Case Number: T 0639/01 - 3.3.1
Application Number: 95928145.2
Publication Number: 0772606
IPC: C07D 277/26

Language of the proceedings: EN

Title of invention: Substituted thiazoles for the treatment of inflammation

Applicant: G.D. SEARLE & CO.

Opponent: -

Headword: Thiazole compounds/SEARLE

Relevant legal provisions: EPC Art. 54(2), 54(3), 56, 88, 111(1), 123(2)

Keyword: "Validity of claimed priority (no, claim 1 main request and claim 5 auxiliary request; yes, claim 1 auxiliary request)"
"Allowability of disclaimer (no) - no prior art under Article 54(3) - no accidental anticipation - added subject-matter (yes)"
"Novelty (yes - auxiliary request)"
"Inventive step (yes, auxiliary request)"

Decisions cited: G 0001/03, G 0002/98

Catchword: -
Case Number: T 0639/01 - 3.3.1

DECISION
of the Technical Board of Appeal 3.3.1
of 9 February 2005

Appellant: G.D. SEARLE & CO.
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 18 January 2001
refusing European application No. 95928145.2
pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: P. P. Bracke
Members: J. M. Jonk
S. C. Perryman
Summary of Facts and Submissions

I. This appeal lies from the decision of the Examining Division refusing the present European patent application 95 928 145.2 (published under number WO 96/03392), which relates to "Substituted thiazoles for the treatment of inflammation".

II. The Examining Division refused the application on the ground that the subject-matter of a main request consisting of Claims 1, 2 (partly) (submitted on 15 July 1999), 2 (partly) and 3 (partly) (submitted on 10 June 2000), and 3 (partly) and 4 to 20 (also submitted on 10 June 2000) and the subject-matter of an auxiliary request consisting of a set of claims corresponding to that of the main request but containing modified Claims 4 and 5 both lacked novelty under Article 54(3) EPC with respect to Claims 1, 2, 4 to 6 and 14 to 20 in view of document (1) WO 95/00501, and also lacked inventive step in the light of documents

(2) EP-A-0 513 387 and

(3) FR 8.018 M.

III. Independent Claim 1 of said main request read as follows:
A compound of Formula II

wherein $R^4$ is selected from methyl and amino; wherein $R^5$ is selected from aryl, C$_3$-C$_{12}$-cycloalkyl, C$_3$-C$_{10}$-cycloalkenyl and heterocyclic; wherein $R^5$ is optionally substituted at a substitutable position with one or more radicals selected from halo, C$_1$-C$_{10}$-alkylthio, C$_1$-C$_{10}$-alkylsulfanyl, C$_1$-C$_{20}$-haloalkylsulfanyl, aminosulfonyl, C$_1$-C$_{20}$-alkyl, C$_2$-C$_{20}$-alkenyl, C$_2$-C$_{20}$-alkynyl, cyano, carboxyl, C$_1$-C$_{20}$-carboxyalkyl, C$_1$-C$_{10}$-alkoxycarbonyl, aminocarbonyl, acyl, N-C$_1$-C$_{20}$-alkylaminocarbonyl, N-arylaminocarbonyl, N,N-di-C$_1$-C$_{20}$-alkylaminocarbonyl, N-C$_1$-C$_{20}$-alkyl-N-arylaminocarbonyl, C$_1$-C$_{20}$-haloalkyl, hydroxyl, C$_1$-C$_{10}$-alkoxy, C$_1$-C$_{20}$-hydroxyalkyl, C$_1$-C$_{10}$-haloalkoxy, amino, N-C$_1$-C$_{20}$-alkylamino, N,N-di-C$_1$-C$_{20}$-alkylamino, heterocyclic and nitro; and

