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**Datasheet for the decision  
of 26 July 2010**

**Case Number:** T 1473/08 - 3.3.01

**Application Number:** 04813233.6

**Publication Number:** 1692141

**IPC:** C07D 495/04

**Language of the proceedings:** EN

**Title of invention:**

Substituted 3-amino-thieno[2,3-B]pyridine-2-carboxylic acid  
amide compounds as IKK inhibitors

**Applicant:**

Boehringer Ingelheim Pharmaceuticals Inc.

**Headword:**

IKK Inhibitors/BOEHRINGER

**Relevant legal provisions:**

EPC Art. 123(2), 54

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

-

**Keyword:**

"Remittal after amendment"

**Decisions cited:**

G 0002/03

**Catchword:**

-



Case Number: T 1473/08 - 3.3.01

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.01  
of 26 July 2010

**Appellant:** Boehringer Ingelheim Pharmaceuticals Inc.  
900 Ridgebury Road  
P.O. Box 368  
Ridgefield  
Connecticut 06877-0368 (US)

**Representative:** Hammann, Heinz  
Boehringer Ingelheim GmbH  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 10 March 2008  
refusing European patent application  
No. 04813233.6 pursuant to Article 97(2) EPC.

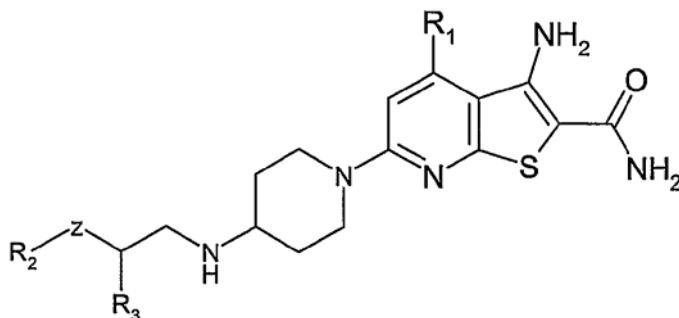
**Composition of the Board:**

**Chairman:** P. Ranguis  
**Members:** L. Seymour  
C.-P. Brandt

## Summary of Facts and Submissions

- I. This appeal lies from the decision of the examining division refusing the European patent application No. 04 813 233.6, based on international application WO 2005/056562, under Article 97(2) EPC.
- II. Claim 1 of the claim set forming the basis of the decision under appeal (main and sole request) read as follows:

"1. A compound of formula (I):



wherein:

R<sub>1</sub> is ...

R<sub>2</sub> is heteroaryl selected from the group consisting of furanyl, thienyl, pyrrolyl, oxazolyl, thiazolyl, imidazolyl, pyrazolyl, isoxazolyl, isothiazolyl, oxadiazolyl, triazolyl, tetrazolyl, thiadiazolyl, pyridinyl, pyridazinyl, pyrimidinyl, pyrazinyl, indolizinyl, indolyl, isoindolyl, benzofuranyl, benzothienyl, indazolyl, benzimidazolyl, benzthiazolyl, benzoxazolyl, purinyl, quinolizinyl, quinolinyl,

isoquinolinyl, cinnolinyl, phthalazinyl, quinazolinyl, quinoxalinyl, naphthyridinyl, pteridinyl, carbazolyl, acridinyl, phenazinyl, phenothiazinyl and phenoxazinyl, optionally substituted with one to three R<sub>4</sub>;

R<sub>3</sub> is -OH or -H;

...

Z is a bond or -O-CH<sub>2</sub>-;

and pharmaceutically acceptable salts, esters, tautomers, individual isomers, and mixtures of isomers thereof **under the provision that the compound is not 3-Amino-6-[4-(2-hydroxy-2-thiophen-2-yl-ethylamino)-piperidin-1-yl]-4-propyl-thieno[2,3-b]pyridine-2-carboxylic acid amide**" (emphasis added and definitions of R<sub>1</sub> and R<sub>4</sub> omitted by the board).

III. In its decision, the examining division referred to the following document as constituting prior art under Article 54(3) EPC:

(2) WO 03/103661

The examining division was of the opinion that the disclaimer, which had been introduced by the applicant to exclude the specific novelty-destroying compound disclosed in document (2), was not sufficient to establish novelty, in view of the remaining area of overlap between the generic formulae according to the respective claims 1 of document (2) and the present application. The examining division therefore

considered document (2) to be novelty destroying state of the art under Article 54(3) EPC.

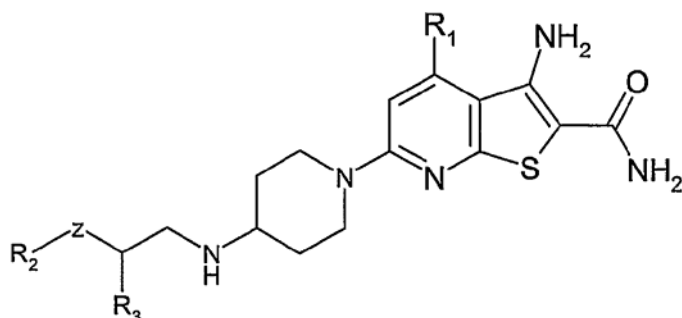
In addition, the examining division held that the introduction of the disclaimer was not allowable according to the criteria set out in the decision of the Enlarged Board of Appeal G 2/03. The examining division therefore considered that the subject-matter of claim 1 did not comply with the requirements of Article 123(2) EPC.

