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Datasheet for the decision of 12 May 2016

Case Number: T 2094/13 - 3.3.04

Application Number: 08011409.3

Publication Number: 1994937

IPC: A61K39/395, A61P25/28, A61K38/00, A61K38/28, A61K9/26, A61K33/06

Language of the proceedings: EN

Title of invention:
Prevention and treatment of amyloidogenic disease

Patent Proprietor:
Janssen Alzheimer Immunotherapy

Opponents:
F. Hoffmann-La Roche
Eli Lilly and Company
Biogen Inc.

Headword:
Treatment of amyloidogenic diseases/JANSSEN

Relevant legal provisions:
EPC Art. 83, 114(2)
RPBA Art. 12(2), 12(4)

This datasheet is not part of the Decision.
It can be changed at any time and without notice.

Keyword:
Sufficiency of disclosure - all claim requests (no)

Decisions cited:
T 0636/97, T 0609/02, T 0063/06

Catchword:

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European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2094/13 - 3.3.04

D E C I S I O N
of Technical Board of Appeal 3.3.04
of 12 May 2016

Appellant: (Patent Proprietor)	Janssen Alzheimer Immunotherapy Little Island Industrial Estate Little Island, County Cork (IE)
Representative:	Goodfellow, Hugh Robin Carpmaels & Ransford LLP One Southampton Row London WC1B 5HA (GB)
Respondent I: (Opponent 01)	F. Hoffmann-La Roche Grenzacherstrasse 124 CH-4070 Basel (CH)
Representative:	Vossius & Partner Patentanwälte Rechtsanwälte mbB Siebertstrasse 3 81675 München (DE)
Respondent II: (Opponent 02)	Eli Lilly and Company Lilly Corporate Center Indianapolis, IN 46285 (US)
Representative:	Ingham, Stephen H. Eli Lilly and Company Ltd European Patent Operations Lilly Research Centre Erl Wood Manor Sunninghill Road Windlesham, Surrey, GU20 6PH (GB)
Respondent III: (Opponent 03)	Biogen Inc. 225 Binney Street Cambridge MA 02142 (US)

Representative: Weiss, Wolfgang
Weickmann & Weickmann
Patentanwälte PartmbB
Postfach 860 820
81635 München (DE)

Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted on 24 July 2013 revoking European patent No. 1994937 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman B. Claes
Members: M. Montrone
M. Blasi

Summary of Facts and Submissions

I. The appeal was lodged by the patent proprietor (hereinafter "the appellant") against the decision of the opposition division to revoke European patent No. 1 994 937, which is based on a divisional application of European patent No. 1 033 996. The patent has the title "*Prevention and treatment of amyloidogenic disease*".

II. In the impugned decision the opposition division held that, in relation to the subject-matter of claim 1 of the main request (which was identical to claim 1 of the patent as granted), the patent lacked sufficiency of disclosure (Articles 83 and 100(b) EPC). Moreover, it held that the subject-matter of claims 1 of auxiliary requests 1 to 3 contained added matter (Articles 76(1), 123(2) and 100(c) EPC).

III. With its statement of grounds of appeal the appellant filed a main request and auxiliary requests 1 to 6. The main request and auxiliary requests 1 to 3 were identical to the ones underlying the decision under appeal.

Claim 1 of the main request reads:

"1. A pharmaceutical composition comprising an antibody to Aβ and a pharmaceutically acceptable non-toxic carrier or diluent, for use in preventing or treating a disease characterized by amyloid deposit in a patient, wherein the isotype of the antibody is human IgG1."

The subject-matter of claim 1 of auxiliary request 1 differed from that of the main request in that the

feature "antibody to Aβ" was replaced with the feature "antibody to Aβ13-28".

The subject-matter of claim 1 of auxiliary request 2 differed from that of the main request in that the feature "and wherein the antibody binds specifically to the dissociated form of Aβ peptide without binding to the aggregated form" was added at the end of the claim.

The subject-matter of claim 1 of auxiliary request 3 differed from that of the main request in that the feature "wherein the patient is asymptomatic optionally wherein the patient is under 50, and/or has inherited risk factors indicating susceptibility to Alzheimer's disease" was added at the end of the claim.

