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Datasheet for the decision of 18 May 2018

Case Number: T 0740/12 - 3.3.08

Application Number: 02703488.3

Publication Number: 1371730

IPC: C12N15/48

Language of the proceedings: EN

Title of invention:
RECOMBINANT POXVIRUS FOR CHIMERIC PROTEINS OF THE HUMAN IMMUNODEFICIENCY VIRUS

Patent Proprietor:
CENTRO DE INGENIERIA GENETICA Y BIOTECNOLOGIA (CIGB)

Opponent:
Bavarian Nordic A/S

Headword:
HIV chimeric gene/CIGB

Relevant legal provisions:
EPC Art. 14(2) sentence 2, 54, 56, 84, 123(2), 123(3)
RPBA Art. 13(1), 13(3)

Keyword:
Main request - admission into the proceedings (yes)
Added matter (no)
Scope of protection extended (no)
Clarity (yes)
Novelty (yes)
Inventive step (yes)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 0740/12 - 3.3.08

D E C I S I O N
of Technical Board of Appeal 3.3.08
of 18 May 2018

Appellant: (Patent Proprietor)	CENTRO DE INGENIERIA GENETICA Y BIOTECNOLOGIA (CIGB) Avenida 31 entre 158 y 190, Cubanacan Playa Ciudad de la Habana 10600 (CU)
Representative:	Schut, Frederik Beeksma, Jetze Beeke V.O. P.O. Box 87930 2508 DH Den Haag (NL)
Respondent: (Opponent)	Bavarian Nordic A/S Hejreskovvej 10 A 3490 Kvistgaard (DK)
Representative:	Zimmer, Franz-Josef Plaggenborg, Rainer Grünecker Patent- und Rechtsanwälte PartG mbB Leopoldstraße 4 80802 München (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 27 January 2012 concerning maintenance of the European Patent No. 1371730 in amended form.**

Composition of the Board:

Chairman	B. Stolz
Members:	M. R. Vega Laso
	D. Rogers

Summary of Facts and Submissions

I. European patent No. 1 371 730 with the title "Recombinant poxvirus for chimeric proteins of the human immunodeficiency virus" was granted on the European application No. 2703488.3, which had been filed as an international application under the Patent Cooperation Treaty and published as WO 02/068654 (in the following "the application as filed").

II. The patent, which was granted with 27 claims, was opposed on the grounds for opposition of Article 100(a) in conjunction with Articles 54, 56, and 53(c); 100(b) and 100(c) EPC.

III. In an interlocutory decision pursuant to Article 101(3)(a) and 106(2) EPC posted on 27 January 2012, which was corrected as indicated in a communication sent on 16 February 2012, the opposition division found that amended claims 1 to 19 according to auxiliary request VI filed at the oral proceedings, fulfilled the requirements of the EPC.

IV. The patent proprietor (appellant) lodged an appeal against the decision of the opposition division and submitted a statement setting out the grounds of appeal, including four sets of amended claims as main request and auxiliary requests I to III, a corrected English translation of the application as filed, and additional evidence.

V. The opponent (respondent) replied to the grounds of appeal and submitted further evidence.

VI. The parties were summoned to oral proceedings. In a communication sent in preparation of the oral

proceedings, the board expressed a provisional opinion on procedural issues and various substantive issues concerning Articles 123(2)(3), 84, 83, 87, 54 and 56 EPC.

VII. In reply to the board's communication, the appellant submitted two sets of claims as auxiliary requests IV and V, as well as a corrected English translation of pages 7 and 8 of the application as filed.

VIII. The respondent replied to the appellant's submission.

IX. Oral proceedings were held on 18 May 2018. During the proceedings, the appellant withdrew the claims according to the main request and refiled the claims according to auxiliary request IV (claims 1 to 24) as its new main request.

X. Claim 1 of the main request reads as follows:

"1. A chimeric gene which contains fragments from different HIV-1 genes, wherein said fragments code for overlapping cytotoxic T cell (CTL) epitopes, which are presented by a wide range of Major Histocompatiblity Complex (HLA-1) antigens, said fragments further coding for T helper (Th) cell epitopes from HIV and at least one B cell epitope that is the target of a monoclonal antibody (Mab), wherein said overlapping CTL epitopes are selected from conserved internal proteins or regulatory proteins expressed early in the viral life cycle."

