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Datasheet for the decision of 18 May 2017

Case Number: T 2160/12 - 3.3.04

Application Number: 08785106.9

Publication Number: 2183278

IPC: C07K14/47, A61K39/00

Language of the proceedings: EN

Title of invention:
Novel immunogenic epitopes for immunotherapy

Applicant:
Immatics Biotechnologies GmbH

Headword:
Peptide binding to MHC class-I/IMMATICS BIOTECHNOLOGIES

Relevant legal provisions:
EPC Art. 54, 83, 84, 111(1), 113(1), 123(2)

Keyword:
Novelty - (yes)
Sufficiency of disclosure - (yes)
Claims - clarity (yes)
Amendments - allowable (yes)
Right to be heard - substantial procedural violation (no)
Appeal decision - remittal to the department of first instance (yes)

Decisions cited:
T 0951/92, R 0002/14

Catchword:

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Case Number: T 2160/12 - 3.3.04

D E C I S I O N
of Technical Board of Appeal 3.3.04
of 18 May 2017

Appellant: (Applicant)	Immatics Biotechnologies GmbH Paul-Ehrlich-Strasse 15 72076 Tübingen (DE)
Representative:	Krauss, Jan Boehmert & Boehmert Anwaltspartnerschaft mbB Patentanwälte Rechtsanwälte Pettenkoferstrasse 20-22 80336 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 23 July 2012 refusing European patent application No. 08785106.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairwoman	G. Alt
Members:	M. Montrone
	M. Blasi

Summary of Facts and Submissions

I. The appeal was lodged by the applicant (hereinafter "appellant") against the decision of the examining division to refuse European patent application No. 08 785 106.9. The application was filed as an international application and published as WO 2009/015842 (hereinafter "the application as filed") with the title "*Novel immunogenic epitopes for immunotherapy*".

II. The examining division held in the impugned decision that the application did not disclose the invention defined in claims 1, 4 and 8 of the request filed with the letter dated 3 May 2012 in a manner sufficiently clear and complete for it to be carried out by the skilled person. Moreover, the subject-matter of claims 10 to 12 lacked clarity.

With regard to sufficiency of disclosure, the examining division took the view that the peptides according to claim 1 were functionally defined by the feature "*which induces T cells cross-reacting with said peptide*", which implied that the peptides had to bind first to MHC molecules before they induced cross-reactive T cells, because these cells recognised exclusively MHC:peptide complexes, *i.e.* not the claimed peptides as such. The application disclosed that the peptide of SEQ ID NO. 1 bound to MHC class-I but not to class-II molecules (Figure 4). However, the examining division held that it was impossible for peptides longer than 10 amino acids to bind to MHC class-I molecules. Accordingly, since claim 1 encompassed peptides exceeding a length of 10 amino acids, the invention could not be carried out over substantially the whole ambit of that claim (see point 3 of the reasons).

Document D19 (see section VI below) disclosed two peptides longer than 10 amino acids binding to MHC class-I, but these seemed to be exceptions (see points 4 and 5 of the reasons). Moreover, the examining division took the view that the cleaving activity of the exopeptidases disclosed in document D19 was no guarantee that the peptides comprising SEQ ID NO. 1 according to claim 1 were generated, since it could result in fragments having little or nothing in common with that sequence (see point 6 of the reasons).

The same arguments applied to the retro-inverso peptidomimetics of the peptides comprising the sequence of SEQ ID NO. 1 according to claim 1 and the *in vitro* method according to claim 8, since peptides longer than 10 amino acids were not bound by MHC class-I molecules (see point 7, first paragraph, and point 8 of the reasons).

With regard to the retro-inverso peptidomimetics referred to in claim 1, the examining division held in addition that the application did not disclose that retro-inverso peptidomimetics bound to MHC class-I; the description only indicated that they bound to MHC class-II molecules (see point 7, second paragraph, of the reasons). Also, the application did not show that the peptide nucleic acids (PNAs) cited in claim 4 could encode the peptides according to claim 1 (see point 9 of the reasons).