wherein $R^6$ is selected from halo, amino, C$_1$-C$_{10}$-alkoxy, nitro, hydroxyl, aminocarbonyl, acyl, C$_1$-C$_{20}$-alkylaminocarbonyl, arylaminocarbonyl, C$_2$-C$_{20}$-alkenyl, C$_2$-C$_{20}$-alkynyl, C$_1$-C$_{10}$-haloalkoxy, C$_1$-C$_{20}$-alkylamino, arylamino, C$_1$-C$_{20}$-aralkylamino, C$_1$-C$_{20}$-alkylaminoalkyl, heterocyclo-C$_1$-C$_{20}$-alkyl, aryl-C$_1$-C$_{20}$-alkyl, C$_1$-C$_{20}$-cyanoalkyl, N-C$_1$-C$_{20}$-alkylsulfonylaminoo, heteroarylsulfonyl-C$_1$-C$_{20}$-alkyl, heteroarylsulfonyl-C$_1$-C$_{20}$-haloalkyl, C$_1$-C$_{20}$-aryloxyalkyl, aryl-C$_1$-C$_{20}$-alkyloxyalkyl, aryl and heterocyclo, wherein the aryl and heterocyclo radicals are optionally substituted at
a substitutable position with one or more radicals selected from halo, C₁-C₂₀-alkyl, C₁-C₁₀-alkoxy, C₁-C₁₀-alkylthio, C₁-C₁₀-alkylsulfinyl, C₁-C₂₀-haloalkyl, C₁-C₁₀-haloalkoxy, C₁-C₂₀-carboxyalkyl, C₁-C₁₀-alkoxycarbonyl, aminocarbonyl, amino, acyl and C₁-C₂₀-alkylamino;

wherein aryl means carbocyclic aromatic ring system containing 1, 2 or 3 rings being attached pendently or fused;

wherein heterocyclic/heterocylo means saturated, partially saturated or unsaturated heteroatom containing ring shaped radicals where the heteroatom is selected from nitrogen, sulfur and oxygen;

wherein heteroaryl is an unsaturated heterocyclic radical, provided R is other than tetrazolyl or tetrazolyl-C₁-C₂₀-alkyl;

or a pharmaceutically-acceptable salt thereof."

IV. Oral proceedings before the Board were held on 9 February 2005.

V. The Appellant defended the patentability of the subject-matter of the present application on the basis of a main request which corresponded to the main request forming the basis for the decision of the Examining Division and an auxiliary request submitted during the oral proceedings before this Board.

Independent Claims 1 and 5 of the present auxiliary request read as follows:
"1. A compound of the Formula I

wherein $R^1$ is selected from amino, mono- or di-C$_1$-C$_{20}$alkylamino, mono- or diarylamino, aryl C$_1$-C$_{20}$alkylamino, aryloxy-C$_1$-C$_{20}$alkyl, aryl-C$_1$-C$_{10}$alkyloxy-C$_1$-C$_{20}$alkyl, where the aryl radicals are optionally substituted at a substitutable position with one or more radicals selected from halo, C$_1$-C$_{20}$alkyl, C$_1$-C$_{10}$alkoxy, C$_1$-C$_{10}$alkythio, C$_1$-C$_{10}$alkylsulfinyl, halo-C$_1$-C$_{20}$alkyl, halo-C$_1$-C$_{10}$alkoxy, carboxy-C$_1$-C$_{20}$alkyl, C$_1$-C$_{10}$alkoxycarbonyl, aminocarbonyl, amino, acyl and mono- or di-C$_1$-C$_{20}$alkylamino; and

wherein $R^2$ is phenyl which is optionally substituted at a substitutable position with one or more radicals selected from halo, C$_1$-C$_{10}$alkylthio, C$_1$-C$_{10}$alkylsulfonyl, halo-C$_1$-C$_{20}$alkylsulfonyl, aminosulfonyl, C$_1$-C$_{20}$alkyl, C$_2$-C$_{20}$alkenyl, C$_2$-C$_{20}$alkynyl, cyano, carboxyl, carboxy-C$_1$-C$_{20}$alkyl, C$_1$-C$_{10}$alkoxycarbonyl, aminocarbonyl, acyl, N-C$_1$-C$_{20}$alkylaminocarbonyl, N-arlyaminocarbonyl, N,N-di-C$_1$-C$_{20}$alkylaminocarbonyl, N-C$_1$-C$_{20}$alkyl-N-arlyaminocarbonyl, halo-C$_1$-C$_{20}$alkyl, hydroxyl, C$_1$-C$_{10}$alkoxy, hydroxy-C$_1$-C$_{20}$alkyl, halo C$_1$-C$_{10}$alkoxy, amino, N-C$_1$-C$_{20}$alkylamino, N,N-di-C$_1$-C$_{20}$-alkylamino, heterocyclic and nitro;

