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**Datasheet for the decision  
of 8 February 2011**

**Case Number:** T 0590/07 - 3.3.10

**Application Number:** 99946064.5

**Publication Number:** 1214336

**IPC:** C07K 7/02

**Language of the proceedings:** EN

**Title of invention:**

Synthesis of template-fixed beta-hairpin loop mimetics

**Applicant:**

Polyphor AG, et al

**Opponent:**

-

**Headword:**

Synthesis of template-fixed  $\beta$ -hairpin loop mimetics/POLYPHOR

**Relevant legal provisions:**

EPC Art. 123(2)

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

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**Keyword:**

"Amendments (not allowable) - not directly and unambiguously derivable from application as filed, neither explicitly nor implicitly"

**Decisions cited:**

T 0823/96

**Catchword:**

-



Case Number: T 0590/07 - 3.3.10

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.10  
of 8 February 2011

**Appellants:**

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**Representative:**

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**Decision under appeal:**

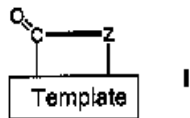
**Decision of the Examining Division of the  
European Patent Office posted 29 November 2006  
refusing European patent application  
No. 99946064.5 pursuant to Article 97(1) EPC.**

**Composition of the Board:**

**Chairman:** P. Gryczka  
**Members:** J. Mercey  
F. Blumer

## Summary of Facts and Submissions

- I. This appeal lies from the decision of the Examining Division posted on 29 November 2006 refusing European patent application No. 99946064.5 with the European publication No. 1 214 336 and International publication No. WO 01/16161. Claim 1 of the set of claims underlying the contested decision related to a process for the manufacture of compounds of the general formula:



comprising steps (a) to (p), step (a) reading as follows:

"(a) coupling a solid support derived from polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotrityl linker with an appropriately N-protected derivative of that amino acid which in the desired end-product is in position  $n/2$ ,  $n/2+1$  or  $n/2-1$  if  $n$  is an even number and, respectively, in position  $n/2+1/2$  or  $n/2-1/2$  if  $n$  is an odd number, any functional group which may be present in said N-protected amino acid derivative being likewise appropriately protected".

- II. In the decision under appeal, the Examining Decision held that the subject-matter according to the then pending sole request extended beyond the content of the application as filed (Article 123(2) EPC) and lacked inventive step (Article 56 EPC). More particularly, it held that the feature "a solid support derived from

polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotrityl linker" in amended claim 1 was not supported by the application as filed, even in the light of documents (9), (10) and (11):

(9) K. Barlos *et al.*, *Tetrahedron Lett.*, 1989, 30, 3943-3946,

(10) J. M. J. Fréchet *et al.*, *Can. J. Chem.*, 1976, 54, 926-934 and

(11) Catalogue excerpts relating to 2-chlorotrityl chloride resin,

document (9) being cited in the application as filed in connection with the 2-chlorotrityl linker only, document (10) being cited in document (9) but disclosing two resins, i.e. not only polystyrene crosslinked with 1% divinylbenzene, and document (11) having been filed by the Applicant to show that the term "2-chlorotrityl chloride resin" was consistently used to refer to polystyrene crosslinked with 1% divinylbenzene and functionalized with a 2-chlorotrityl linker.

III. With a letter dated 16 March 2007, the Appellant (Applicant) submitted a main request, wherein step (a) of claim 1 was identical to step (a) of claim 1 underlying the contested decision, and at the oral proceedings before the Board held on 8 February 2011, it submitted an auxiliary request, claim 1 of which differed from claim 1 of the main request only in that it was specified that the coupling in step (a) was "in dichloromethane".

IV. The Appellant argued that the amendments to the claims found support in the application as filed, and thus complied with the requirements of Article 123(2) EPC. More particularly, it argued that the feature that the coupling step (a) of the process was carried out with a solid support "derived from polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotrityl linker" was supported by the reference in Example 1 of the application as filed to a 2-chlorotrityl chloride resin. The expression "2-chlorotrityl chloride resin" was understood by those skilled in the art to be a short-hand name for polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotrityl linker, the Appellant citing in this respect documents (9), (10) and (11), together with seven further documents filed with letter dated 4 January 2011:

G. Stavropoulos *et al.*, Letters in Peptide Science, 1995, 2, 315-318,

K. Barlos *et al.*, Liebigs Ann. Chem., 1993, 215-220,

P. Athanassopoulos *et al.*, Tetrahedron Lett., 1997, 36, 5645-5648,

W. J. Hoeckstra *et al.*, Tetrahedron Lett., 1997, 38, 2629-2632,

M. A. Youngman *et al.*, Tetrahedron Lett., 1997, 38, 6347-6350,

R. Bollhagen *et al.*, J. Chem. Soc., Chem. Commun., 1994, 2559-2560 and,

EP-B-1115739, page 18,

and three documents filed at the oral proceedings before the Board:

M. Harre *et al.*, *Reactive and Functional Polymers*, 1999, 41, 111-114,

K. Barlos *et al.*, *Int. J. Peptide Protein Res.*, 1991, 37, 513-520 and

CBL Products catalogue excerpt "2-Chlorotrityl chloride resin" retrieved from

[http://www.cblpatras.gr/?page\\_id=3&category=7&product\\_id=28](http://www.cblpatras.gr/?page_id=3&category=7&product_id=28) on 19 January 2011.