IV. Opponent 01 (hereafter "respondent I"), opponent 02 (hereafter "respondent II") and opponent 03 (hereafter "respondent III") all replied to the appeal.

V. Following a request for acceleration of the appeal proceedings submitted by respondent II, the board decided to deal with the case in an expedited manner. The parties were summoned to oral proceedings and were informed of the board's preliminary view in a communication pursuant to Article 15(1) RPBA.

VI. The appellant in reply submitted auxiliary requests 7 and 8.

VII. During oral proceedings before the board, the appellant withdrew auxiliary requests 4 to 8. The parties were heard on the issues of added matter in relation to claim 1 of the main request (Articles 100(c), 76(1)/123(2) EPC) and on the issue of sufficiency of disclosure (Articles 100(b), 83 EPC). At the end of the

oral proceedings the chairman announced the board's decision.

VIII. Documents cited in the decision:

D88: Arriagada P. *et al.*, Neurology (1992), 42, 631

D95: Immunobiology, Janeway & Travers, 3rd Edition (1997), 8:1-8:2 and 1:21-1:22

D96: St George-Hyslop and Westaway, Nature (1999), 400, 116-117

D101: England & Wales High Court decision: [2013] EWHC 1737 (Pat)

D110: Dodart *et al.*, Nature Neuroscience (2002), 5(5), 452-457

IX. The parties' arguments in relation to the admission of documents D88, D95, D96, D101 and D110 into the proceedings may be summarised as follows:

The appellant submitted that documents D95, D96 and D101 should be admitted into the proceedings. Late-filed documents D88 and D110 were considered as not being *prima facie* relevant and should therefore not be admitted.

Respondent I submitted that document D101 should not be admitted since it was late filed and did not support the appellant's case.

Respondent II submitted that documents D88 and D110 should be admitted since they were required to address

an issue the board had raised for the first time in the communication pursuant to Article 15(1) RPBA.

X. The appellant's arguments in relation to sufficiency of disclosure of the patent in suit for the invention as defined in claims 1 of the main and auxiliary requests 1 to 3 may be summarised as follows:

The invention was a ground-breaking technical contribution to the art. A broadly formulated claim was justified since the patent disclosed for the first time that amyloid deposits as a hallmark of Alzheimer's disease (AD) were either prevented or reduced by polyclonal antibodies elicited by an active immunisation with amyloid β (Aβ), irrespective of the mechanism involved.

Although the patent in suit reported no experimental evidence of the efficacy of anti-Aβ antibodies of a human IgG1 isotype for the claimed therapeutic application, their suitability was nevertheless derivable for the skilled person from the experimental data reported in examples I, III, IV and VI. These data disclosed that polyclonal antibodies elicited by the immunisation of so-called PDAPP mice, an animal model for human AD, with either full-length Aβ or a N-terminal fragment thereof, prevented or reduced the formation of cerebral Aβ deposits, while the same mice without Aβ immunisation developed Aβ deposits. This therapeutic effect was caused by the elicited antibodies and thus provided sufficient evidence for a generalised antibody-mediated concept in the treatment of AD without the need for major conceptual leaps (*cf.* e.g. decisions T 609/02 and T 636/97).

The suitability of anti-Aβ antibodies with a human IgG1 isotype for the claimed therapeutic application was also readily testable by the skilled person applying the *in vivo* and *in vitro* assays disclosed in examples I, III, IV and VI of the patent in suit and the instructions relating to the design of a clinical study (see example XI). Although the assays were time consuming they required only ordinary skills.

The assays disclosed in the patent in suit demonstrated that all regions of Aβ were immunogenic and thus suitable for eliciting therapeutic antibodies. Moreover, exemplary suitable polyclonal and monoclonal antibodies directed against epitopes located on N-terminal, central and C-terminal regions of Aβ or on undefined regions of aggregated Aβ were reported in table 6 of example VI.