Dependent claims 2 to 4 relate to various embodiments of the chimeric gene of claim 1. Claim 5 concerns a chimeric protein and claim 6 a recombinant virus containing in the genome a heterologous gene which is

defined in the same manner as the chimeric gene of claim 1. The remaining claims 7 to 21 concern subject-matter related to the chimeric gene and the recombinant virus defined in claims 1 and 6.

XI. The following documents are referred to in this decision:

(13): E. Iglesias et al., J. Biochem., Mol. Biol. & Biophys., 2001, Vol. 5, pages 109 to 122;

(17): T.G. Evans et al., The Journal of Infectious Diseases, 1999, Vol. 180, pages 290 to 298;

(18): T. Hanke and A.J. McMichael, Nature Medicine, September 2000, Vol. 6, No. 9, pages 951 to 955.

XII. The submissions made by the appellant concerning issues relevant to this decision, were essentially as follows:

Admission of the set of claims of the main request into the proceedings

The claims according to the main request, which had been filed as auxiliary request IV in reply to the objections raised by respondent, should be admitted into the proceedings. Independent claims 1 and 6 were essentially identical to the corresponding claims of the main request underlying the decision under appeal. The claims were based on the claims of the main request submitted together with the statement of grounds of appeal, the main differences being the deletion of claims 4, 10 and 11 and of the word "*essentially*" in claims 5 and 6 of the previous main request.

Article 123(2)(3) EPC – added matter and extension of scope

According to claims 1 and 6 of the main request, the fragments coding for the overlapping CTL epitopes further coded for T helper cell epitopes and at least one B cell epitope, and were selected from conserved internal proteins or regulatory proteins expressed early in the viral life cycle. In the claims as granted, the first feature had been optional. The second feature had a basis on page 7, lines 16 and 17 of the corrected English translation of the application as filed. Overlapping CTL epitopes were disclosed on page 7, lines 18 to 24 of the application as filed.

Article 84 EPC – clarity

The claims defined the invention in a clear manner. A person skilled in the art reading claim 1 would understand that the approach of the invention was to take fragments from the more conserved internal proteins, rather than from the variable capsid proteins.

Article 54 EPC – novelty

None of the documents on file described a chimeric gene containing fragments of HIV-1 genes which coded for cytotoxic T cell epitopes, T helper cell epitopes and at least one B cell epitope. The claimed subject-matter was therefore novel.

Article 56 EPC – inventive step

The requirement of Article 56 EPC was fulfilled. Document (18) could be considered to be the closest

state of the art as it described overlapping CTLs and Th epitopes in a chimeric gene. The difference between the chimeric gene of document (18) and that of claim 1 was that the latter was required to have additionally a B cell epitope that was the target of a monoclonal antibody. The skilled person would not combine the teaching of document (18) directed to a cellular immune response with a teaching of HIV epitopes for a humoral response, because document (18) taught that induction of a B cell response may compromise the T cell response. In contrast to expectations, the inventors had shown that the CR3 chimeric gene elicited both a strong cellular response as shown in Figure 6 of the patent, and a humoral response.

XIII. The submissions by the respondent, insofar as they are relevant to the present decision, may be summarised as follows:

Admission of the set of claims of the main request into the proceedings

The claims of the main request had been submitted without any justification as to their lateness. In fact, they could have been filed much earlier in the proceedings, either together with the statement of grounds of appeal or, at the latest, in reply to the respondent's submissions. They did not address the objection of lack of novelty in view of documents (17) and (18) and raised new issues, in particular issues under Articles 123(2) and 84 EPC. Hence, the main request should not be admitted into the proceedings.

Article 123(2)(3) EPC – added matter and extension of scope

The opposition division had correctly stated in its decision that the addition of a passage on top of page 7 of the application as filed, which passage was completely missing in the patent, extended the scope of protection conferred by the patent as granted. It was disclosed in the passage in question that the CTL epitopes often overlapped. That wording covered CTL epitopes which overlapped and those which did not overlap. Since the latter ones were not encompassed by the patent as granted, the introduction of the new passage resulted in an extension of the protection conferred by claims 1 and 6 of the patent as granted. Thus, Article 123(3) EPC was contravened.

