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DECISION of 14 May 1997

Case Number:

T 0254/93 - 3.3.2

Application Number:

87309681.2

Publication Number:

0266992

IPC:

A61K 31/57

Language of the proceedings: EN

Title of invention:

Prevention of glucocorticoid-induced skin atrophy

Applicant:

ORTHO PHARMACEUTICAL CORPORATION

Opponent:

Headword:

Prevention of skin atrophy/ORTHO PHARMACEUTICAL

Relevant legal provisions:

EPC Art. 54, 123(2)(3)

Keyword:

"Novelty (no)"

"Novel use as a technical feature respectively technical effect within the meaning of G 2/88 denied - effects tied up and both apparent from prior use"

Decisions cited:

G 0005/83, G 0002/88, G 0006/88, T 0231/85, T 0059/87

Headnote follows.



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Boards of Appeal

Chambres de recours

Case Number: T 0254/93 - 3.3.2

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DECISION of the Technical Board of Appeal 3.3.2 of 14 May 1997

Appellant:

ORTHO PHARMACEUTICAL CORPORATION

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New Jersey 08869/0602 (US)

Representative:

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Decision under appeal:

Decision of the Examining Division of the

European Patent Office posted 29 October 1992

refusing European patent application

No. 87, 309 681.2 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman:

P. A. M. Lançon

Members:

U. Oswald R. E. Teschemacher

## Summary of Facts and Submissions

- I. European patent application No. 87 309 681.2 (publication No. 0 266 992) was refused by a decision of the Examining Division on the grounds of:
  - (i) lack of novelty under Article 54(1) EPC;
  - (ii) failure to comply with Article 52(2)(a) EPC by not being an invention but a discovery

and

(iii) lack of an inventive step under Article 56 EPC.

The Examining Division considered that the subjectmatter of claim 1 relating to the

"Use of a retinoid in the preparation of a topically administrable medicament for use in the prevention of corticosteroid-induced skin atrophy"

was not novel since several prior art documents, for example document

(3) EP-A-0 196 121,

described compositions comprising a retinoid and a corticosteroid. Although the cited prior art was silent as to the effect that skin atrophy did not occur because of the presence of the retinoid component, this effect did not relate to a pre-existing disease and therefore did not relate to a new use of the retinoid component within the meaning of decisions G 5/83 and G 2/88. The main therapeutical agent was the

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corticosteroid causing the skin atrophy as a biological side-effect, and therefore the use of the retinoid component was inseparable from the primary use of the corticosteroid as the dermatological active agent.

The Examining Division furthermore took the view that the subject-matter of claim 1 could at best be regarded as something like a surprising result of an observation or possibly an investigation made by the inventors.

Even if the subject matter of claim 1 were to be regarded as novel and representing an invention within the meaning of Article 52(2) EPC, the Examining Division came to the conclusion that in the light of the prior art the subject-matter of claim 1 was obvious to a skilled person. The prior art, for example document (3), described the suppression of certain side-effects of corticosteroids and thus related to the same problem and had already solved it by the same means.

- II. The Appellant lodged an appeal against the decision of the Examining Division. Oral proceedings took place on 14 May 1997. At the oral proceedings the Appellant filed a retyped set of claims 1 to 11 corresponding to claims 1 to 11 forming the basis for the decision of the Examining Division. The Appellant further submitted a question for referral to the Enlarged Board of Appeal.
- III. The arguments of the Appellant both in the written procedure and at the oral proceedings may be summarised as follows:
  - (i) In the present case there was no reason to draw a distinction between a clinical condition arising from a pathological condition and a clinical condition arising as a side-effect of drug

therapy. Moreover, there was no support in the prior art for the assumption that the currently claimed use of a retinoid was based on a secondary effect not relating to a clinical condition. It was known from document

(8) Martindale - The Extra Pharmacopoeia, 28th Edition (1982), page 448, third column, penultimate ten lines,

that skin atrophy was a well-recognised and fully documented clinical condition occurring after prolonged use of corticosteroids. Accordingly, the fact that the condition was caused as a side effect of the use of corticosteroids did not in any way detract from the fact that it was an undesirable clinical condition for which a treatment was highly desirable.

Since decision G 2/88 was decided on much broader principles than G 5/83 and those broader principles were relevant to both non-medical and medical uses, the Examining Division furthermore was wrong to dismiss the relevance of the inherency principle discussed in G 2/88, and consequently was wrong to argue that skin atrophy could be regarded as a secondary unusual parameter destined to disguise a lack of novelty. Since the technical effect related solely to the use of the retinoid compound, it was irrelevant to the question of novelty whether the retinoid was applied before, with or after the corticosteroid treatment.