and $R^3$ is phenyl substituted with C$_1$-C$_{20}$alkylsulfonyl or aminosulfonyl;
wherein aryl means carbocyclic aromatic ring system containing 1, 2 or 3 rings being attached pendently or fused;

wherein heterocyclic means saturated, partially saturated or unsaturated heteroatom containing ringshaped radicals where the heteroatom is selected from nitrogen, sulfur and oxygen;

or a pharmaceutically-acceptable salt thereof."

and

"5. A compound of Formula II

![Formula II Image]

wherein \( R^4 \) is selected from \( \text{C}_1-\text{C}_{10}\text{alkyl} \) and amino;

wherein \( R^5 \) is phenyl optionally substituted at a substitutable position with one or more radicals selected from halo, \( \text{C}_1-\text{C}_{10}\text{alkylthio} \), \( \text{C}_1-\text{C}_{10}\text{alkylsulfinyl} \), \( \text{C}_1-\text{C}_{20}\text{alkylsulfonyl} \), \( \text{C}_1-\text{C}_{20}\text{haloalkylsulfonyl} \), aminosulfonyl, \( \text{C}_1-\text{C}_{20}\text{alkyl} \), \( \text{C}_2-\text{C}_{20}\text{alkenyl} \), \( \text{C}_2-\text{C}_{20}\text{alkynyl} \), cyano, carboxyl, carboxy-\( \text{C}_1-\text{C}_{20}\text{alkyl} \), \( \text{C}_1-\text{C}_{10}\text{alkoxycarbonyl} \), aminocarbonyl, acyl, \( \text{N}-\text{C}_1-\text{C}_{20}\text{alkylaminocarbonyl} \), \( \text{N}-\text{arylaminocarbonyl} \), \( \text{N,}\text{N-di-C}_1-\text{C}_{20}\text{alkylaminocarbonyl} \), \( \text{N-C}_1-\text{C}_{20}\text{alkyl-N-arylaminocarbonyl} \), halo-\( \text{C}_1-\text{C}_{20}\text{alkyl} \), hydroxyl, \( \text{C}_1-\text{C}_{10}\text{alkoxy} \), \( \text{C}_1-\text{C}_{20}\text{hydroxyalkyl} \), halo-\( \text{C}_1-\text{C}_{10}\text{alkoxy} \), amino, \( \text{N-C}_1-\text{C}_{20}\text{alkylamino} \), \( \text{N,}\text{N-di-C}_1-\text{C}_{20}\text{alkylamino} \), heterocyclic and nitro; and
wherein $R^6$ is selected from amino, mono- or di-C$_1$-C$_{20}$alkylamino, mono- or diarylamino, aryl-C$_1$-C$_{20}$alkylamino, aryloxy-C$_1$-C$_{20}$alkyl, aryl-C$_1$-C$_{10}$alkoxy-C$_1$-C$_{20}$alkyl, wherein the aryl radicals are optionally substituted at a substitutable position with one or more radicals selected from halo, C$_1$-C$_{20}$alkyl, C$_1$-C$_{10}$alkoxy, C$_1$-C$_{10}$alkylthio, C$_1$-C$_{10}$alkylsulfinyl, halo-C$_1$-C$_{20}$alkyl, halo C$_1$-C$_{10}$alkoxy, carboxy-C$_1$-C$_{20}$alkyl, C$_1$-C$_{10}$alkoxycarbonyl, aminocarbonyl, amino, acyl and mono- or di-C$_1$-C$_{20}$alkylamino;

wherein aryl means carbocyclic aromatic ring system containing 1, 2 or 3 rings being attached pendently or fused;

wherein heterocyclic means saturated, partially saturated or unsaturated heteroatom containing ringshaped radicals where the heteroatom is selected from nitrogen, sulfur and oxygen;

or a pharmaceutically-acceptable salt thereof."

