Datasheet for the decision
of 23 February 2007

Case Number: W 0002/07 - 3.3.04
Application Number: PCT/EP2005/005988
Publication Number: WO 2005/118829
IPC: C12P 13/00
Language of the proceedings: EN

Title of invention:
Biosynthetic production of 4-Amino-4-Deoxychorismate (ADC) and [3R,4R]-4-Amino-3-Hydroxycyclohexa-1,5-diene-1-carboxylic acid (3,4-CHA)

Applicants:
DSM IP ASSETS B.V.
DSM BIOTECH GMBH
FORSCHUNGSZENTRUM JÜLICH GMBH

Headword:
ADC and 3,4-CHA/DSM

Relevant legal provisions:
PCT Art. 17(3)(a)
PCT Rules 13, 40, 68.3(c)
EPC Art. 154(3)
EPC R. 105(3)

Keyword:
"Admissibility of the protest - (no)"

Decisions cited:
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Catchword:
-
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International Application No. PCT/EP2005/005988

DEcision
of the Technical Board of Appeal 3.3.04
of 23 February 2007

Applicants: DSM IP ASSETS B.V.
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Decision under appeal: Protest according to Rule 40.2(c) of the Patent Cooperation Treaty made by the applicants against the invitation (payment of additional fees) of the European Patent Office (International Searching Authority) dated 12 December 2005.

Composition of the Board:
Chair: U. Kinkeldey
Members: M. Wieser
T. Bokor
Summary of Facts and Submissions

I. International patent application No. PCT/EP2005/005988 having the title "Biosynthetic production of 4-Amino-4-Deoxychorismate (ADC) and [3R,4R]-4-Amino-3-Hydroxycyclohexa-1,5-diene-1-carboxylic acid (3,4-CHA)" was filed with twenty-four claims.

II. Independent claims 1, 9 and 23 read as follows:

"1. Process for the biosynthetic production of 4-amino-4-deoxychorismate (ADC) catalyzed at least by an enzyme belonging to the class of aminodeoxychorismate synthases, characterized in that the biosynthetic production is performed fermentatively in vivo in a host microorganism with a 4-amino-4-deoxychorismate synthase at an increased level of activity, while obtaining a fermentation broth comprising 4-amino-4-deoxychorismate (ADC) and 4-amino-4-deoxyprephenate (ADP), and that these compounds, either together or individually, are recovered from the fermentation broth.

9. Process for the biosynthetic production of [3R,4R]-4-amino-3-hydroxycyclohexa-1,5-diene-1-carboxylic acid (3,4-CHA) catalyzed at least by an enzyme belonging to the class of aminodeoxychorismate synthases, characterized in that the biosynthetic production is performed by concerted action, and at an increased level of activity, of a 4-amino-4-deoxychorismate synthase and of an enzyme capable of converting isochorismate into [5S,6S]-5,6-dihydroxycyclohexa-1,3-diene-1-carboxylic acid (2,3-CHD), and that the [3R,4R]-4-amino-3-hydroxycyclohexa-1,5-diene-1-
carboxylic acid (3,4-CHA) is recovered from the fermentation broth so obtained.

23. Use of [3R,4R]-4-amino-3-hydroxycyclohexa-1,5-diene-1-carboxylic acid (3,4-CHA), obtained by the process according any of claims 9-19, as a catalytically active product, in particular as a chiral catalyst."

III. The European Patent Office (EPO), acting in its capacity as International Searching Authority (ISA) under Articles 16 PCT and 154 EPC, informed the Applicant in a communication of 12 December 2005 (Form PCT/ISA/206) that the application did not comply with the requirement of unity of invention (Rules 13.1 to 13.3 PCT) and invited the Applicant to pay two additional search fees, in accordance with Article 17(3)(a) PCT and Rule 40.1 PCT.

