementary to the polynucleotide of (a).

7. A polypeptide having the amino acid sequence of SEQ ID NO:2 and having a transaldolase enzymatic activity.
  
9. The[*sic*] recombinant vector wherein said vector is pSUZ1 deposited in the strain 5715 under the number DSM 13263.
  
10. A coryneform bacterium transformed with the vector of claim 9.
  
11. A recombinant coryneform bacterium having an increased intracellular activity of transaldolase, wherein said increased intracellular activity is achieved by overexpression of a polynucleotide encoding a polypeptide having the enzymatic activity of a transaldolase, wherein said polynucleotide codes for a polypeptide having an amino acid sequence which is identical to the amino acid sequence of SEQ ID NO: 2.
  
12. A process for the[*sic*] preparation of L-amino acids, which comprises the following steps:
  - a) fermentation of a coryneform bacterium having an increased intracellular activity of a transaldolase, wherein said increased intracellular activity is achieved by overexpression of a polynucleotide encoding a polypeptide having the enzymatic activity of a transaldolase, said polynucleotide being selected from among:
    - a1) the polynucleotide, which codes for a polypeptide having an amino acid sequence which is identical to the extent of at least 90% to the amino acid

sequence of SEQ ID NO: 2, in a medium to thereby produce said L-amino acid

- b) accumulation of said L-amino acid in the medium or in the cells of said bacterium,
- c) isolation of said L-amino acid, whereby said L-amino acids are chosen from the group consisting of L-lysine, L-threonine or L-isoleucine."

XIV. The following documents are referred to in the present decision:

(2): DE 196 44 566 A 1, published on 30 April 1998;

(3): J.J. Vallino and G. Stephanopoulos, 1993, Biotechnology and Bioengineering, Vol. 41, pages 633 to 646;

(5): A. Marx et al., 1996, Biotechnology and Bioengineering, Vol. 49, pages 111 to 129;

(6): EP 1 225 218 A1, published on 29 March 2001 as WO 01/21774.

XV. The submissions made by the appellants may be summarized as follows:

*Admissibility of the appeal*

In the statement of grounds of appeal, arguments against the opposition division's decision on the main request were put forward. It was argued that, when refusing the main request for lack of novelty, the



opposition division relied on mere assumptions, rather than on proper evidence. Since a certified translation of the priority application of document (6) had not been filed, it had not been proven that this document was prejudicial to the novelty of the claimed subject-matter. Thus, the objection concerning the admissibility of the appeal was unfounded.

*Fresh objections and new evidence submitted in appeal proceedings*

The new evidence filed by the respondent at the outset of the appeal proceedings corroborated the appellants' belief that the procedure was being abused. Some of the filed documents had been published by the respondent itself. Since no reasons had been given for its late filing, the new evidence should not be admitted into the proceedings.

The allegation that the fresh objections had been triggered by the decision of the opposition division was not credible. The respondent had failed to indicate from which findings in the decision the fresh objections arose.

*Articles 123(2)(3) and 84 EPC*

The amendments introduced into the claims of the main request conformed to Article 123(2)(3) EPC and fulfilled the requirements of Article 84 EPC.

*Novelty - Document (6) - Article 54(3)(4) EPC 1973*

A certified translation of the priority document for document (6) had not been filed, either in opposition or in appeal proceedings. Thus it was doubtful whether the priority of document (6) was validly claimed and consequently, whether this document formed part of the state of the art to be considered for the assessment of novelty. In any case, document (6) did not describe a polypeptide having an amino acid sequence which is identical to the amino acid sequence of SEQ ID NO:2 of the patent in suit, or a polynucleotide encoding this polypeptide.

- XVI. The submissions made by the respondent in writing may be summarized as follows:

*Admissibility of the appeal*

In their statement of grounds of appeal the appellants requested that the patent be maintained in the granted form. The same request had been refused by the opposition division on the grounds of lack of novelty of the claimed subject-matter. However, in the statement of grounds the appellants had not put forward any reasons why the opposition division's finding was not correct. Since the appeal had not been substantiated as required by Rule 99(2) EPC, it was inadmissible under Rule 101 EPC.