Regarding Article 84 EPC, the examining division took the view that claims 10 to 12 lacked clarity, since the skilled person could not determine whether their subject-matter related to the compounds cited in claim 9, to their use or to both (see point 10 of the reasons).

III. With the statement of grounds of appeal, the appellant submitted that the main request corresponded to the claims underlying the impugned decision and filed auxiliary request 1 and documents D20 and D21 (see section VI below). In addition, the appellant argued that its right to be heard had been violated and requested that the appeal fee be reimbursed.

IV. By communication dated 3 May 2017, the appellant was informed of the board's preliminary opinion that claim 7 of the main request involved added subject-matter, that the application did not sufficiently disclose the invention defined in claim 8, and that claims 10 to 12 lacked clarity. The same applied to corresponding claims 7, 8 and 10 to 12 of auxiliary request 1.

V. By letter dated 11 May 2017, the appellant submitted a new main request which replaced all previous requests.

Claims 1, 4, 8, and 9 to 12 of the new main request read:

"1. A peptide comprising a sequence of SEQ. ID. No. 1 which induces T cells cross-reacting with said peptide, and wherein said peptide has an overall length of between 9 and 16 amino acids, or a retro-inverso peptidomimetic thereof.

4. A nucleic acid encoding a peptide according to any one of claims 1 o 3, wherein said nucleic acid is DNA, cDNA, PNA, CNA, RNA or combinations thereof.

8. An *in vitro* method for producing activated cytotoxic T lymphocytes (CTL), the method comprising contacting

in vitro CTL with antigen loaded human class I MHC molecules expressed on the surface of a suitable antigen presenting cell for a period of time sufficient to activate said CTL in an antigen specific manner, wherein said antigen is a peptide according to any of claims 1 or 2.

9. A peptide according to any one of claims 1 to 3, a nucleic acid according to claim 4, an expression vector according to claim 5, or a cell according to claim 7 for use as a medicament.

10. The peptide, the nucleic acid, the expression vector, or the cell, for use according to claim 9, wherein said medicament is active against cancer.

11. The peptide, the nucleic acid, the expression vector, or the cell, for use according to claim 9 or 10, wherein said medicament is a vaccine.

12. The peptide, the nucleic acid, the expression vector, or the cell, for use according to claim 10, wherein said cancer is selected from glioblastoma, colorectal cancer, pancreatic cancer, lung cancer, renal cancer or gastric cancer."

VI. The following documents are cited in this decision:

D19: Janeway's Immunobiology, Taylor & Francis, 7th revised edition, January 2008, p. 129-133

D20: Harris and Winssinger, Chemistry, 2005, 11(23), p. 6792-6801.

D21: Nair *et al.*, J. Immunol., 2003, 170(3), p. 1362-1373

VII. Oral proceedings before the board were held on 18 May 2017. At the end of the oral proceedings the chairwoman announced the board's decision.

VIII. The appellant's arguments may be summarised as follows:

Main request

Sufficiency of disclosure (Article 83 EPC)

Claim 1 was directed to peptides comprising the sequence of SEQ ID NO. 1 and retro-inverso peptidomimetics thereof having a length of between 9 and 16 amino acids which induced cross-reactive T cells - a property that depended on their prior binding to MHC class-I molecules.

The application disclosed that a peptide consisting of the sequence of SEQ ID NO. 1 having 9 amino acids bound to an MHC class-I molecule (Figure 4). Document D19 was a textbook in the field of immunology and represented the skilled person's common general knowledge at the filing date of the application. It disclosed that also peptides longer than 10 amino acids bound to MHC class-I molecules by either kinking or extending out of the binding cleft at the C-terminal end. Furthermore, document D20 disclosed that retro-inverso peptidomimetics bound to MHC class-I molecules. Accordingly, taking account of the skilled person's common general knowledge, the application contained sufficient information to put the invention defined in claims 1 and 8 into practice across their whole ambit.

