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Datasheet for the decision of 28 April 2016

Case Number: T 0114/15 - 3.3.07

Application Number: 04763497.7

Publication Number: 1660055

IPC: A61K9/70, A61K31/485

Language of the proceedings: EN

Title of invention:
TRANSDERMAL FORMULATION COMPRISING AN OPIOID ANALGESIC AND AN ALOE COMPOSITION

Patent Proprietor:
Acino AG

Opponent:
LTS LOHMANN Therapie-Systeme AG

Relevant legal provisions:
EPC Art. 56, 100(a)

Keyword:
Inventive step - (no)

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Case Number: T 0114/15 - 3.3.07

D E C I S I O N
of Technical Board of Appeal 3.3.07
of 28 April 2016

Appellant: (Opponent)	LTS LOHMANN Therapie-Systeme AG Lohmannstrasse 2 56626 Andernach (DE)
Representative:	Schweitzer, Klaus Plate Schweitzer Zounek Patentanwälte Rheingaustrasse 196 65203 Wiesbaden (DE)
Respondent: (Patent Proprietor)	Acino AG Am Windfeld 35 83714 Miesbach (DE)
Representative:	Beetz & Partner mbB Patentanwälte Steinsdorfstraße 10 80538 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 4 November 2014 rejecting the opposition filed against European patent No. 1660055 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	J. Riolo
Members:	D. Semino
	I. Beckedorf

Summary of Facts and Submissions

I. European Patent No. 1 660 055 was granted on the basis of 21 claims, independent claim 1 reading as follows:

"1. Patch provided with a covering layer comprising an opioid analgesic from the phenanthrene group or a pharmaceutically acceptable salt thereof as active ingredient and an aloe composition as transdermal penetration agent for use in a method for the transdermal treatment of pain."

II. A notice of opposition was filed in which revocation of the patent in its entirety was requested.

III. During opposition proceedings, the following documents *inter alia* were cited:

D4: US-A-2003/0064093
D7: US-A-4 806 341

IV. The decision of the opposition division rejecting the opposition was announced at the oral proceedings on 9 October 2014. As far as relevant to the present decision, it can be summarised as follows:

a) The correction of g to µg in table 1 met the requirements of Article 123(2) EPC and the patch of granted claim 1 was novel over the cited prior art.

b) The patch of granted claim 1 differed from the one disclosed in D7, as one of the possible alternative closest prior art, in that the transdermal penetration agent was an aloe composition. As there were no comparative test, the problem was the provision of an alternative

penetration agent for the delivery of opioid analgesics from the phenanthrene group through the skin. The solution was not obvious, as none of the cited prior art documents, including document D4, suggested the use of aloe compositions as transdermal penetration agents in patches.

V. The opponent (appellant) lodged an appeal against that decision, contesting the findings of the opposition division.

VI. The patent proprietor (respondent) countered the arguments of the appellant in a letter of reply to the statement of grounds.

VII. In a communication sent in preparation of oral proceedings, the Board summarised the points to be dealt with, and provided a preliminary view *inter alia* on inventive step pointing out that in view of the agreement on the closest prior art and on the formulation of the technical problem, the "critical question is therefore whether the claimed subject-matter is obvious with regard to the closest prior art in combination with the other documents on file", and noting that document D4 "discloses Aloe Vera as aqueous adjuvant which provides superior benefits in transdermal delivery of high molecular weight delivery agents" (point 4.3).

VIII. Oral proceedings were held on 28 April 2016.

IX. The arguments of the appellant, as far as relevant to the present decision, can be summarised as follows:

The patch of granted claim 1 differed from the one of document D7, which was one of the possible alternative

choices for the closest prior art, in that it contained an aloe composition. As no data were available to compare the claimed patch with the ones of D7, the problem was the provision of a patch for transdermal penetration with an alternative penetration agent. The solution was obvious, as it was known to use aloe compositions or ingredients of those compositions as penetration agents. In particular, document D4 disclosed Aloe Vera as a preferred aqueous adjuvant of a penetration enhancer in transdermal delivery of therapeutic compounds. The fact that it was disclosed as aqueous adjuvant did not make any difference, as the function which was described was that of enhancing delivery and D4 concerned transdermal penetration. Moreover, the claimed composition was an open one, which did not exclude the presence of other components, as the other ingredients of the three component system of D4, and D4 referred to transdermal delivery of large classes of therapeutic agents.