*Fresh objections and new evidence submitted in appeal proceedings*

The new evidence was a reaction to the findings of the opposition division in the decision under appeal. It was filed at the earliest possible stage in the appeal proceedings, i.e. together with the statement of grounds of appeal. The submission of fresh objections and new experimental evidence together with the statement of grounds had been triggered by the decision of the opposition to maintain the patent in amended form although it was clear that the amended claims encompassed embodiments that did not solve the technical problem underlying the invention.

*Novelty - Document (6) - Article 54(3)(4) EPC 1973*

The priorities of the previous US applications could not be validly claimed for the subject-matter of the claims and, therefore, the relevant date for the assessment of the state of the art was the filing date, i.e. 5 July 2000.

Thus, document (6), a European patent application for which the priority of a previous Japanese application (21 September 1999) was validly claimed, was part of the state of the art under Article 54(3)(4) EPC 1973. This document described the over-expression of a transaldolase gene encoding a polypeptide having the amino acid sequence of SEQ ID NO:1 in *C. glutamicum* and was, therefore, prejudicial to the novelty of the claimed subject-matter.

XVII. The appellants requested that the decision under appeal be set aside and the case be remitted to the opposition division for further prosecution on the basis of the main request filed during the oral proceedings.

XVIII. The respondents requested - prior to withdrawing its appeal - that the decision under appeal be set aside and the patent be revoked.

### **Reasons for the Decision**

#### *Procedural status of the opponent*

1. Since the opponent withdrew its appeal during the appeal proceedings, its present procedural status is that of a respondent. The patent proprietors are, thus, the sole appellants against the interlocutory decision of the opposition division.

#### *Admissibility of the appeal*

2. The respondent argued that the appeal lodged by the patent proprietor was not substantiated within the meaning of Rule 99(2) EPC (see paragraph XVI above).
3. In accordance with the established jurisprudence of the Boards of Appeal, the relevant question in respect of the requirements of Rule 99(2) EPC is whether or not the appellants indicated in their statement of grounds of appeal at least one reason for setting aside the impugned decision. Contrary to the respondent's view, the question whether or not the claims according to the auxiliary requests submitted by the appellants together

with the statement of grounds of appeal conform to Rule 80 EPC, is immaterial in the context of assessing the admissibility of their appeal.

4. In the statement setting out the grounds of appeal, the appellants maintained that their right to be heard under Article 113(1) EPC had been violated in opposition proceedings (see pages 1 to 3 of the appellants' statement of grounds of appeal dated 5 May 2009). The appellants also contested the probative value of the evidence on which the opposition division based its adverse decision on novelty in respect of the main request (see paragraph 1.1.1 of the appellants' statement of grounds of appeal).
5. Hence, the appellants' statement of grounds of appeal specifies at least two reasons for setting aside the decision under appeal. Moreover, it indicates the facts and evidence on which the appellants based their appeal in respect of the main request rejected by the opposition division (see paragraph 1.1.1 of the statement of grounds of appeal).
6. In view of the above, the board regards the respondent's objection concerning the admissibility of the appeal as unfounded. The appellants' appeal is considered to be admissible.

*Fresh objections and new evidence submitted in appeal proceedings*

7. At the outset of the appeal proceedings, the respondent submitted new documentary and experimental evidence and raised fresh objections relying exclusively on the new

evidence. In particular, the respondent put forward various objections under Articles 123(2), 84 and 83 EPC, an objection of lack of novelty based on a new document, and an objection of lack of inventive step based on a new document as the closest state of the art, and on fresh experimental evidence in support of the allegation that the objective technical problem had not been solved over the whole scope of the claims. In response to the experimental evidence filed by the respondent, also the appellants submitted additional experimental evidence. Further documentary evidence was filed by the respondent in support of the fresh objection that the objective technical problem had not been solved.

8. The board is unable to see any reason that justifies the respondent's submission of fresh objections and new documents for the first time in appeal proceedings. The respondent's argument that the evidence submitted at the outset of the appeal proceedings was filed as a reaction to the interlocutory decision of the opposition division maintaining the patent on the basis of the claims according to the second auxiliary request filed at the oral proceedings, cannot be accepted.
9. The fresh objections of lack of novelty and lack of inventive step raised by the respondent concerned in fact claim 1 of the second auxiliary request. However, the subject-matter of this claim was essentially identical to the subject-matter of claim 16 as granted, except that one of the embodiments specified in the latter claim, namely the preparation of L-tryptophan was no longer pursued. In the notice of opposition, claim 16 had been objected solely under Article 100(a)

in conjunction with Article 56 EPC 1973 relying exclusively on documents (2) to (5), and no other objections were raised during the opposition proceedings. Consequently, this was also the sole issue decided by the opposition division in respect of claim 1 of the second auxiliary request. Under these circumstances, the fresh objections and the new evidence to support them submitted by the respondent at the outset of the appeal proceedings could have been presented already in opposition proceedings.