Furthermore, peptide nucleic acids (PNAs) as referred to in claim 4 were commonly known in the art

(document D21). They were artificially synthesised polymers similar to DNA or RNA since they contained purine and pyrimidine bases and therefore encoded the peptides according to claim 1. They only differed from DNA or RNA in that their backbone was composed of repeating N-(2-aminoethyl)-glycine units linked by peptide bonds.

Thus, the main request met the requirements of Article 83 EPC.

Violation of the right to be heard and reimbursement of the appeal fee (Article 113(1) and Rule 103(1)(a) EPC)

A violation of the right to be heard under Article 113(1) EPC had occurred because the decision under appeal was based on two objections under Article 83 EPC on which the appellant had not been given an opportunity to comment before the decision was taken.

The examining division had raised a first new objection in points 3 to 5 of the reasons. It had stated that it was "*impossible*" that all peptides between 9 and 16 amino acids in length according to claim 1 bound to MHC class-I molecules. This implied that peptides of 9 or 10 amino acids in length also did not bind, and therefore that the objection applied to the entire subject-matter of claim 1. However, in point 3.1 of it's communication dated 28 March 2012, which had immediately preceded the impugned decision, the examining division had raised a corresponding objection only against peptides exceeding a length of 10 residues, *i.e.* peptides having 11 to 16 amino acids.

Hence, the objection made in the impugned decision differed substantially from that raised in the communication.

The examining division had raised a second new objection (see point 7, second paragraph, of the reasons) against the retro-inverso peptidomimetics according to claim 1, which it had said did not bind to MHC class-I molecules in general, *i.e.* irrespective of their length and sequence. This objection had not however been, raised at all in the communication dated 28 March 2012.

IX. The appellant requested that the decision under appeal be set aside and that the case be remitted to the examining division for further prosecution. It also requested that the appeal fee be reimbursed.

Reasons for the Decision

Main request

Amendments (Article 123(2) EPC)

1. In the following, the references are to passages and claims of the application as filed.

2. The subject-matter of claim 1 is derivable from claims 1 and 2, in combination with page 30, second and third paragraphs of the application.

3. The subject-matter of claims 2 to 4 and 6 to 12 is disclosed in claims 4, 6 to 8, 11, 14 and 19 to 22, respectively.

4. The subject-matter of claim 5 is derivable from claim 9 in combination with page 34, second and third paragraphs of the application.

5. The subject-matter of claim 7 is derivable from claim 7 in combination with page 16, last paragraph.

6. Therefore the board is satisfied that the subject-matter of claims 1 to 12 of the main request meets the requirements of Article 123(2) EPC.

Clarity and support (Article 84 EPC)

7. Present claims 10 to 12 are purpose-limited product claims, like claim 9 on which these claims depend. In the board's view, since all the claims now belong to the same claim category, the clarity objection raised by the examining division in the impugned decision has become moot. The examining division did not raise any further objections under lack of clarity and support against claims 1 to 12 and the board too has none.

8. Accordingly, the claims of the main request meet the requirements of Article 84 EPC.

Introduction to the invention

9. The invention concerns the peptide "*C20-001*" which is characterised by the amino acid sequence "*ALSNLEVTL*" (SEQ ID NO. 1) and peptides having a length of 9 to 16 amino acids comprising this sequence. This peptide is derived from the tumour-associated antigen "*chromosome 20 open reading frame 42*" (C20orf42), which is a focal

adhesion protein and involved in the attachment of the actin cytoskeleton to the plasma membrane or in integrin-mediated cellular processes. Moreover, C20orf42 is over-expressed in the majority of colon and lung carcinomas (see Table 1, line 1 on page 9 and page 10, second paragraph, page 11, lines 1 to 3 of the application).

10. The peptide C20-001 binds to major histocompatibility complex (MHC) class-I molecules, which are exposed on the surface of most cells having a nucleus (see page 1, last paragraph, Figure 4 and legend thereto on page 7, third paragraph of the application). The complex of MHC class-I and bound peptide is recognised by cytotoxic T cells expressing on their surface CD8 co-receptors and T-cell receptors (TCRs); the former bind to MHC class-I while only the latter bind to MHC class-I-peptide-complexes. The binding of both receptors to the same MHC class-I-peptide complex activates the cytotoxic T cells, which then lyse the cells presenting the complex, for example, tumour cells (see page 2, first and last paragraphs to page 3, first paragraph of the application).