The patent in suit proposed an antibody-mediated cellular phagocytosis of Aβ plaques as the main mechanism underlying the therapeutic efficacy of the antibodies. However, the skilled person was aware that also other antibody-mediated mechanisms existed. Indeed it was commonly known that the removal of soluble Aβ from the body reduced the available amount of Aβ as principal constituent of Aβ cerebral plaques. The removal only required antibodies binding to Aβ irrespective of the region to which they bound.

The burden of proof was on the respondents that the invention could not be carried out over the whole ambit claimed, since according to the case law a presumption existed that the invention was sufficiently disclosed after grant of a patent (*cf.* e.g. decision T 63/06).

XI. Respondent I's arguments in relation to sufficiency of disclosure of the patent in suit for the invention as defined in claims 1 of the main and auxiliary requests 1 to 3 may be summarised as follows:

The data disclosed in examples I to III, table 5 and figure 12 of the patent in suit related solely to an active immunisation of PDAPP mice as an animal model for AD, *i.e.* it induced endogenous polyclonal antibodies against full-length Aβ. Experimental data relating to passively, *i.e.* externally administered monoclonal anti-Aβ antibodies of the claimed human isotype to the same animal model were not reported in the patent in suit. Therefore the reference in the patent in suit to the therapeutic use of monoclonal anti-Aβ antibodies was not more than an invitation to the skilled person to conduct a research programme.

XII. Respondent II's arguments in relation to sufficiency of disclosure of the patent in suit for the invention as defined in claims 1 of the main and auxiliary requests 1 to 3 may be summarised as follows:

The experimental evidence disclosed in the patent in suit demonstrated that certain of the polyclonal antibodies elicited by immunisation with either full-length Aβ or a N-terminal fragment thereof, achieved a therapeutic effect by reducing or preventing Aβ deposits in the brain. The claimed therapeutic applications were not however restricted to diseases characterised by Aβ amyloid deposits but encompassed all diseases characterised by amyloid deposits. Moreover, there was no established relationship between an Aβ amyloid cerebral deposit and the pathogenesis of AD (see e.g. documents D88 and D110), contrary to the

criteria established by the case law (*cf.* e.g. decision T 609/02).

Furthermore, the experimental data disclosed in the patent in suit did not show that all antibodies directed against Aβ were suitable for clearing Aβ plaques in the brain. On the contrary, the evidence provided showed that the therapeutic efficacy of the antibodies depended on the region of Aβ to which the antibodies bound and whether or not an antibody-mediated phagocytic response was induced (see example IV).

XIII. Respondent III's arguments in relation to sufficiency of disclosure of the patent in suit for the invention as defined in claims 1 of the main and auxiliary requests 1 to 3 may be summarised as follows:

The PDAPP mouse model disclosed in the patent in suit differed substantially from human AD since intracellular deposits of neurofibrillary tangles were not found in PDAPP mice, whereas they were encountered in human AD (see document D96). Therefore, this model was not suitable to provide evidence for a therapeutic effect of anti-Aβ antibodies in the treatment of *inter alia* AD patients.

The therapeutic effect of endogenously elicited polyclonal antibodies by the active immunisation of PDAPP mice by Aβ, as disclosed in the patent in suit, was also not suitable as evidence showing that the passive administration of anti-Aβ monoclonal antibodies of a single human isotype would have achieved the same therapeutic effect. This was so because the polyclonal antibodies were characterised by undefined Aβ-binding specificities and isotypes, while the monoclonal

antibodies had a single Aβ-binding specificity and a human isotype. Moreover, the experimental data disclosed in example IV of the patent in suit showed that only certain anti-Aβ antibodies were suitable for the claimed therapeutic application, but not anti-Aβ antibodies in general.

Accordingly, the information provided in the patent in suit did not support the therapeutic effect of all antibodies falling within the ambit of the claim.

XIV. The appellant requested that the decision under appeal be set aside and that the case be remitted to the opposition division for further prosecution with respect to novelty and inventive step, on the basis of the claims of the main request, or alternatively of one of the first to third auxiliary requests filed with the statement of grounds of appeal.

The respondents requested that the appeal be dismissed.