The invitation was reasoned as follows (see Form PCT/ISA/206 (extra sheet)):

"This International Searching Authority found multiple (groups of) inventions in this international application, as follows:


Process for the biosynthetic production of 4-amino-4-deoxychrismate (ADC) in admixture with 4-amino-4-deoxyprephenate (ADP), host cells containing the suitable enzyme, and the further transformation of ADP to p-aminophenylalanine.

Process for the biosynthetic production of \([3R, 4R]-4\)-amino-3-hydroxycyclohexa-1,5-diene-1-carboxylic acid (3,4-CHA), host cells containing suitable enzyme(s), and the further transformation of 3,4-CHA to oseltamivir phosphate.

3. Claim: 23

Use of \([3R, 4R]-4\)-amino-3-hydroxycyclohexa-1,5-diene-1-carboxylic acid (3,4-CHA) as a catalyst.

IV. The ISA pointed out that these three inventions, which were characterised each by an individual "special technical feature" as defined in Rule 13.2 PCT, were not so linked as to form a single general inventive concept as required by Rule 13.1 PCT.

The problems underlying the three inventions were different. For invention (1) it was the provision of a process for the fermentative in vivo production of ADC in mixture with ADP, by using ADC-synthase. The problem underlying invention (2) was the provision of a process for the biosynthetic production of 3,4-CHA by using ADC-synthase and an enzyme capable of converting isochorismate into 2,3-CHD. Invention (3) aimed at the provision a new use of a known compound, namely 3,4-CHA.

Thus, each invention provided a different and independent solution to a different problem, whereby each of the solutions depended on an individually developed special technical feature.
The communication of 12 December 2005 also contained the results of the partial international search.

V. With letter dated 9 January 2006 the Applicant requested the debiting of two additional search fees from his deposit account. The payment "of at least one, but in fact even both" additional search fees was made under protest and it was requested that the fee(s) should be reimbursed.

In the letter the Applicant argued that he considered the additional search fees to be excessive as the main part of the search had already been carried out with respect to the priority document of the present application, namely the European patent application No. 04076644. This could be seen from a comparison of the partial search report for the present application, submitted on 12 December 2005, with the search report of European patent application No. 04076644, which differed only in so far as the latter contained one additional document.

VI. On 13 April 2006 the ISA invited the Applicant to pay the protest fee according to Rule 40.2 PCT (see Form PCT/ISA/228 (April 2005)). Together with the invitation, in the Annex of this Form, the ISA communicated to the Appellant the following results of a review of the protest:

The Applicant had not submitted any substantiated arguments in answer to the invitation to pay additional search fees issued by the ISA on 12 December 2005. With regard to Applicant's assertion that the main part of
the search had already been carried out for European patent application No. 04076644, it was noted that the claims of the present international application and of this European patent application were different.

The protest was refused as it was not reasoned. The objection as to lack of unity (Rule 13 PCT) was maintained in total.

VII. With letter dated 9 May 2006 the Applicant requested the debiting of the protest fee from his deposit account.

Reasons for the decision

The Protest-procedure according to Article 17(3)(a) and Rule 40 PCT in general

1. The International application was filed on 2 June 2005. Therefore, in the present case, the 1 April 2005 version of the Regulations under the PCT is applicable.

2. According to Rule 40.2(c) PCT an Applicant may pay additional search fees, required by the ISA under Rule 17(3)(a) PCT, under protest accompanied by a reasoned statement to the effect that the application complies with the requirement of unity of invention. Such protest shall then be examined by a review body constituted in the framework of the ISA, which to the extent that it finds the protest justified, shall order the total or partial reimbursement of the additional fees to the Applicant.
3. According to Rule 40.2(e) PCT the examination of such protest may be subjected by the ISA to the payment of a protest fee. In this case the Applicant, according to Rule 40.1(iii) PCT, shall pay this fee within one month of being invited to do so. According to Rule 40.1(ii) this invitation shall be made together with the invitation to pay the additional search fees.

The implementation of the Protest-procedure by the EPO acting as ISA

4. Due to its filing date the present application has to be treated by the EPO acting as ISA according to the procedure set out in the "Notice from the European Patent Office dated 1 March 2005 concerning the protest procedure under the PCT (lack of unity)" (OJ, EPO 3/2005, 226 - hereinafter: Notice).