VI. During the oral proceedings, the Appellant was informed by the Board that the claimed priority with respect to the subject-matter of Claim 1 of the main request and Claim 5 of the auxiliary request could not be acknowledged in view of the considerations of the Enlarged Board of Appeal in its decision G 2/98 (OJ EPO 2001, 413) and that, consequently, the disclaimer in Claim 1 of the main request might not be admissible under Article 123(2) EPC in view of the standards set out in the decision of the Enlarged Board of Appeal G 1/03 (OJ EPO 2004, 413).

VII. Under these circumstances, the Appellant argued in particular that the groups of compounds as defined in the present Claims 1 and 5 of the auxiliary request
differed from the group of compounds as defined in document (1), since the compounds of the application in suit comprised a mandatory thiazolyl core and particular specifically arranged substituents attached to said core.

Moreover, he argued with respect to the subject-matter of Claim 1 of the auxiliary request that document (2) represented the closest prior art, that the technical problem underlying the application in suit in the light of this closest prior art was the provision of substituted thiazole compounds having anti-inflammatory, analgesic and antipyretic properties and having the additional benefit of producing less harmful side effects due to their selectively cyclooxygenase-2 inhibiting activity, and that the solution of this problem indicated in present Claim 1 of the auxiliary request was not obvious in the light of the cited documents (2) and (3) alone or in combination.

Furthermore, concerning the subject-matter of Claim 5 of the auxiliary request he considered that, in view of lack of priority, document (1) was the closest prior art, that the technical problem underlying the application in suit in the light of this document was the provision of further substituted diazole compounds useful in the treatment of cyclooxygenase-2 mediated diseases, and that the cited documents (1), (2) and (3), alone or in combination, did not give any incentive to the skilled person to provide the compounds of Claim 5 in order to solve this problem.

VIII. The Appellant requested that the decision under appeal be set aside, and that a patent be granted on the basis
of the main request refused in the decision of the Examing Division or on the basis of the set of claims 1 to 13 submitted as auxiliary request at the oral proceedings on 9 February 2005.

IX. At the conclusion of the oral proceedings the Board’s decision was pronounced.

Reasons for the Decision

1. The appeal is admissible.

Main request

2. Validity of the claimed priority (Article 88 EPC)

2.1 Although the EPO does not normally check the validity of a priority right during examination, a check must be made, however, if the content of the European patent application is totally or partially identical with the content of another European patent application within the meaning of Article 54(3) EPC designating one or more of the same states.

2.2 In the present case, it has not been disputed by the Appellant that document (1) discloses a group of compounds which partially overlaps with the group of compounds defined in Claim 5 of the present application as originally filed, which claim essentially corresponds to present Claim 1.
Moreover, the international filing date of document (1) is 9 June 1994 and its international publication date is 5 January 1995, whereas the priority date of the application in suit is 27 July 1994 and its international filing date is 26 July 1995.

Furthermore, the designated states according to document (1) predominantly correspond to those designated by the application in suit.

2.3 Therefore, making use of its competence under Article 111(1) EPC, the Board examined the validity of the claimed priority, and it came to the conclusion that having regard to the opinion of the Enlarged Board of Appeal in G 2/98 the claimed priority with respect to the subject-matter of present Claim 1 cannot be acknowledged, since the group of thiazole compounds as defined in Claim 1 cannot directly and unambiguously be derived by the skilled person from the priority document as a whole. It is true, that the priority document discloses a group of thiazole compounds, which could be referred to in support of the claimed priority, but this group has a smaller scope due to a delimited number of corresponding R⁵ and R⁶ substituents (see page 49, lines 1 to 26, of the priority document).