(ii) Since the present invention lay in the realisation of the practical application of the discovery that retinoids prevent skin atrophy, namely use of retinoids in the preparation of a

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medicament for use in the said prevention, there was no basis to reject the application under Article 52(2)(a) EPC. According to the established case law of the Boards of Appeal, the mere fact that such inventions are based on discoveries did not prima facie preclude their patentability.

(iii) As regards the prior art, it was the Appellant's fundamental position that none of the cited documents describing combined retinoidcorticosteroid preparations related to the problem of skin atrophy caused by the topical application of corticosteroids and that on the priority date of the application the skilled person did not know any method of reducing such a side-effect. Each of the said prior art documents related only to dermatoses such as eczema and psoriasis. In the same way the prior art relating to treatment with either retinoids or corticosteroids alone clearly indicated nothing more than that these compounds were useful in the treatment of dermatoses. The skilled medical practitioner could readily distinguish between dermatoses on the one hand and skin atrophy on the other.

Taking account of the fact that the claimed subject-matter comprised the treatment of dermatoses with a corticosteroid and a retinoid compound, the Appellant came to the conclusion that one of the cited documents, for example document (3), relating to such a treatment could be regarded as the closest prior art. However, this prior art was totally silent about the clinical condition of skin atrophy. There was also no evidence that the absence of skin atrophy was recognised by the medical practitioner. On

the priority date of the application a skilled person would naturally have expected any corticosteroid therapy to have skin atrophy as a side-effect. In the absence of such mention of skin atrophy, the only logical assumption that the skilled person could make was that this problem still existed. It was therefore purely speculative for the assessment of inventive step to start with an assumption about what was over and above that going on in the mind of the skilled person.

- In reply to a question by the Board of Appeal (iv) concerning what was actually achieved by the invention when taking into account the prior art use of a retinoid and a corticosteroid compound, the Appellant's basic idea was that in the light of document (3) the problem underlying the invention could be seen in the recognition of what does not happen when using a retinoid and a corticosteroid together and the transformation into practice of this recognition. In this context the Appellant emphasised repeatedly that neither document (3) nor the other cited prior art could foreshadow the solution now claimed that such an adverse effect as skin atrophy could be reduced by the topical use of a retinoid. This was proven for the first time by the comparative data contained in Table II of the application.
- (v) It was a substantial procedural violation for the Examining Division to take it upon itself to redefine the invention and the claims and suggest that the claims should be read and understood in a manner which was inconsistent with the claims on file, the text of the description and the argumentation of the Appellant. Moreover, at the end of the oral proceedings, after the decision

was pronounced, the Examining Division referred for the first time to arguments relating to a so-called primary and secondary effect. The fact that the Appellant was given no opportunity to comment on these rejecting arguments also constituted a substantial procedural violation.

IV. The Appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 11 as resubmitted during the oral proceedings.

Furthermore, he requested that the appeal fee be reimbursed.

Alternatively, he requested that the following question of law submitted during the oral proceedings be referred to the Enlarged Board of Appeal.

"Does the principle, established in G 2/88 in respect of second and subsequent non-medical use claims, that under Article 54(2) EPC the question to be decided is what has been "made available" to the public and not what may have been "inherent" in what was made available, equally apply to second and subsequent medical use claims".

## Reasons for the Decision

- 1. The appeal is admissible.
- 2. Claim 1 is based on the description, page 3, lines 20 to 23; claim 2 corresponds to claim 11 as originally filed. Claims 3 to 11 are based on claims 2 to 10 as originally filed.

The requirements of Article 123(2) EPC are accordingly satisfied.

3. The application relates to the use of a retinoid compound in a compulsory association with the simultaneous, separate or sequential use of corticosteroids in the prevention of skin atrophy.

None of the documents cited during the proceedings, particularly none of those numerous documents which relate to the combined use of a corticosteroid and a retinoid, tells the reader that the symptom of skin atrophy caused by the topical application of corticosteroids could be prevented or reduced by the topical use of a retinoid.

As regards the question of novelty of the claimed subject matter, the Appellant did not only rely on decision G 5/83 (OJ EPO 85, 64) relating to novelty of a so-called second medical indication, but put particular the emphasis on what might be derived from decision G 2/88 (OJ EPO, 90, 93) (see also decision G 6/88, OJ EPO, 90, 114).