Reasons for the Decision

Admission of documents D88, D95, D96, D101 and D110 into the proceedings

1. Documents D95 and D96 were submitted by the appellant with its letter dated 10 May 2013 in reply to the respondents' submissions and thus shortly before the oral proceedings before the opposition division. Document D101 was filed with the appellant's statement of grounds of appeal. Documents D88 and D110 were both submitted by respondent II, the former during the opposition proceedings with its letter dated

10 April 2013 and the latter in reply to the appellant's statement of grounds of appeal.

2. None of the respondents objected to the admission of documents D95 and D96 and the board decided to take them into account (Article 114(2) EPC).

3. It is within the discretionary power of the board to hold inadmissible facts, evidence or requests which could have been presented in the first-instance proceedings or were late-filed in those proceedings (Article 114(2) EPC and Article 12(4) RPBA). The appellant requested that documents D88 and D110 not be admitted into the proceedings. The board notes that respondent II wanted to rely on them to address an issue raised in the preliminary view expressed by the board in point 28 of its communication pursuant to Article 15(1) RPBA. Under these circumstances, respondent II's arguments based on evidence disclosed in documents D88 and D110 could not have been presented earlier and the board consequently admitted the former and kept the latter in the appeal proceedings.

4. Respondent I requested the exclusion from the appeal proceedings of document D101 relating to a decision from the England and Wales High Court (Patents Court) concerning the UK equivalent of the patent under consideration. The board notes, however, that it is established practice that the boards of appeal take into consideration relevant decisions of courts of the contracting states (see also Case Law of the Boards of Appeal of the EPO, 7th edition 2013 (hereinafter "CLBA"), III.H.3.1). Accordingly, the board confirmed that document D101 remained in the proceedings (Articles 12(2),(4) RPBA).

Main request

Introduction in the invention

5. Although today there are still a number of different hypotheses about the exact etiology of how Alzheimer's disease (AD) develops in humans, one of the established pathogenic hallmarks at the priority date of the patent in suit was - and still is today - the presence of amyloid deposits, also known as senile plaques, in the brain of AD patients (see e.g. document D88, page 631, column 1, first paragraph).

5.1 Aβ is the principal constituent of amyloid deposits and a natural proteolytic peptide fragment of 39 to 43 amino acids in length of an amyloid precursor protein (APP). Several mutations within APP, e.g. at position 717 of the protein sequence, have been correlated with the pathogenesis of AD, and are all commonly thought to increase the amount of pathogenic Aβ in the brain, in particular its long forms, e.g. Aβ1-42 or Aβ1-43 (see paragraphs [0003] and [0031] of the patent in suit; the board notes that the numbers 1-42 or 1-43 in relation to Aβ indicate that the peptide has a length of either 42 or 43 amino acids respectively (see paragraph [0033] of the patent in suit)).

5.2 The patent in suit relates to the use of compositions comprising antibodies against the amyloid β peptide (Aβ) for the treatment of diseases characterised by amyloid deposits, e.g. AD.

Sufficiency of disclosure

6. It is established case law of the boards of appeal that when assessing medical use claims attaining the claimed therapeutic effect is a functional technical feature of the claims. Accordingly under Article 100(b) EPC, unless this is already known to the skilled person at the priority date, the patent in suit must disclose the suitability of the product to be manufactured for the claimed therapeutic application. Clinical trials are not required to establish suitability. It may suffice that *in vitro* or *in vivo* data directly and unambiguously reflect the therapeutic effect on which the claimed therapeutic application relies or, alternatively, an established relationship between the physiologic activities of the compound under consideration and the claimed disease (see e.g. CLBA, II.C.6.2 and decision T 609/02 of 27 October 2004 cited therein).

7. The subject-matter of claim 1 is pharmaceutical compositions comprising antibodies of a human IgG1 isotype binding to Aβ and a carrier or diluent for use in preventing or treating diseases characterised by amyloid deposits. The compositions for the claimed therapeutic application therefore comprise as embodiments such antibodies of a human IgG1 isotype which are (i) monoclonal, *i.e.* all bind to one single epitope on Aβ, or (ii) polyclonal, *i.e.* bind to an undefined number of different epitopes of undefined location within Aβ. Moreover, the epitope(s) recognised by the antibodies referred to in the claim can be situated within (iii) soluble or (iv) aggregated forms of Aβ.