X. The arguments of the respondent, insofar as relevant to the present decision, can be summarised as follows:

The patch of granted claim 1 differed from the one of document D7 as the closest prior art in that it contained an aloe composition. The problem was the provision of an alternative transdermal penetration agent in a composition such as the one of D7. The documents relating to possible ingredients of aloe compositions as penetration agent were not relevant, as the skilled person would not consider replacing a single component with a complex composition including it. None of the remaining documents suggested to use an aloe composition as transdermal penetration enhancer. In D4, in particular, an aloe extract was used as aqueous adjuvant in a three component system containing

additionally a delivery agent and a penetration enhancer; a disclosure of an aloe composition alone as transdermal penetration agent was missing. In particular, enhancement of delivery to the skin, as in paragraph [0048] of D4, did not equate to transdermal delivery, i.e. systemic delivery up to the blood. Moreover, D4 did not disclose any opioid analgesic from the phenanthrene group, which were extremely lipophilic substances whose transdermal penetration was very difficult.

XI. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

XII. The respondent requested that the appeal be dismissed.

Reasons for the Decision

Granted claim 1 - inventive step

1. There was agreement between the parties in the choice of document D7 (among others) as the closest prior art, as well as in the analysis of the document and in the identification of the distinguishing feature, namely the presence in claim 1 of an aloe composition.

1.1 Indeed, document D7 discloses transdermal absorption dosage units comprising a backing layer and an adjoining layer in which an analgesic of morphine type (which belongs to the opioid analgesics from the phenanthrene group) is microdispersed (column 1, technical field). In the acknowledgement of the background art it is mentioned that "the transdermal absorption rates of certain pharmaceuticals can be increased by use of absorption promoting compounds (also referred to as skin permeation enhancers)" (column 1, lines 49-52). Later,

in the detailed description of the invention specific skin permeation enhancers to be used in the dosage units are listed, such as "saturated and unsaturated fatty acids and their esters, alcohols, monoglycerides, acetate, diethanolamides and N, N-dimethylamides" (column 13, lines 9-38).

1.2 Also the formulation of the technical problem as the provision of a patch with an alternative transdermal penetration agent was agreed by the parties, as it was acknowledged that example 1 in the patent (paragraphs [0072]-[0076]) shows that Aloe Vera works as penetration enhancer, but no comparison with different penetration enhancers, such as those mentioned in D7, was available. The Board has no reason to take a different approach.

1.3 As to obviousness of the solution, document D4 discloses a transdermal delivery system to administer pharmaceuticals or cosmetic agents to the human body (paragraph [0014]) with three components, namely a delivery agent (the molecule or mixture of molecules to be delivered to the body), a penetration enhancer and an aqueous adjuvant (paragraph [0015], claim 1). A large class of pharmaceuticals is mentioned, including low or high molecular weight pharmaceuticals, anti-inflammatory drugs and pain-relief solutions (paragraph [0014]). The preferred aqueous adjuvant of D4 is Aloe Vera extract (paragraph [0017], claim 2), which as third component of the three component system enhances the delivery of both low and high molecular weight molecules to the skin cells of the body (paragraph [0048]).

1.4 The skilled person, starting from the patch of D7 and aiming at the provision of a patch with an alternative transdermal penetration agent, would therefore take into consideration the teaching of D4. By following this

teaching, he would use a system including, together with the drug, a penetration enhancer and an aqueous adjuvant, including the preferred aqueous adjuvant disclosed therein (Aloe Vera extract). When doing so, the skilled person would obtain a patch containing an opioid analgesic from the phenanthrene group and an aloe composition together with a penetration enhancer according to D4.

1.5 As claim 1 does not exclude the presence of further ingredients (the patch is defined as "comprising" the listed components), the patch obtained by following the teaching of D4 would fall under granted claim 1.

1.6 In this respect it is worthwhile noting that the expression "as transdermal penetration agent" with reference to the aloe composition cannot constitute a difference between the patch of claim 1 and the patch obtained starting from the disclosure of D7 and combining it with the teaching of D4, as such a patch has all the ingredients listed in claim 1 and is to be used for the therapeutic indication expressed in the claim.

1.7 A disclosure of an aloe composition alone as transdermal penetration agent in D4 is in this respect not necessary, as granted claim 1 leaves open that other ingredients and other transdermal penetration agents are present.

1.8 The question whether the teaching on paragraph [0048] refers to intradermal or transdermal penetration is also not relevant to the conclusion reached in view of the considerations above (points 1.4 and 1.5). In addition, the fact that special difficulties may exist for transdermal penetration of the drugs of the specific

class present in granted claim 1 cannot be taken into account, as it is not supported by facts.

1.9 For these reasons, that patch of granted claim 1 does not involve an inventive step.

Conclusion

2. As lack of inventive step is found for the patent as granted and no other request is present on file, it is not necessary for the Board to decide on any other issue and the patent is to be revoked.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

K. Boelicke J. Riolo

Decision electronically authenticated