In point 10.3 of the Reasons for the Decision G 2/88 (corresponding to point 9 of the Reasons for the Decision G 6/88), the Enlarged Board of Appeal concluded that a new use of a known compound may reflect a newly discovered technical effect. The attaining of such a technical effect should then be considered as a functional technical feature of the claim. If that technical feature has not been previously made available to the public by any of the

means set out in Article 54(2) EPC, then the claimed invention is novel, even though such technical effect may have inherently taken place in the course of carrying out what has previously been made available to the public.

In the present case, the Board has no difficulty in accepting that the prevention of skin atrophy has to be regarded as a pharmaceutical feature and, following the conclusions of the Enlarged Board of Appeal (G 2/88 point 10.3 of the Reasons for the Decision), that the effect underlying this feature was not made available to the public in written form by any of the cited literature. Nevertheless, the question arises whether in the present case this effect represents a technical effect within the meaning of decisions G 2/88 and G 6/88, which would be necessary to establish novelty under Article 54(1) EPC of the claimed subject matter over the prior art.

- 4. It is a basic consideration in G 2/88 that the recognition or discovery of a previously unknown property of a compound, such property providing a new technical effect, can involve a valuable and inventive contribution to the art (Reasons 2.3). This is apparently the reason why the Enlarged Board of Appeal accepted that the use related to such a property may be regarded as a technical feature appropriate for establishing novelty.
- The Enlarged Board of Appeal started, however, from the assumption that the technical effect disclosed for the first time implied a **new** use of the known substance (Reasons 10.3). In the situations which the Enlarged Board had in mind such a new use was actually present:

- (1) In the case giving rise to the referral (T 59/87, OJ EPO 1988, 347) a use of a substance as a friction reducing agent in a lubricant composition was claimed. In the state of the art the use of the substance as a rust inhibiting additive was known.
- (2) In the second relevant case mentioned in G 2/88 (Reasons 9.1, T 231/85, OJ EPO 1989,74) the application was directed to the use of a compound as a fungicide whereas the state of the art described the same compound as an agent for influencing plant growth.

Since no new substance and no new means for its application were claimed, there was the possibility that the new technical effect might have inherently taken place when the product of the claimed process was applied for the known purpose. This was not regarded as detrimental for novelty since such hidden effect had not been made available to the public when the product was applied for the known use. Furthermore, there were in both cases two different applications for the product which could be separated clearly from each other. This is evident in the case of the agrochemical since the circumstances in which a fungicide is applied may be quite different from the circumstances in which a growth promoter is applied. Also, in the case of the lubricant it may be said that the product indicated in the claim and the known product could serve quite different purposes. Whereas the known use was related to the inhibition of rust, the technical problem underlying the claimed subject matter was to reduce the friction between sliding surfaces in engines. Lubricants may be applied for numerous purposes and both properties may be important in quite different situations.

In these cases the newly discovered effect ended in a new technical application which was not necessarily correlated with the known one and could be clearly distinguished therefrom.

It must be examined whether the same situation occurs in the present case. As already stated above, the application under appeal relates to the simultaneous, separate or sequential use of a glucocorticoid and a retinoid, in particular to a combined corticosteroid-retinoid preparation. The latter combined pharmaceutical is applied for the treatment of dermatoses (description page 3, line 16) in the same way as several identical products actually on the market long before the priority date.

Accordingly, the prior art relating to the treatment of patients with both a corticosteroid and a retinoid must represent the closest prior art. Prior art relating to the treatment of patients with either retinoids or corticosteroids alone is further removed from the claimed invention.

According to the description (page 2, lines 26 to 28), skin atrophy is the most common adverse reaction to glucocorticosteroidal analogs. This side effect is described as prevalent and serious (above, lines 34/35). The Appellant himself has additionally referred to document (8) and admitted that skin atrophy is a well-recognised and fully-documented clinical condition occurring after prolonged use of corticosteroids. Therefore, it is and must always have been an essential aspect in the application of glucocorticosteroids in the treatment of dermatoses to avoid skin atrophy in order not to make the main effect of the glucocorticosteroid meaningless for the patient. It follows from this that the prevention of skin atrophy was inseparably tied to the use of the known

pharmaceuticals. Thus, the situation is not comparable to the cases mentioned in paragraph 4.1 above. Although it concerns a specific aspect of the known use, the use specified in Claim 1 (prevention of skin atrophy) is not finally different from the known use (treatment of dermatoses).