Article 84 EPC – clarity

The wording "*conserved internal proteins*" in amended claims 1 and 6 was ambiguous. Moreover, there was a discrepancy between claims 1 and 2: while claim 1 required that the CTL epitopes were selected from internal conserved proteins or regulatory proteins, it was specified in claim 2 that the CTL epitopes were from at least one structural protein and one non-structural protein. Since structural HIV proteins comprised the internal HIV proteins, and non-structural HIV proteins encompassed the regulatory proteins, the actual fragment composition of the claimed chimeric genes was obscure. Hence, the amended claims did not meet the requirements of Article 84 and Rule 43(1) EPC.

Article 54 EPC – novelty

Document (17)

The subject-matter of claims 1 and 2 lacked novelty over document (17). This document described a recombinant canarypox viral vector comprising multiple fragments of HIV-1 genes, in particular *gag* p55, part of *env* expressing MN gp120, two *nef* genes, and three *pol* regions encoding peptides corresponding to amino acids 172-219, 325-383, and 461-519 of the *pol* protein (see page 291, left-hand column, lines 9 to 13). The *gag* and *pol* proteins were structural proteins, whereas the *nef* protein was non-structural. There was evidence on file that the V3 region of the HIV protein gp120 included a B cell epitope that is recognized by the monoclonal antibody 2C4. Hence, document (17) described a chimeric gene having all the features specified in claims 1 and 2.

Document (18)

Document (18) destroyed the novelty of the subject-matter of claims 1 and 2, because it described an immunogen named HIVA including CTL epitopes originating from the HIV-1 *gag*, *pol*, *nef* and *env* proteins (see page 952, right-hand column, lines 7 to 15). Moreover, it was described that an epitope for a monoclonal antibody was added to the C-terminus of HIV for easy detection of a full-size protein and estimation of the level of expression (see page 952, right column, lines 26 to 28).

Article 56 EPC – inventive step

Document (18) represented the closest state of the art. The sole difference between the HIVA immunogen described therein and the chimeric gene of claim 1 was that in the latter the B cell epitope was a HIV-1 epitope. There was no technical effect linked to this feature. Hence, starting from document (18) the problem to be solved was the provision of an alternative to the HIVA immunogen described in that document. It was obvious to a person skilled in the art to add a B cell epitope to the HIVA immunogen. The effect of eliciting a B cell response could merely be considered as a bonus effect, which according to the case law could not confer inventiveness on an obvious solution. Hence, the requirement of Article 56 EPC was not met.

XIV. The appellant requested that the decision under appeal be set aside and the patent maintained upon the basis of the main request filed at the oral proceedings before the board on 18 May 2018.

XV. The respondent requested that the appeal be dismissed.

Reasons for the Decision

Admission of the set of claims of the main request into the proceedings

1. The claims of the present main request were first submitted as auxiliary request IV in reply to the communication sent by the board in preparation of the oral proceedings, and re-filed as main request during the oral proceedings. The respondent opposed to their admission into the appeal proceedings.

2. According to Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA), any amendment to a party's case after it has filed its grounds of appeal (or reply) may be admitted and considered at the board's discretion. In particular, amendments sought to be made after oral proceedings have been arranged shall not be admitted if they raise issues which the board or the other party cannot reasonably be expected to deal with without adjournment of the oral proceedings (see Article 13(3) RPBA).

3. The claims according to the main request differ from those of the main request filed together with the statement of grounds of appeal in that claims 4, 10 and 11 of the previous request have been deleted. Moreover, the wording "*internal conserved proteins*" in claims 1 and 6 has been replaced by "*conserved internal proteins*", and the word "*essentially*" in claims 5 and 6 (claims 4 and 5 in the present main request) has been deleted.

4. These amendments were introduced as a reaction to observations made by the board in its communication. It is the case that the respondent had objected to the word "*essentially*" in its reply to the statement of grounds of appeal and that, in principle, amended claims addressing this objection could have been filed earlier in the proceedings. However, under the circumstances of the present case the board considers that the appellant, in waiting for the board's communication before amending its claims, has not acted in a manner that was detrimental to the procedural efficiency or prejudiced the respondent. The deletion of the word "*essentially*", a straightforward amendment aimed at remedying a possible novelty issue, could not have taken the respondent (or the board) by surprise.

The same applies, *mutatis mutandis*, to the deletion of claims 4, 10 and 11.