5. According to the Notice, in derogation from Rule 40.1(iii) PCT, the invitation to pay the protest fee is not made together with the invitation to pay additional search fees, but at a later point in time. Pending entry into force of the EPC as revised in 2000, where additional fees for international search or international preliminary examination are paid under protest according to Rule 40.2(c) or Rule 68.3(c) PCT, the EPO will continue to subject any invitation to pay such additional fees to an internal review, prior to submission of the protest to the Board of Appeal. The Notice further states that this review is in the nature of a service from the EPO and the previous procedure described in Rule 105(3) EPC - which provision implemented for the EPO the protest procedure according to the earlier version of the PCT - "is no longer
applicable". In order to allow the Applicant to consider the result of the review the EPO will, by way of concession, not require payment of the protest fee until one month after the date of notification of the review to the applicant (see point (3) of the Notice).

It must be noted that the formulation in the Notice that the previous procedure according to Rule 105(3) EPC is "no longer applicable" is quite misleading, when considering the fact that the Notice actually confirms that the previous procedure in fact will be further applied. What is probably meant is that even though the present version of Rule 40.2(e) PCT does not explicitly foresee an interlocutory revision before the final decision on the protest - and in this sense the procedure according to Rule 105(3) EPC is indeed no longer considered as a mandatory provision which finds its legal basis in the PCT -, such an interlocutory revision is actually performed by the EPO acting as ISA.

6. When following this procedure, the Applicant is invited to pay the protest fee only after having received the communication of the ISA, in which he is informed of the result of the "internal review". The time limit for the payment of the protest fee starts at the date of said communication. In the present case this invitation to pay the protest fee was given in the "Form PCT/ISA/228", (see especially points (1) and (2) of this Form).

7. Thus, the EPO acting as ISA does not strictly follow all of the provisions of Rule 40.1 PCT. However, it is clear that the application of a less strict procedure
that derogates from the exact wording of the PCT is to the advantage of the Applicant (see point (3) of the Notice, last sentence: "... by way of concession, ...").

8. According to Rule 40.2(e) PCT a protest shall be considered not to have been made, where an Applicant has not, within the time limit under Rule 40.1(iii) PCT, paid the required protest fee. However, it has to be noted that Rule 40.1(iii) PCT not only lays down the time limit for the payment of the protest fee, but also the obligation of the ISA to call the Applicant's attention to his liability to pay this fee and to prescribe the time limit. Thus, the term "... from the date of the invitation ..." in Rule 40.1(iii) PCT refers not only to the date of the invitation according to Article 17(3)(a) PCT and Rule 40.1(ii) PCT, but also to the invitation to pay the protest fee itself (see Rule 40.1(iii) PCT, first sentence: "invite the applicant to pay, ..."). Therefore, the legal effect foreseen in Rule 40.2(e) PCT when an Applicant has not, within the given time limit, paid the protest fee (protest shall be considered not to have been made), cannot occur without a preceding, explicit invitation for payment of the protest fee and the setting of a time limit by the ISA.

9. The procedure according to the Notice corresponds with the provisions of Rule 40.1(iii) PCT in so far as the Applicant is invited to pay the protest fee within a time limit of one month. However, it does not correspond with the provisions of Rule 40.1 PCT with regard to the point in time at which the invitation has to be made. Pursuant to Rule 40.1 PCT the invitation provided for in Article 17(3)(a) PCT contained both an
invitation to pay the protest fee together with an invitation to pay additional search fees. The position under the Notice is that these invitations are now made separately.