10. Even though the appellants objected to the introduction of the new evidence into the proceedings, and the board commented on this issue in its communication under Article 15(1) RPBA, pointing to Article 114(2) EPC and indicating that the issue would have to be discussed at the oral proceedings, the respondent did not put forward further arguments in this respect in writing, nor attend the oral proceedings. Consequently, in the absence of plausible reasons why the fresh objections and evidence were not submitted in due time, i.e. during the period for opposition or, at the latest, during opposition proceedings, the board, exercising its discretion under Article 114(2) EPC and Article 12(4) RPBA, decided to disregard them.

*Admission of the set of amended claims filed as main request during the oral proceedings*

11. The amendments introduced into the set of claims filed at the oral proceedings are straightforward and do not give rise to formal objections. They are aimed mainly at overcoming the objection of lack of novelty in view of document (6) by restricting claims directed to

polynucleotides and recombinant coryneform bacteria including this polynucleotide (claims 1 to 6 and 11) to specify that the encoded amino acid sequence of the transaldolase is **identical** to the amino acid sequence of SEQ ID NO:2 (instead of an identity of at least 90% as in the granted claims). This particular embodiment of the polynucleotides of the invention was within the scope of the claims as granted; in fact, it was the subject-matter of dependent claim 5 as granted. Thus, the respondent had ample opportunity to present comments on this specific embodiment in opposition or in appeal proceedings.

12. Since amended claim 12 is essentially identical to claim 1 of the request on the basis of which the opposition division intended to maintain the patent, the board is convinced that none of the amendments introduced into the claims can take the respondent by surprise.
13. In view of these circumstances, the board decided to admit into the appeal proceedings the set of claims filed as main request during the oral proceedings.

*Articles 123(2)(3) and 84 EPC*

14. Amended claim 1 differs from the corresponding claim as granted in that the feature "*to the extent of at least 90%*" has been omitted. Thus, the claim has been restricted to a polynucleotide which encodes a polypeptide having an amino acid sequence which is **identical** to the amino acid sequence of SEQ ID NO:2 disclosed in the application as filed, and a polynucleotide having the complementary nucleotide



- sequence. This amendment neither introduces subject-matter which was not disclosed in the application as filed, nor extends the protection conferred by the patent as granted. The same is true for dependent claim 4 which has been amended by omitting one of the embodiments specified in claim 6 as granted (embodiment (e)).
15. As regards independent claim 11 which is derived from claim 14 as granted, the same amendment as in claim 1 has been introduced to restrict the subject-matter of the claim to a recombinant coryneform bacterium which overexpresses a polynucleotide encoding a polypeptide having an amino acid sequence which is **identical** to the amino acid sequence of SEQ ID NO:2.
16. Independent claim 12 is derived from claim 15 as granted which has been amended by reciting the wording of claims 14 and 1 as granted, to which granted claim 15 referred, and by restricting its subject-matter to three embodiments specified in dependent claim 16 as granted. Basis for the amended claim 12 is found in claims 8 and 11 of the application as filed.
17. The further amendments introduced into the set of claims of the main request by deleting claims 2, 5, 11 and 16 as granted, and adapting the dependencies of the remaining claims accordingly, do not offend against Article 123(2)(3) EPC.
18. The findings of the opposition division on Article 123(2) EPC (see point 2.8 of the decision under appeal) were not contested by the respondent in appeal. Nor did the respondent raise any objections under

Article 123(3) or 84 EPC. The board has no concerns of its own in this respect.

*Article 52 and Rule 27 EPC*

19. The respondent did not put forward any arguments against the findings of the opposition division on Article 52 and Rule 23(c) EPC 1973, now Rule 27 EPC (see point 2.11 of the decision under appeal), and the board has no doubt that these findings are correct.