The Appellant further argued that the skilled person, on reading the term "2-chlorotrityl chloride resin", would only have contemplated using a resin derived from polystyrene crosslinked with 1% divinylbenzene, since such a resin was the most common commercially available resin of this type and was better than those with a higher or lower percentage of divinylbenzene, since these were less swellable and/or resulted in lower yields of desired product.

- V. During the oral proceedings before the Board, the Appellant withdrew its written submission that the Opposition Division had committed a procedural violation.
  
- VI. The Appellant requested that the decision under appeal be set aside and that the patent be granted on the basis of a set of claims submitted as main request with letter dated 16 March 2007 or, subsidiarily, on the basis of the set of claims submitted as auxiliary request during the oral proceedings before the Board.
  
- VII. At the end of the oral proceedings, the decision of the Board was announced.

## Reasons for the Decision

1. The appeal is admissible.

### *Main and auxiliary request*

2. *Article 123(2) EPC*

- 2.1 In order to determine whether or not an amendment offends against Article 123(2) EPC, it has to be examined whether technical information has been introduced which a skilled person would not have objectively and unambiguously derived from the application as filed, either explicitly or implicitly.

- 2.2 Claim 1 of both requests is derived from originally filed claim 1, which has been amended *inter alia* by the replacement in process step (a) of the feature "an appropriately functionalized solid support" by the feature "a solid support derived from polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotriptyl linker". The Appellant argued that support for this amendment was the reference in Example 1 of the application as filed to "a 2-chlorotriptyl chloride resin", the 2-chlorotriptyl group being the linker which functionalises the solid support, and the resin being the solid support derived from polystyrene crosslinked with 1% divinylbenzene.

- 2.3 The Board, however, holds that the application as filed does not provide a basis for this amendment, since nowhere in the application as filed is the resin in the

"2-chlorotriptyl chloride resin" of Example 1 defined as being derived from polystyrene crosslinked with 1% divinylbenzene, such that subject-matter has been added which extends beyond the content of the application as filed.

2.4 According to the Appellant, who conceded that a solid support derived from polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotriptyl linker was not explicitly disclosed in the application as filed, such a solid support was nevertheless implicitly disclosed therein, since the expression "2-chlorotriptyl chloride resin" was understood by those skilled in the art of solid phase peptide synthesis to be a short-hand name for polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotriptyl linker.

2.4.1 The Board observes, however, that in this context "implicit disclosure" means no more than the clear and unambiguous consequence of what is explicitly mentioned (see T 823/96, point 4.5 of the reasons, not published in OJ EPO).

However, in the present case, the term "resin" in the expression "2-chlorotriptyl chloride resin" does not necessarily mean polystyrene crosslinked with 1% divinylbenzene, as can be seen, for example, from the description of the application as filed itself, wherein at page 15, lines 4 to 8, the functionalised solid support is described as being derived from polystyrene crosslinked with 1-5% divinylbenzene, polystyrene coated with polyethyleneglycol spacers and polyacrylamide resins.



2.4.2 The Appellant, in addition to documents (9) to (11), further cited several documents (see point IV above) in which the expression "2-chlorotrityl resin" was used without describing the chemical nature of said resin, and argued that this lack of a definition of the resin was because it was clear to those skilled in the art that said expression designated nothing else than polystyrene crosslinked with 1% divinylbenzene and functionalized with a 2-chlorotrityl linker.

The Board holds, however, that even if this expression was often used in the scientific literature to mean polystyrene crosslinked with 1% divinylbenzene which is functionalized by means of a 2-chlorotrityl linker, this is no proof that at the date of filing of the present application this expression had always this meaning. This is confirmed by the present application itself which defines the resin *inter alia* as polystyrene crosslinked with 1-5% divinylbenzene and not only 1%.

2.4.3 Finally, the Appellant also argued that the amendment found implicit support in the application as filed, since the skilled person, on reading the term "2-chlorotrityl chloride resin" in Example 1 of the present application, would only have contemplated using a resin derived from polystyrene crosslinked with 1% divinylbenzene, since such a resin was the most common commercially available resin of this type and was known to be better than those with a higher or lower percentage of divinylbenzene, since it had better swelling properties and/or resulted in higher yields and purity of desired product.

In this respect, the Board observes that the term "implicit disclosure" should not be construed to mean matter that does not belong to the content of the technical information provided by a document but may be rendered obvious on the basis of that content (see T 823/96, *loc. cit.*). Thus, although the skilled person on reading "2-chlorotrityl chloride resin" in the context of Example 1 may have known that it was desirable to employ a resin derived from polystyrene crosslinked with 1% divinylbenzene and that such a resin was readily commercially available, this does not imply directly and ambiguously that the product named "2-chlorotrityl chloride resin" in Example 1 of the application as filed was **inevitably** derived from polystyrene crosslinked with 1% divinylbenzene. In addition, whether such a resin was commercially available or not is, moreover, irrelevant to the question of disclosure, since there is no indication in Example 1 that a commercially available resin was used at all. These arguments of the Appellant must therefore also be rejected.

- 2.5 The Board concludes that claim 1 of the main request and claim 1 of the auxiliary request are amended in such a way that subject-matter extending beyond the application as filed is added, contrary to the requirements of Article 123(2) EPC, with the consequence that the main request and the auxiliary request are not allowable.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

C. Rodríguez Rodríguez

P. Gryczka