3. Amendments (Article 123(2) EPC)

3.1 Present Claim 1 of this request contains a disclaimer excluding a group of compounds of formula II, wherein R (in fact R⁶) is tetrazolyl or tetrazolyl-C₁-C₂₀alkyl in combination with the specified substituents R⁴ and R⁵.
3.2 However, having regard to the decision of the Enlarged Board of Appeal G 1/03 this disclaimer in present Claim 1 is not allowable, since

(a) the claimed priority for the subject-matter of present Claim 1 could not be acknowledged for the reasons indicated above, so that document (1) does not represent prior art within the meaning of Article 54(3)(4) EPC, and

(b) document (1) thus being state of the art within the meaning of Article 54(2) EPC does not represent an accidental anticipation as defined in G 1/03, since it is concerned with anti-inflammatory agents as is the present application.

3.3 Therefore, the Board concludes that the subject-matter of Claim 1 of the present main request extends beyond the content of the application as filed, and consequently does not meet the requirement of Article 123(2) EPC.

Auxiliary request

4. Validity of the claimed priority (Articles 88 EPC)

4.1 For the reasons indicated above under points 2.2 and 2.3, and making use of its competence under Article 111(1) EPC, the validity of the claimed priority with respect to the independent Claims 1 and 5 of this request must also be examined.
4.2 Having regard to the opinion of the Enlarged Board of Appeal in G 2/98, the claimed priority for the subject-matter of present Claim 1 can be acknowledged, since it finds its support in the priority document, namely on page 4, line 21 to page 5, line 36, with respect to the substituents R¹, R² and R³; and page 54, line 33 to page 60, line 2, concerning the specified numbers of carbon atoms of the respective substituents, the meaning of the terms "aryl" and "heterocyclic", and the nature of the substituted amino groups.

On the other hand, the claimed priority for the subject-matter of present Claim 5 cannot be accepted for the same reasons as indicated under point 2.3 above with respect to the subject-matter of Claim 1 of the main request.

5. Amendments (Article 123(2) EPC)

5.1 Present Claims 1 and 2 of this request are supported by Claims 1 and 2 of the application as filed in combination with the description as filed, page 54, line 7 to page 62, line 37, concerning the specified numbers of carbon atoms of the respective substituents, the meaning of the terms "aryl" and "heterocyclic", and the nature of the substituted amino groups.

Claims 3 and 4 are supported by Claims 3 and 4 of the application as filed.

Claims 5 and 6 find their support in Claims 5 and 6 of the application as filed in combination with the description as filed, page 54, line 7 to page 62, line 37, concerning the specified numbers of carbon
atoms of the respective substituents, the meaning of the terms "aryl" and "heterocyclic", and nature of the substituted amino groups.

Claim 7 is based on the combined subject-matter of Claims 12 to 17 of the application as filed.

Claims 8 to 13 are supported by Claims 34 to 38 of the application as filed.

5.2 Therefore, the Board concludes that the subject-matter of the claims of this request does not extend beyond the content of the application as filed, and consequently meets the requirement of Article 123(2) EPC.

6. **Novelty**

6.1 The subject-matter of present Claims 1 to 13 is novel over the cited documents, because none of these documents discloses compounds comprising a mandatory thiazolyl core and the particular specifically arranged substituents attached to said core as defined in the present independent Claims 1 and 5.

7. **Inventive step**

7.1 For deciding whether subject-matter claimed involves an invention step, the Boards of Appeal consistently apply the problem and solution approach, which essentially consists in identifying the closest prior art, determining in the light thereof the technical problem which the claimed invention addresses and successfully solves, and examining whether or not the claimed
solution to this problem is obvious for the skilled person in view of the state of the art within the meaning of Articles 54(2) and 56 EPC.

If the technical results of the claimed invention provide some improvement over the closest prior art, the problem can be seen as providing such improvement, provided this improvement necessarily results from the claimed features for all that is claimed. If, however, there is no improvement, but the means of implementation are merely different, the technical problem can be defined as the provision of an alternative to the closest prior art.