10. In effect, the discrepancy outlined above only arises from the fact that the EPO continues to perform the interlocutory revision even when it is no longer mandatory. Otherwise the two cornerstones of the procedure, namely the invitation to pay further search fees and the genuine second instance review of the invitation by the Board remains unchanged. It may be noted that these two instances were the pillars of the protest procedure even in the previous version of the PCT Regulations, considering that the intermediate level of the interlocutory revision (the "prior review" in Rule 40.2(e) PCT, version in force before 1 April 2005) was only required if the ISA availed itself of the possibility to require a protest fee from the applicant. Thus the present practice does not appear to be contrary to the basic principles underlying the protest procedure. Furthermore, to what extent the implementation of the protest-procedure according to the Notice corresponds to the legal obligations on an ISA under the procedure laid down in the Regulations under the PCT need not to be answered. The Board as a review body according to Rule 40.2(c) PCT (see also Article 154(3) EPC) does not consider itself to be competent to approve or prohibit this practice of the EPO acting as ISA. Rather, the responsibility of the Board (when examining the admissibility of the protest) is restricted to the examination of the formal requirements for filing a protest. The Board - in the absence of competence and of a directly applicable
legal basis in the PCT itself - cannot deduce any further legal effect from this unilateral amendment of the protest-procedure by the EPO acting as ISA.

11. The Board takes it that the Applicant, in view of the Notice, could proceed from the assumption, that the procedure of the ISA in the present case would lead to the entrustment of the Board with the examination of the protest, as long as the protest fee was paid on time within the framework of the procedure according to the Notice and as long as the payment of the additional search fees was accompanied by a reasoned statement to the effect that the international application complied with the requirement of unity of invention or that the amount of the required additional fees was excessive (Rule 40.2(c) PCT).

12. Therefore, considering the generally established principle of protection of legitimate expectations, the Board takes the view that these are the only issues to be considered when examining the admissibility of the protest.

13. In the present case the Applicant was invited with the communication of 13 April 2006 ("Form PCT/ISA/228") to pay the protest fee within one month. In a letter dated 9 May 2006 the Applicant requested the debiting of the protest fee from his Deposit Account. Thus, the payment was made in time, and the protest is considered to have been made (Rule 40(2)e, PCT).
Admissibility of the Protest

14. Applicant's statement in his reply to the invitation to pay additional fees (see section (IV) above), in its first part, only says that the additional search fees are considered to be excessive and that therefore the payment "of at least one, but in fact of both" additional search fee(s) was made under protest.

In the following paragraph it is argued that "the main part of the search" had already been carried out with regard to a different application, namely European application No. 04076644, which is the priority document of the present international application. The Applicant concedes in this paragraph that the claims of the two applications are not identical.

Concept of "excessive fee"

It appears that that Applicant has misconstrued the provision of Rule 40.2(c) PCT that the protest must be "accompanied by a reasoned statement to the effect that ... the amount of the required additional fees is excessive". The notion of the "excessive fees" is not a reference to some subjective judgement concerning the amount of the fees, but must have a legally clear meaning. Rather, this provision must be seen in light of the first of the possible alternative requirements, namely that the protest must be "accompanied by a reasoned statement to the effect that the international application complies with the requirement of unity". Such a statement can not be made if the application in fact contains more than one invention which are non-unitary, but the Applicant had been invited to pay
search fees for even more inventions than he himself considers to be justified in light of the actual number of non-unitary inventions. The second alternative, namely "a reasoned statement to the effect that ... the amount of the required additional fees is excessive" is provided for this possibility.

**Reasoned statement**

The above shows that the requirement of the reasoned statement is directed to the same purpose even when using the second alternative, namely the Applicant must give grounds why those multiple inventions which should be searched for a single search fee are to be considered to comply with the requirement of unity (Rule 13.1 PCT). The Applicant's arguments that the EPO in fact did not need to perform further searches based on the search of the priority document are legally irrelevant for the question of unity of the claimed inventions. Therefore the protest must be considered as not being reasoned within the meaning of Rule 40.2(c) PCT which would allow the Board to examine why the invitation to pay additional fees should be unfounded.
Order

For these reasons it is decided that:

The protest under Rule 40.2(c) PCT is dismissed as inadmissible.

Registrar:            Chair:

P. Cremona            U. Kinkeldey