*Novelty - Document (6) - Article 54(3)(4) EPC 1973*

20. Document (6) is a European patent application filed under the Patent Cooperation Treaty on 21 September 2000, claiming the priority of a previous Japanese patent application filed on 21 September 1999. In the decision under appeal, the opposition division, relying on an English translation of the Japanese priority application, regarded the priority of document (6) as being valid, whereas the priorities claimed in the patent in suit (see paragraph I above) were considered not to be valid in respect of the subject-matter of the claims as granted. Consequently, document (6) formed part of the state of the art under Article 54(3)(4) EPC 1973 to be considered for the assessment of novelty. Since the document in question described a polynucleotide which codes for a polypeptide having transaldolase activity and an amino acid sequence which is identical to the extent of **at least 90%** to the amino acid sequence of SEQ ID NO:2 in the present patent, the subject-matter of claim 1 - as well as that of claims 9, 11, 13 and 14 as granted - was considered to lack novelty.

21. In the set of claims under consideration, claim 1 is restricted to a polynucleotide encoding a polypeptide having transaldolase activity and an amino acid sequence which is identical to the amino acid sequence of SEQ ID NO:2. It has never been disputed in opposition or appeal proceedings that the polypeptide described in document (6) (see SEQ ID NO:1 on page 14) differs from the polypeptide of SEQ ID NO:2 of the present patent in two positions of the amino acid sequence, namely position 178 (Tyr instead of Phe as in SEQ ID NO:2 of the patent) and position 300 (Leu instead of Gln as in SEQ ID NO:2 of the patent). Thus, the polynucleotide described in document (6) (see SEQ ID NO:1 on page 14) does not encode a polypeptide having an amino acid sequence which is **identical** to the amino acid sequence of SEQ ID NO:2 and, therefore, cannot be considered to destroy the novelty of the subject-matter of amended claim 1 as presently on file. Under these circumstances, the question whether or not the priority of document (6) and that of the patent in suit are valid, does not need to be decided.

22. In the decision under appeal, the opposition division pointed to the passage on page 2, lines 42ff of document (6) as the relevant disclosure within the framework of assessing novelty (see point 2.18 of the decision). This passage reads:

*"(2) A polypeptide comprising the amino acid sequence of SEQ ID NO:1 in which one or more amino acids have been substituted, deleted or added, and having transaldolase activity.(3) A protein comprising an amino acid sequence which is at*

*least 60% homologous to the amino acid sequence of SEQ ID NO:1, and having transaldolase activity."*

23. However, even if it is true that the substitution of two amino acids in the amino acid sequence of SEQ ID NO:1 of document (6) might possibly result in a polypeptide having the amino acid sequence of SEQ ID NO:2 of the patent, neither a polypeptide having the **specific** amino acid sequence of SEQ ID NO:2 of the patent, nor a polynucleotide encoding this sequence are clearly and directly derivable from document (6). Thus, the generic disclosure in the passage cited by the opposition division cannot be considered to be prejudicial to the novelty of the subject-matter of amended claim 1 as presently on file. The same applies, *mutatis mutandis*, in respect of claim 7, which is identical to claim 9 as granted, and claims 10 and 11.
24. Claim 12 is essentially identical to claim 1 of the set of claims according to the second auxiliary request on the basis of which the opposition division intended to maintain the patent. In the decision under appeal, the claimed subject-matter was found to be novel (see point 4.4. of the decision) and this finding has not been contested in appeal.
25. Hence, the board concludes that the requirement of novelty is met.

*Article 113(1) EPC - Right to be heard*

26. In its communication under Article 15(1) RPBA, the board provided observations which should help the parties to prepare for the oral proceedings, and

expressed a provisional opinion on some of the issues to be discussed. The parties were given the opportunity to present their comments. However, the respondent did not reply to the board's communication and, although duly summoned, did not attend the oral proceedings. Even though the present decision is taken on a set of amended claims which was filed during the oral proceedings, the board believes that both parties had ample opportunity to file any observations they wished in respect of the grounds and evidence on which the decision is based. Thus, the board is satisfied that the provisions of Article 113(1) EPC are complied with.

*Remittal to the opposition division for further prosecution*

27. Since the issue of inventive step has not been decided by the opposition division in respect of the set of claims presently on file, the board, upon request by the appellants and exercising its discretion under Article 111(1) EPC, decides to remit the case to the opposition division for further prosecution.

**Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution based on the main request filed during oral proceedings.

The Registrar:

The Chairman:

K. Boelicke

M. Wieser