Sufficiency of disclosure (Article 83 EPC)

11. Claim 1 is directed to peptides comprising a sequence of SEQ ID NO. 1 or retro-inverso peptidomimetics thereof having an overall length of between 9 and 16 amino acids, which are further characterised by the functional feature "*which induces T cells cross-reacting with said peptide*".

12. Accordingly, peptides comprising a sequence of SEQ ID NO. 1 having a length of 11 to 16 amino acids and retro-inverso peptidomimetics of SEQ ID NO. 1 having a length of 9 to 16 amino acids which all induce cross-reactive T cells are embodiments of claim 1 and will be considered in the following.

13. It is established case law of the boards of appeal that a claimed invention must be disclosed in the application as a whole in a manner sufficiently clear and complete for it to be carried out by the skilled person, taking also into account his common general knowledge. Furthermore, when a technical effect is a feature of a claim, whether or not this effect is achieved by substantially all embodiments of the claim is a question of sufficiency of disclosure (see Case Law of the Boards of Appeal of the EPO, 8th edition 2016 (hereinafter "CLBA"), II.C, II.C.4.4).

14. In the impugned decision the examining division essentially pointed out two deficiencies with regard to insufficiency of disclosure of the invention defined in claim 1, namely (i) the inability of peptides or retro-inverso peptidomimetics thereof which are longer than 10 amino acids to bind to MHC class-I molecules and (ii) the inability of retro-inverso peptidomimetics in general, *i.e.* independent of their length and amino acid sequence, to bind to MHC class-I molecules. It was common ground between the examining division and the appellant that those peptides claimed which had a length of either 9 or 10 amino acids did bind to MHC class-I molecules and that this was a prerequisite for the induction of cross-reactive T cells.

15. It has therefore to be assessed whether the application discloses evidence that the peptides or retro-inverso peptidomimetics under consideration (see point 12 above) bind to MHC class-I molecules or whether the skilled person reading the application in the light of his common general knowledge would consider that these peptides or retro-inverso peptidomimetics were suitable for binding to MHC class-I molecules.

16. The application does not explicitly disclose that the peptides or retro-inverso peptidomimetics under consideration bind to MHC class-I molecules. It reports on page 3, third paragraph that "*For a peptide to trigger (elicit) a cellular immune response, it must bind to an MHC-molecule. This process is dependent on the allele of the MHC-molecule and specific polymorphisms of the amino acid sequence of the peptide. MHC-class-I-binding peptides are usually 8-10 amino acid residues in length and usually contain two conserved residues ("anchors") in their sequence that interact with the corresponding binding groove of the MHC-molecule. In this way each MHC allele has a "binding motif" determining which peptides can bind specifically to the binding groove*" (emphasis added).

17. The application further discloses that the peptide "*C20-001*" characterised by the amino acid sequence "*ALSNLEVTL*" (SEQ ID NO. 1) consisting of 9 amino acids binds to MHC class-I molecules (see Table 1, Figure 4 and legend thereto on page 7, third paragraph).

18. Document D19 is a standard textbook in the field of immunology and therefore represents the common general knowledge of the skilled person at the filing date of the application, as was not contested by the examining division. It discloses on page 129, second paragraph

that "*Peptides that bind to MHC class-I molecules are usually 8—10 amino acids long. Longer peptides are thought to be able to bind, particularly if they can bind at their carboxy terminus, but are subsequently cleaved by exopeptidases present in the endoplasmic reticulum, which is where MHC class I molecules bind peptides. The peptide lies in an elongated conformation along the cleft; variations in peptide length seem to be accommodated, in most cases, by a kinking in the peptide backbone. However, two examples of MHC class I molecules in which the peptide is able to extend out of the cleft at the carboxy terminus suggest that some length variation can also be accommodated in this way*" (emphasis added).