7.2 Having regard to the Board's findings that the claimed priority is valid for the subject-matter of present Claim 1, but not for the subject-matter of present Claim 5 (see point 4.2 above), document (1) is only relevant for assessing inventive step with respect to present Claim 5 in view of Article 56 EPC.

7.3 Under these circumstances, the Board considers, in agreement with the Appellant, that the closest prior art with respect to the subject-matter of present Claim 1 is the disclosure of document (2).

7.4 This document (2) relates to azole derivatives, such as thiazole derivatives, having anti-inflammatory properties due to their activity of inhibiting the release of superoxide radical from neutrophyllic leukocytes or of removing the superoxide radical (see page 3, lines 20 to 26, and page 5, lines 34 to 47). However, the thiazole derivatives defined in this document (see page 3, line 29 to page 5, line 33)
essentially differ from those as claimed in present Claim 1 in that they do not have an optionally substituted amino group, an aryloxyalkyl group or an arylalkoxyalkyl group as defined in present Claim 1 with respect to \( R^1 \) at the 2-position of the triazole ring.

7.5 Starting from the teaching of this closest state of the art, the Board considers, in agreement with the Appellant, that the technical problem underlying the application in suit consists in providing thiazole compounds having anti-inflammatory, analgesic and antipyretic properties and having the additional benefit of showing less harmful side effects (see also the application in suit page 1 line 14 to page 2, line 12; and page 5, line 19 to page 7, line 26).

7.6 The present patent application proposes as the solution to this problem a group of substituted thiazole compounds of formula I as defined in Claim 1 being characterised in that \( R^1 \) represents an optionally substituted amino group, an aryloxyalkyl group or an arylalkoxyalkyl group, \( R^2 \) is an optionally substituted phenyl group, and \( R^3 \) is an alkylsulfonyl phenyl or aminosulfonyl phenyl group.

Furthermore, in view of the examples and the test-reports in the present application the Board deems it plausible that the technical problem as defined above has been successfully solved.

7.7 The remaining question is thus whether the prior art within the meaning of Articles 54(2) and 56 EPC has suggested to a person skilled in the art solving the
technical problem as defined under point 7.5 above in the proposed way.

7.8 Document (2) cannot render the claimed subject-matter obvious by itself since, as indicated under point 7.4 above, the thiazole derivatives disclosed therein do not have at the 2-position of the triazole ring an optionally substituted amino group, an aryloxyalkyl group or an arylalkoxyalkyl group as defined in present Claim 1 with respect to R\(^1\).

7.9 Furthermore, document (3) discloses azole compounds, including thiazole compounds, having anti-inflammatory properties containing three substituents R\(^1\), R\(^2\) and R\(^3\) at any of the positions 2, 4 and 5, whereby R\(^1\) and R\(^2\), which may be the same or different, represent phenyl or substituted phenyl whereby the substituents may be halo, alkylsulfonyl and/or aminosulfonyl, and R\(^3\) represents a carboxylic acid rest (see page 1, lines 8 to 26).

Preferably, the compounds are thiazole compounds of formula II, which corresponds to formula I in present Claim 1, wherein R\(^1\) and R\(^2\) are situated at the 2 and 4 positions of the thiazole ring, and R\(^3\) representing a mandatory carboxylic acid rest is situated at the 5 position (see page 2, line 32 to page 3, line 9).

Thus having regard to the fact, that the thiazole compounds disclosed in this document have a mandatory carboxylic acid group, it does not give the skilled person an incentive to provide compounds of the application in suit either, since it does not comprise any suggestion that the thiazole compounds must have at the 2-position of the thiazole ring an optionally substituted amino group, an aryloxyalkyl group or an
arylalkoxyalkyl group as defined in present Claim 1 with respect to R\(^1\), and at the same time at the 5 position a phenyl group substituted with alkylsulfonyl or aminosulfonyl as defined in present Claim 1 with respect to R\(^3\) and at the 4 position an optionally substituted phenyl group as defined in present Claim 1 with respect to R\(^2\).