8. Thus, the question to be assessed in the context of Article 100(b) EPC in the present case is whether or not the patent in suit or the prior art provides information disclosing the suitability of the compositions comprising antibodies as referred to in claim 1 for the claimed therapeutic application.

9. It is uncontested that the patent in suit does not disclose explicit experimental evidence that administered compositions comprising anti-Aβ antibodies attain a therapeutic effect in the treatment of diseases characterised by amyloid deposits, such as AD. It was also common ground between the parties that such evidence was not derivable from any of the cited prior art documents. Under these circumstances, the patent in suit must disclose evidence to the skilled person, having due regard of common general knowledge, that compositions comprising anti-Aβ antibodies reduce or prevent amyloid deposits. Failure to demonstrate such an effect necessarily results in the lack of the suitability of the anti-Aβ antibodies in the claimed therapeutic application.

10. The patent in suit discloses in several examples the immunisation of so-called PDAPP mice with either full-length aggregated Aβ or conjugated and non-conjugated fragments thereof (see e.g. paragraph [0112]). PDAPP mice are transgenic for the human APP gene, having a point mutation at position 717 of the protein sequence (see point 5.1 above). Expression of this gene inevitably causes the formation of Aβ amyloid deposits or plaques in mouse brains at an age of six months (see paragraph [0061]). Since these plaques were one of the established pathogenic hallmarks of AD at the relevant date of the patent in suit (see point 5 above), in the board's opinion - contrary to the view of the

respondents - the skilled person would consider the PDAPP mice as a suitable animal model for evaluating the effectiveness of therapeutic agents in the treatment of human AD.

11. The following experimental data of the patent in suit are of particular interest:

11.1 Example I discloses that the immunisation of PDAPP mice with human aggregated Aβ1-42 prevents Aβ plaque formation, while non-immunised control mice develop plaques (see paragraphs [0061], [0069] to [0071] and [0076]).

11.2 Example II reports a dose-dependent formation of anti-Aβ antibodies upon immunisation of PDAPP mice and control mice with human aggregated Aβ1-42 (see paragraphs [0077] and [0081]).

11.3 Example III shows that the immunisation of PDAPP mice with human aggregated Aβ1-42 also reduces amyloid plaque deposits already established in the brain (see figure 7), including a reduction in the total amount of detectable Aβ and Aβ1-42 in certain regions of the brain (see tables 2 and 3 on pages 14 and 15). An immunohistochemical analysis of the brains after immunisation further indicates that activated phagocytic microglia and monocytes, *i.e.* cell-mediated processes, are involved in plaque removal (see paragraphs [0091] and [0095]).

11.4 Example IV reports that a reduction of established amyloid plaques, including a reduction in total Aβ in the brain of PDAPP mice, is also achieved by immunisation with either aggregated rodent Aβ1-42 or a conjugated Aβ1-5 fragment derived from the N-terminus

of human Aβ (see paragraphs [0112], [0116], [0117], [0120] and [0121]). Example IV also reports, however, that the immunisation of PDAPP mice with other conjugated human Aβ fragments, *i.e.* Aβ1-12, Aβ13-28, Aβ33-42 and an aggregated Aβ25-35 peptide (see paragraphs [0107] and [0112]), does not significantly reduce either the amount of established amyloid plaques or the total amount of Aβ in the brain of PDAPP mice (see paragraphs [0120] and [0121]). In this context, the board notes that the lack of a therapeutic effect after immunisation with the Aβ fragments cited appears not to be due to the absence of anti-Aβ antibodies, since polyclonal antibodies binding to Aβ are detectable in the serum and on cerebral Aβ plaques (see paragraphs [0123], [0124]).