5. Contrary to the respondent's view, the board considers that, *prima facie*, the amendments introduced into the claims of the main request and the description do not raise any new issues, in particular any new issues under Articles 123(2) and 84 EPC which the board or the respondent could not reasonably be expected to deal with without adjournment of the oral proceedings. Most of the amendments introduced into the translation of the application as filed submitted by the appellant together with its reply to the board's communication were already in the amended translation filed with the statement of grounds of appeal. New amendments were introduced as a reaction to the board's observations or were mere editorial amendments, to which the respondent has not expressly objected. As regards the respondent's objection with respect to claim 2, it should be noted that this claim was already included in the set of claims according to the main request filed together with the statement of grounds of appeal. Hence, the respondent's argument that the presence of claim 2 in the present main request raises **new** issues is without merit.

6. For these reasons, the board decides to exercise its discretion to admit the set of claims according to the main request into the proceedings.

Article 123(2) EPC - added matter

7. In the decision under appeal, the opposition division found that, in view of the feature "*selected from conserved internal proteins or from regulatory proteins*", the subject-matter of claims 1 and 6 then on

file extended beyond the content of the application as filed (see first paragraph in section 10.3 of the decision under appeal).

8. The application on which the patent in suit was granted was originally filed under the Patent Cooperation Treaty in Spanish, i.e. in a language which is not one of the official languages of the European Patent Office (EPO). Upon entry into the European phase, a translation into English, one of the official languages of the EPO, was filed in accordance with Article 14(2), first sentence, EPC. Pursuant to Article 14(2), second sentence, EPC, throughout the proceedings before the EPO such translation may be brought into conformity with the application as filed.

9. The appellant filed a corrected English translation of the application as filed together with its statement of grounds of appeal. In response to observations made by the board in its communication, an amended translation of pages 7 and 8 of the application as filed was submitted by the appellant. The relevant passage of the amended translation reads:

> "*The essence of the present invention is the construction of chimeric genes composed by regions rich in individual CTL epitopes from HIV, where those regions are selected from conserved internal proteins or regulatory proteins expressed early in the viral life cycle.*" (see amended page 7, lines 13 to 16)

10. The respondent did not object to the amendments introduced into this passage of the translation of the application as filed, and the board is satisfied that the amended translation quoted above corresponds to the

original text in the application as filed. Since the feature "*selected from conserved internal proteins or from regulatory proteins*" in claims 1 and 6 has a clear basis in this passage, the opposition division's finding on Article 123(2) EPC (see paragraph 7 above) does not apply to the present main request.

11. The respondent raised a further objection under Article 123(2) EPC arguing that the subject-matter of claim 2 represented an intermediate generalization of the disclosure in the application as filed. However, the feature in claim 2 is directly and unambiguously derivable from claim 2 of the application as filed. The respondent's argument that the presence of claim 2 gives rise to new groups of "*conserved internal structural proteins*" and "*conserved internal non-structural proteins*" is not persuasive, because the respondent failed to identify any such groups.

12. Also the objection to claim 4 raised by the respondent referring merely to the findings in section 13.3 of the decision under appeal is not persuasive. The opposition division found that claim 1 of auxiliary request V then on file - which was essentially a combination of claims 1 and 5 as granted - extended beyond the content of the application as filed because the chimeric gene of amended claim 1, which was defined as having a DNA sequence corresponding to that of SEQ ID NO:1, was not required to comprise a B cell epitope from the V3 region of the MN strain recognized by Mab 2C4, as required by claim 4 as granted. The board is unable to understand the opposition division's reasoning for this finding, in particular the argument that the fragment of the V3 region of the MN strain present in SEQ ID NO:1 did not necessarily elicit a B cell response (see paragraph bridging pages 9 and 10 of the

decision under appeal), because this requirement is not present in claim 4 of the application as filed.

13. Despite the board indicating in its communication that it was provisionally not inclined to share the opposition division's view as expressed in the passage bridging pages 9 and 10 of the decision under appeal, the respondent did not make any submissions on this point.

14. In view of the above, the board concludes that the claimed subject-matter does not extend beyond the content of the application as filed. Thus, Article 123(2) EPC is complied with.

Article 123(3) EPC – extension of scope

15. In the decision under appeal, the opposition division found that the amendments introduced into the description offended against Article 123(3) EPC because, in view of the passage introduced into page 7 defining the CTL epitopes as "*often overlapping*" the wording "*overlapping*" in claims 1 and 6 then on file had a broader meaning than in the corresponding claims as granted (see last paragraph on page 4 and first two paragraphs on page 5 of the decision).