During the oral proceedings at the appeal stage the 4.3 Appellant agreed to take into account document (3) as the closest prior art. Document (3) describes a preparation in the form of an ointment based inter alia on corticosteroids, salicylates and antibiotics and optionally containing vitamin A as one of the active ingredients for the treatment of the skin disease psoriasis (see page 2, column 1, lines 1 to 5, Example 1 as well as claims 1 and 3). It is indicated in column 1, lines 20 to 33, that this preparation overcomes the disadvantage of secondary effects which may occur after the local application of corticosteroids such as skin necrosis, steroidal dermatitis, and in some cases secondary effects on the adrenal gland. The preparation is particularly useful in overcoming the activity of steroids on the endocrine system and it induces vasoconstrictive effects on peripheral blood circulation and therefore enhances recovery.

The preparation according to Example 1 contains vitamin A.

The Appellant argued that claim 1 according to document (3) described only two essential ingredients preventing the side-effects mentioned in this document, and vitamin A was only mentioned as an optional ingredient in claim 3.

Apart from the fact that the disclosure or teaching of a prior art patent is not restricted to the content of the claims, the Board is convinced that a person skilled in the art would for practical reasons not only use the broadly defined composition according to claim 1 but preferably also follow the teaching according to the worked example, including vitamin A.

4.4 Skin atrophy occurs neither as a consequence of the treatment according to document (3) nor according to each of the other documents relating to the treatment of patients with corticosteroids together with a retinoid. The Appellant was not in a position to contend the contrary and even admitted that fact at the oral proceedings. Consequently, starting from e.g. document (3), no problem could arise in the prevention of corticosteroid-induced skin atrophy.

Accordingly, the only question arising lies in the explanation of the phenomenon underlying the treatment of patients with a preparation such as that described in document (3).

- In the present case, the answer to that question is found in the recognition that in a formulation such as the one according to Example 1 of document (3), the retinoid is the cause of the prevention of skin atrophy, which is normally expected when using corticosteroids alone.
- The Board is convinced that before the priority date of the application in suit, after having treated patients suffering from the skin disease psoriasis with the preparation known from document (3), the medical practitioner would have in fact continued to treat other patients with this preparation in the expectation that no serious side-effects other than those already known would occur. By way of contrast, knowing the

present application the medical practitioner would also continue to treat patients suffering from the skin disease psoriasis with the known preparation in the expectation that no serious side-effects other than those already known would occur, but with the **full** understanding that the retinoid component prevents skin atrophy.

- As already stated above, it is mentioned in the description of the application (see page 2, lines 34 and 35, as originally filed: "Because of the high prevalence and seriousness of skin atrophy..."), that skin atrophy induced by corticosteroids is accompanied by such strong symptoms that they cannot be overlooked by the medical practitioner. It may therefore be possible to follow the Appellant's final argument that it is speculative to assume what was going on in the medical practitioner's mind, but in the present case it is not speculative to conclude what the medical practitioner visually recognises.
- The Board considers that the mere explanation of an effect obtained when using a compound in a known composition, even if the explanation relates to a pharmaceutical effect which was not known to be due to that compound in the known composition, cannot confer novelty on a known process if the skilled person was already aware of the occurrence of the desired effect when applying the known process.

In the present case, the pharmaceutical feature of preventing skin atrophy does not represent a technical effect within the meaning of decisions G 2/88 and G 6/88.

4.9 It follows from the preceding paragraphs that the subject-matter of claim 1 lacks novelty.

Since each request can only be considered as a whole and in the absence of any further request relating to an auxiliary set of claims, claims 2 to 11 must fall with claim 1.

- The auxiliary request to refer a question of law to the Enlarged Board of Appeal (see points II and IV of the facts and submissions above) does not need to be considered since in the present case no contradiction to decision G 2/88 occurs. Due to the non-technical aspect, the situation underlying the present case can be clearly distinguished from the situation forming the basis for the decision G 2/88 (see particularly points 4; 4.1 and 4.2 above).
- 4.11 For the reasons set out above, the appeal is to be dismissed. Accordingly, the Appellant's submissions concerning Rule 67 EPC do not need to be considered in detail, because one of the necessary prerequisites for reimbursement of appeal fees is that the Board of Appeal should deem the appeal to be allowable (and hence in the present case the Board has no power to order reimbursement of the appeal fee).

## Order

## For these reasons it is decided that:

- The appeal is dismissed.
- 2. The requests for reimbursement of the appeal fee and for referral to the Enlarged Board of Appeal are refused.

The Registrar:

P Martorana

The Chairman:

P. A. M. Lançon

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