12. Accordingly, it can be derived from the above that the patent in suit reports that upon immunisation, certain Aβ antigens induce an anti-Aβ antibody response combined with a cellular immune response which in turn prevents or reduces cerebral amyloid plaque formation, whereas other Aβ antigens induce solely an anti-Aβ antibody response in PDAPP mice without affecting plaque formation.

13. On the one hand, the board considers that the skilled person after analysing the data disclosed in the patent in suit (see points 11.1 to 11.4 above) could thus have arrived at the conclusion that the immunisation of PDAPP mice with certain Aβ immunogens, *i.e.* aggregated human and rodent Aβ1-42 and a conjugated human N-terminal derived Aβ1-5 fragment, elicits polyclonal anti-Aβ antibodies which are suitable for the claimed therapeutic application. Moreover, on the basis of these data the skilled person could have also considered that monoclonal anti-Aβ1-5 antibodies were

suitable for this application, since the Aβ1-5 fragment, due to its small size, encompasses only a very limited number of potential epitopes to which the antibodies can bind.

14. On the other hand however, the board notes that the experimental data also demonstrate that certain other Aβ immunogens, in particular fragments derived from the central or C-terminal region of Aβ, fail to induce therapeutically effective polyclonal antibodies, although the antibodies bind to cerebral amyloid plaques (see point 11.4 above). Since, due to their small size, the fragments Aβ1-12, Aβ13-28, Aβ25-35 and Aβ33-42 encompass only a very limited number of potential epitopes, the board considers that the failure of these polyclonal antibodies also extends to monoclonal antibodies binding to the same fragments.

15. The appellant has submitted that the skilled person would have considered anti-Aβ antibodies binding to soluble Aβ in general to be therapeutically suitable, since it was commonly known that antibodies binding to soluble proteins caused their removal from the body and thereby reduced the available amount of Aβ as the principal constituent of cerebral amyloid plaques.

16. The board does not agree. As reported in example IV of the patent in suit, all of the fragments Aβ1-12, Aβ13-28, Aβ25-35 and Aβ33-42 elicit anti-Aβ antibodies which bind to full-length Aβ1-42 in an ELISA assay, *i.e.* to soluble Aβ. However, none of these antibodies significantly reduces the total amount of Aβ in the brain or affects the amount of Aβ cerebral deposits (see paragraph [0124]). In the board's opinion, the skilled person would therefore derive from these data that antibodies, although binding to soluble Aβ and

therefore able to remove Aβ from the blood, have no significant therapeutic effect in the treatment of AD.

17. The appellant further argued that the skilled person would conclude from the disclosure of example VI, and in particular table 6 on page 20 of the patent in suit, that monoclonal antibodies directed against Aβ1-12, Aβ13-28 and Aβ33-42, *i.e.* the N-terminal, central and C-terminal regions of Aβ are therapeutically suitable.

18. The board notes that example VI in paragraph [0130] and table 6 of the patent in suit only suggest the use of a variety of monoclonal antibodies binding *inter alia* to Aβ1-12, Aβ13-28 and Aβ33-42 for the treatment of amyloid deposits in PDAPP mice. However, no experimental data demonstrating a reduction of Aβ cerebral plaques by passively administered monoclonal antibodies, let alone by the ones mentioned in table 6, are disclosed in the patent in suit. As set out above (see points 11.4 and 16), example IV demonstrates that polyclonal antibodies binding to Aβ1-12, Aβ13-28 and Aβ33-42 fail to reduce amyloid plaques and total Aβ in the brain of PDAPP mice. The actual experimental data of example IV are therefore at odds with the suggestions reported in example VI and the arguments of the appellant must therefore fail.

19. The appellant also submitted that according to e.g. decision T 63/06 of 24 June 2008 (see point 3.3 of the Reasons) a presumption existed that a patent, once granted sufficiently disclosed the claimed invention and that the opponents bore the burden of proof for establishing insufficiency of disclosure.

20. While in general the board agrees with the appellant regarding the principles established in this decision,

the situation in the present case is different since, as outlined in point 11.4 above, the patent in suit itself already discloses experimental evidence that antibodies binding to the central or C-terminal region of Aβ, which are encompassed as embodiments in claim 1, are not suitable for the claimed therapeutic application. Under these circumstances, no additional experimental evidence from the respondents is required, as they can rely on the evidence provided by the patent in suit itself. This shifts the burden of proof back to the appellant, whose argument must therefore fail.