16. This finding was contested by the appellant. In the amended description as presently on file, the passage in question reads:

> "*This solution has advantages over the previously described minigenes because it allows the simultaneous processing of multiple* ***CTL epitopes that many times overlap*** *in these regions and are presented by a wide range of HLA alleles, whereas*

the minigenes have a reduced number of individual CTL epitopes, and therefore they are expected to display a more restricted response by the alleles of HLA." (emphasis added by the board)

17. It should be noted that, while the wording "*many times overlap*" is a literal translation of the Spanish wording "*muchas veces se sobrelapan*" in the application as filed, there appears to be no difference in meaning between "*often overlap*" and "*many times overlap*".

18. The board does not share the opposition division's view that, by introducing the missing passage into page 7, the scope of protection as determined by the claims (Article 69(1) EPC, first sentence) has been extended. Claims 1 and 6 still require that the HIV-1 gene fragments contained in the chimeric gene code for **overlapping** CTL epitopes. The fact that CTL epitopes selected from the conserved internal proteins often overlap, i.e. some do and some don't, does not change the technical meaning of the term "*overlapping cytotoxic T cell (CTL) epitopes*" in claim 1. The claimed chimeric gene still has to comprise them.

19. Whether the claimed chimeric gene may also comprise non-overlapping CTL epitopes is a different question which rather relates to the way in which the claim is worded ("*a chimeric gene which contains ...*", i.e. comprises). In the board's opinion, this open language of the claim does not exclude that the chimeric gene may, additionally, code for further elements, for instance individual (i.e. non-overlapping) CTL epitopes or, as the opposition division found in connection with the auxiliary request III then on file, that the chimeric gene contains further undefined fragments which may comprise non-overlapping CTL epitopes (see

section 11.3 of the decision under appeal). In any case, this open language is unaffected by the paragraph introduced into page 7 of the description which merely states well-known technical facts.

20. For these reasons, the board concludes that the amendments introduced into the passage quoted above do not extend the scope of protection conferred by the claims as granted. Thus, Article 123(3) EPC is complied with.

Article 84 EPC – clarity

21. Contrary to the respondent's view, the board does not see any discrepancy between claims 1 and 2. The HIV-1 *gag* and *pol* proteins are both internal (as specified in claim 1) and structural (as specified in claim 2) proteins, and *nef* is a regulatory and non-structural protein, as specified in, respectively, claims 1 and 2.

22. Moreover, the respondent's objection that the wording "*conserved internal proteins*" has no clear meaning and, therefore, claims 1 and 6 do not comply with Article 84 EPC, is not justified. In the board's view, a person skilled in the art knows that the term "*conserved proteins*" is used in the art to define proteins, the amino acid sequence of which varies only to a certain extent between different strains of an organism or between different organisms. This seems to be the case for the internal proteins of the HIV-1 virus, in particular the *gag* and *pol* proteins. The statements in paragraph [0005] of the patent in suit concerning the high variability of the HIV antigens do not contradict this finding, because they relate to surface antigens and in particular to the gp120 protein.

23. In sum, the arguments put forward by the respondent fail to persuade the board. Hence, the main request meets the requirements of Article 84 EPC.

Article 83 EPC – sufficiency of disclosure

24. No objections under Article 83 EPC have been raised in appeal, and the board sees no reason to doubt that the requirements of Article 83 EPC are complied with.

Article 87 EPC – priority

25. The right to the priority of the earlier Cuban application filed on 28 February 2001 has not been contested in appeal. Hence, document (13), which was published after the priority date, does not form part of the state of the art to be considered for the assessment of novelty and inventive step.

Article 54 EPC – novelty

26. Claim 1 is directed to a "*... chimeric gene which contains fragments from different HIV-1 genes,* [...], *said fragments further coding for T helper (Th) cell epitopes from HIV and at least one B cell epitope that is the target of a monoclonal antibody (Mab) ...*". The board interprets this claim as requiring that both the T helper cell epitopes and the at least one B cell epitope are encoded by an HIV-1 gene fragment or fragments.

Document (17)

27. This document describes a recombinant canarypox virus construct expressing HIV-1 gp120, transmembrane gp41,

the *gag* and *protease* gene, and sequences containing CTL epitopes in *nef* and *pol* (see abstract and page 291, left-hand column, first paragraph under the heading "Methods"). It is undisputed that this construct contains fragments that code for overlapping CTL epitopes and at least one B cell epitope that is the target of a monoclonal antibody. However, the appellant disputed that document (17) describes a construct containing fragments from HIV-1 genes that code for T helper cell epitopes. In fact, this document does not mention such epitopes.