7.10 Therefore, documents (2) and (3), taken alone or in combination, do not provide a pointer to the skilled person to arrive at the compounds proposed in present Claim 1, let alone to the solution of the technical problem underlying the application in suit as defined under point 7.5 above in view of the closest prior art document (2).

7.11 Furthermore, the Board considers, in agreement with the Appellant, that the closest prior art with respect to the subject-matter of present Claim 5 is the disclosure of document (1).

7.12 This document (1) discloses a group of phenyl heterocyclic compounds which, like the compounds of the application in suit, have anti-inflammatory properties and are suitable for the treatment of cyclooxygenase-2 mediated diseases (see page 2, lines 9 to 22; and the test-report on pages 80 to 100). The disclosed group of compounds comprises a group of thiazole compounds having a formula I
wherein X-Y-Z is selected from a list of groups indicated on page 3, line 14 to page 4, line 4, comprising (o) -N=CR^4-S- and (p) -S-CR^4=N-; R^4 is selected from a list of groups defined on page 6, lines 13 to 31, none of these groups falling under the scope of R^6 as defined in present Claim 5; R^1 is selected from a list of groups indicated on page 4, lines 16 to 23, comprising (a) S(O)₂CH₃ and (b) S(O)₂NH₂; R^2 is selected from a list of groups indicated on page 4, line 25 to page 5, line 28, thus including an optionally halo substituted phenyl group as defined under (c).

Therefore, the compounds of present Claim 5 essentially differ from those disclosed in document (1) in that the compounds of present Claim 5 contain a substituent R^6 as defined in the claim.

Starting from the teaching of this closest prior art document (1), the Board considers, in agreement with the Appellant, that the technical problem underlying the application in suit consists in providing further thiazole compounds having anti-inflammatory properties.
The present patent application proposes as the solution to this problem a group of thiazole compounds of formula II as defined in present Claim 5, in which \( R^6 \) represents an optionally substituted amino group, an aryloxyalkyl group or an arylalkoxyalkyl group, \( R^5 \) at the 4 or 5 position is an optionally substituted phenyl group as defined in the claim, and \( R^4 \) represents alkylsulfonyl or aminosulfonyl substituted to the phenyl group at the position 5 or 4 of the thiazole ring.

Furthermore, in view of the examples and the test-reports in the present application, the Board deems it plausible that the technical problem as defined above has been successfully solved.

The next issue to be decided is thus whether the cited prior art has suggested to a person skilled in the art solving the technical problem as defined under point 7.13 above with respect to the closest prior art document (1) in the proposed way.

Document (1) cannot render the claimed subject-matter obvious by itself, since the thiazole derivatives disclosed therein do not have, as indicated under point 7.14 above, at the 2-position of the triazole ring a substituent as defined in present Claim 5 with respect to \( R^6 \).

As follows from the considerations under points 7.4 and 7.8 above, document (2) does not give the skilled person any pointer to arrive at the compounds of present Claim 5, since the thiazole derivatives disclosed in this document, like those disclosed in
document (1), do not contain at the 2-position of the thiazole ring a substituent as defined in present Claim 5 concerning $R^6$ either.

7.18 Document (3) discloses, as indicated under point 7.9 above, a group of azole compounds including thiazole compounds having anti-inflammatory properties, which contain a mandatory carboxylic acid group preferably at the 5 position and an optionally substituted phenyl group preferably at the positions 2 and 4.

Therefore, also this document does not provide any suggestion to the skilled person to arrive at the solution as claimed in present Claim 5.

7.19 In conclusion, the Board finds that the subject-matter of present independent Claims 1 and 5 and, by the same token, that of the dependent Claims 2 to 4 and 6, that of the pharmaceutical composition Claim 7 and that of the use Claims 8 to 13, involves an inventive step in the sense of Article 56 EPC.
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 with the order to grant a patent on the basis of Claims 1 to 13 submitted as auxiliary request at the oral proceedings on 9 February 2005 and a description to be adapted thereto.

The Registrar:  The Chairman:

N. Maslin  P. P. Bracke