21. Lastly, the appellant argued that the skilled person, in view of the disclosure of the patent in suit that polyclonal anti-Aβ antibodies were effective in the claimed therapeutic application, would have considered this as sufficient evidence for a generalised antibody-mediated concept in the treatment of AD, without the need for major conceptual leaps.

22. While it is established case law that claims can validly cover broad subject-matter, the question of the allowability of a broad claim *versus* the requirement of sufficiency of disclosure is one which is strictly assessed on a case-by-case basis, influenced by the extent to which the information in the patent in suit could be used to develop further embodiments without a major conceptual leap (cf. e.g. decision T 636/97 of 26 March 1998, point 4.5 of the Reasons).

23. A generalised anti-Aβ antibody-mediated concept for the claimed therapeutic application is not derivable from the patent in suit, since the patent in suit discloses evidence that antibodies binding to the central and the C-terminal region of Aβ are not suitable (see points 11.4 and 14). Also, the patent in suit provides

neither the rationale for the disclosed failure of these antibodies nor information enabling the skilled person to nevertheless obtain therapeutically effective antibodies of a human IgG1 isotype directed against the central and the C-terminal region of Aβ. Accordingly, also this argument of the appellant must fail.

24. The board therefore concludes, in view of the patent in suit disclosing experimental evidence that anti-Aβ antibodies encompassed by the subject-matter of claim 1 are not suitable for the claimed therapeutic application, that the patent in suit fails to sufficiently disclose the claimed medical use as required by Article 100(b) EPC.

Auxiliary requests 1 to 3

25. The subject-matter of claim 1 of auxiliary request 1 differs from that of the main request in that the feature "antibody to Aβ" has been replaced by the feature "antibody to Aβ13-28".

26. The board notes that the patent in suit discloses in example IV, that anti-Aβ antibodies binding to Aβ13-28 fail to demonstrate suitability for the claimed therapeutic application (see point 11.4 above).

27. The subject-matter of claim 1 of auxiliary request 2 differs from that of the main request in that the feature "and wherein the antibody binds specifically to the dissociated form of Aβ peptide without binding to the aggregated form" has been added at the end of the claim.

28. The board notes firstly that the patent in suit suggests only in general terms antibodies binding specifically to soluble Aβ without binding to aggregated Aβ, and provides no experimental data demonstrating the suitability of specifically these antibodies for the claimed therapeutic application.

29. Secondly, as pointed out in point 16 above, the patent in suit discloses in example IV that polyclonal antibodies binding at the same time to soluble Aβ and aggregated Aβ in amyloid deposits are not suitable for the claimed therapeutic application. Although the binding properties of the antibodies of example IV therefore differ from the compositions comprising the antibodies according to claim 1, neither the patent in suit nor the cited prior art documents disclose evidence that antibodies binding solely to soluble Aβ are suitable for the claimed therapeutic application. Nor has that not been argued by the appellant.

30. The subject-matter of claim 1 of auxiliary request 3 differs from that of the main request in that the feature "wherein the patient is asymptomatic optionally wherein the patient is under 50, and/or has inherited risk factors indicating susceptibility to Alzheimer's disease" has been added at the end of the claim.

31. The board notes that neither the patent in suit nor any of the cited prior art documents reports evidence that restricting the patient group as claimed has an effect on the suitability of the compositions comprising anti-Aβ antibodies for the therapeutic application. This too, has not been argued by the appellant.

32. Therefore, the reasoning set out in points 7 to 23 and the conclusion in point 24 apply *mutatis mutandis* to

the patent in suit in the context of claims 1 of auxiliary requests 1 to 3. Accordingly, the patent in suit does not sufficiently disclose the subject-matter of claims 1 of these requests, contrary to the requirements of Article 83 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar: The Chairman:

P. Cremona B. Claes

Decision electronically authenticated