28. While the respondent counter-argued that, as apparent from Table 2 of the patent in suit, the regions of the *pol* protein described in document (17) (amino acids 172-219, 325-383, and 461-519) contained Th helper cell epitopes, it was disputed by the appellant that the numbering used in document (17) corresponds to that used in Table 2 of the patent, in particular as regards the *pol* fragment between aa 172-219 in document (17) compared to the fragment between aa 172-192 of the RT protein disclosed in Table 2 of the patent. The appellant contended - and the respondent did not dispute - that the amino acid numbering of HIV proteins may vary depending on the HIV isolate.

29. In the present case, the respondent has the onus of proof as regards the alleged presence of T helper cell epitopes in the *pol* peptides described in document (17). However, the respondent has not discharged its burden of proof. Although the objection of lack of novelty over document (17) was raised already in the notice of opposition, and although the board indicated in its communication that the question whether or not document (17) describes chimeric genes containing fragments from HIV-1 genes that code for HIV

T helper cell epitopes would have to be discussed at the oral proceedings, convincing evidence that the *pol* fragment between aa 172-219 described in document (17) codes for T helper cell epitopes has not been provided by the respondent.

30. The board thus finds that the main request is novel over document (17).

Document (18)

31. This document describes the design and construction of an experimental HIV-1 vaccine based on a chimeric gene construct (HIVA). It was common ground among the parties that the HIVA construct contains both CTL and T helper cell epitopes. Moreover, it contains a monoclonal antibody epitope at the C-terminus for easy detection of a full-size protein and estimation of the level of expression (see page 952, right-hand column, second sentence of the second full paragraph). However, it is not directly and unambiguously derivable from document (18) that the epitope that is the target of a monoclonal antibody is encoded by a fragment from a HIV-1 gene, as required by claim 1 (see paragraph 26 above). Consequently, the subject-matter of claim 1 (and claim 6) is novel over document (18).

Article 56 EPC – inventive step

32. The parties agreed that document (18) represents the closest state of the art. As stated above, the chimeric gene of claim 1 differs from the construct described in document (18) in that the epitope that is the target of a monoclonal antibody is encoded by a fragment from a HIV-1 gene. According to the patent in suit, the purpose of adding this epitope is similar to that

described in document (18), namely to facilitate the detection of the polypeptide encoded by the chimeric gene by immunochemical techniques.

33. The parties agreed that, starting from document (18) the problem to be solved is to provide an alternative chimeric gene. It is undisputed that this problem is solved by the chimeric gene defined in claim 1.

34. The respondent argued that it would have been obvious to a person skilled in the art to use a B cell epitope derived from sequences of the same HIV-1 virus. The board disagrees. In the passage bridging pages 953 and 954 of document (18), the authors of the study state that the vaccination approach described therein investigated the protective roles of helper and cytotoxic T lymphocyte responses in the absence of neutralizing antibody, as the HIVA immunogen did not attempt to induce antibodies neutralizing HIV because, in their view, the induction of a neutralizing antibody response against HIV "*... might compromise the T-cell immunogenicity of the current vaccination approach*". A skilled person reading this passage of document (18) and being aware that, upon use as a vaccine, a chimeric construct containing a HIV-1 B cell epitope could potentially induce a humoral immune response and elicit neutralizing antibodies, would be discouraged from incorporating such an epitope into the construct because, by doing so, the T cell immunogenicity and thus the efficacy of the vaccine could be compromised.

35. In the decision under appeal, the opposition division found that, in view of the statement quoted above, "*... the skilled practitioner would not be motivated to add to the construct of D18 a B-cell epitope nor had he a reasonable expectation of* success" (see section 14.6,

lines 8 to 10 of the second paragraph). The board considers this finding to be correct as far as a chimeric construct that includes a B cell epitope encoded by a fragment from a HIV-1 gene is concerned, as it is the case for the chimeric gene of claim 1. Similar considerations apply as regards the recombinant virus of claim 6.

36. Summarizing the above, the board concludes that an inventive step must be acknowledged for the claims of the main request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent with the following claims and a description to be adapted:

   Claims:
   Nos 1 to 24 of the main request received during the oral proceedings of 18 May 2018.

The Registrar: The Chairman:

L. Malécot-Grob B. Stolz

Decision electronically authenticated