- IV. The appellant (applicant) lodged an appeal against this decision, and filed three auxiliary requests with the statement of grounds of appeal.
  
- V. In the communication sent as an annex to the summons to oral proceedings, the board expressed its preliminary opinion on the allowability of the requests on file in view of the requirements of Article 123(2) EPC.
  
- VI. In its response of 19 July 2010, the appellant requested that the appeal procedure be continued on the basis of the previously filed third auxiliary request as the new main request.

In addition, the appellant withdrew its previous request for oral proceedings on condition that the case be remitted to the examining division for further prosecution.

- VII. Claim 1 of the former third auxiliary request, now main and sole request, reads as follows:

"1. A compound of formula (I):



wherein:

$R_1$  is

- (a)  $R_7(CH=CH)-$ ,
- (b)  $C_{1-6}$ alkyl,
- (c)  $-CF_3$ ,
- (d)  $-C_{1-6}$ alkoxy, optionally partially or fully halogenated
- (e)  $-C_{1-6}$ alkylthio, or
- (f)  $-C(O)NHR'$ , wherein  $R'$  is  $R_6$ , pyridyl or  $-CH_3$ ;

$R_2$  is heteroaryl selected from the group consisting of, 3-thienyl, 2-thiazolyl, 2-imidazolyl, 2-, 3- and 4-pyridinyl, 4-pyrimidinyl, 2-pyrazinyl, 2-indolyl, 2-benzothienyl, 2-benzimidazolyl, 2-benzthiazolyl, 2-, 3-, 4- and 6-quinolinyl and 1- and 3-isoquinolinyl; optionally substituted with one to three  $R_4$ ;

$R_3$  is  $-OH$ ;

$R_4$  is chosen from  $C_{1-6}$ alkyl,  $C_{1-6}$ alkoxy, hydroxy $C_{1-6}$ alkyl, halogen,  $-CN$ ,  $-CO_2H$ ,  $-CO_2C_{1-6}$ alkyl,  $-S(O)_n C_{1-6}$ alkyl,  $-S(O)_n$ -*p*-tolyl,  $-NO_2$ ,  $-OH$ ,  $-CF_3$ ,  $-N(R_5)(R_6)$ , and  $-C(O)N(R_5)(R_6)$ ;

R<sub>5</sub> and R<sub>6</sub> are independently selected from H, C<sub>1-6</sub>alkyl, -C(O)C<sub>1-6</sub>alkyl, -SO<sub>2</sub>C<sub>1-6</sub>alkyl, phenyl, pyridyl, benzyl, piperidiny1 and phenylethyl;

R<sub>7</sub> is a phenyl group optionally substituted with one or two groups selected from halogen, C<sub>1-6</sub>alkyl, -CN, -CO<sub>2</sub>C<sub>1-6</sub>alkyl, -C(O)N(R<sub>5</sub>)(R<sub>6</sub>), -SO<sub>2</sub>NH<sub>2</sub>, -NO<sub>2</sub>, -OH, -NH<sub>2</sub>, -CF<sub>3</sub> and C<sub>1-6</sub>alkoxy, or R<sub>7</sub> is C<sub>3-6</sub>cycloalkyl, -CH<sub>2</sub>OH, naphthalene-2-yl, naphthalene-1-yl, pyridyl or thienyl;

n is 0, 1 or 2;

Z is a bond or -O-CH<sub>2</sub>-;

and pharmaceutically acceptable salts thereof."

VIII. By letter of 26 July 2010, the board informed the appellant that the oral proceedings due to take place on 7 October 2010 were cancelled.

IX. The appellant (applicant) requested in writing that the decision under appeal be set aside and that the case be remitted to the first instance for further prosecution on the basis of the main request, which was filed as third auxiliary request with the statement of grounds of appeal.

#### **Reasons for the Decision**

1. The appeal is admissible.
2. The set of claims of the sole remaining request are based on claims 5 to 13 as originally filed.

Consequently, the amended sets of claims meet the requirements of Article 123(2) EPC.

3. As a result of the limitations in the subject-matter of claim 1, in particular in the definition of  $R_2$  which can no longer be 2-thienyl (cf. point VII above and document (2), claim 1, definition of  $R_6$ ), the overlap of the claimed group of compounds with the group of compounds disclosed in document (2) has been removed. The subject-matter claimed is therefore novel over document (2) (Articles 52(1), 54 EPC).
  
4. It follows from the above considerations that the reasons for the refusal of the present patent application by the examining division have been removed.

The examination of the application in suit can thus be resumed on the basis of the main request.

Under these circumstances, the board exercises its power under Article 111(1) EPC and remits the case to the examining 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 first instance for further prosecution on the basis of claims 1 to 9 of the main request, filed as third auxiliary request with the statement of grounds of appeal.

The Registrar:

The Chairman:

B. Atienza Vivancos

P. Ranguis