19. In the board's view, the skilled person, reading that "*MHC-class-I-binding peptides are usually 8-10 amino acid residues in length*" in the paragraph of the application cited in point 16 above in the light of his common general knowledge as represented by document D19 (see point 18 above) would derive from the application that also peptides with more than 10 amino acids bind to MHC class-I molecules. This is so because document D19 explicitly discloses that these peptides may bind to MHC class-I molecule, in particular at their C-terminal end, variations in length being accommodated either by "*kinking*", *i.e.* forming a curve or sharp twist, or by extending out of the binding cleft. Furthermore, the board is of the opinion that the wordings "*in most cases*" or "*suggest that some length variation can also be accommodated in this way*" in document D19 would indicate to the skilled person that more than the two explicitly mentioned examples of longer class I-binding peptides are known in the prior art and that therefore the binding of peptides longer than 10 amino acids is not an exception. It follows

from this that the examining division's argument that the binding of peptides longer than 10 amino acids to MHC class-I molecules is "*impossible*" does not convince the board.

20. The reasons set out in point 19 above apply equally to the retro-inverso peptidomimetics according to claim 1 exceeding a length of 10 amino acids and to the invention defined in claim 8.

21. The examining division further took the view that there was no guarantee that the exopeptidases disclosed in document D19 which cleaved longer peptides into shorter ones would cleave in such a manner that the peptides according to claim 1 were generated. Rather, their cleaving action could result in peptide fragments having little or nothing in common with that encoded by SEQ ID NO. 1.

22. The board is not convinced by this argument. Document D19 discloses that the exopeptidases cleave peptides only "*subsequently*" to their binding to MHC class-I proteins (see point 18 above). Further, as mentioned in point 17 above, the application discloses that a peptide consisting of the sequence of SEQ ID NO. 1 binds to MHC class-I molecules. It follows from this that peptides once bound to MHC class-I are protected from the proteolytic activity of the exopeptidase, since otherwise MHC-bound peptides would not exist. Therefore, MHC-bound fragments of peptides having little or nothing in common with the sequence of SEQ ID NO. 1 would not be generated by the exopeptidase.

23. In a second line of argument with regard to insufficiency of disclosure of the retro-inverso peptidomimetics according to claim 1, the examining

division held that the application disclosed that they bound to MHC class-II molecules, but not that they bound to MHC class-I molecules. A similar objection was raised against the peptide nucleic acids (PNAs) referred to in claim 4, i.e. that the application did not disclose an example of these molecules encoding the peptides according to claim 1.

24. Article 83 EPC stipulates that an invention must be disclosed "*in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art*". Thus, it does not require a claimed invention to have actually been carried out by the applicant. Moreover, according to Rule 42(1)(e) EPC, the description must describe in detail at least one way of carrying out the invention claimed. Consequently, the presence of an example is not mandatory in the application. Therefore, just because an application mentions an effect - in this case the binding of retro-inverso peptidomimetics to MHC class-I molecules - but does not experimentally disclose that it actually occurs is not a sufficient reason for the board to doubt that the effect exists. Thus, for this reason alone the examining division's objections with regard to the retro-inverso peptidomimetics according to claim 1 or to the PNAs according to claim 4 do not convince the board.

25. Furthermore, the board notes that document D20 discloses the binding of retro-inverso peptidomimetics to MHC class-I molecules (see abstract). Moreover, document D21 reports that PNAs are standard molecules in the field of molecular biology which are structurally closely related to DNA or RNA molecules because they differ only in their backbone structure (see abstract, Figure 6). In view of this close

structural relationship to DNA and RNA the board has no doubts that PNAs are able to encode the claimed peptides. Therefore, for these reasons too the objections of the examining division fail.

26. Accordingly, the board concludes that the main request meets the requirements of Article 83 EPC.

Novelty (Article 54 EPC)

27. The board agrees with the examining division's view that none of prior art documents cited are detrimental to the novelty of the subject-matter of any of claims 1 to 12 and thus the main request meets the requirements of Article 54 EPC.

Remittal (Article 111(1) EPC)

28. Since the examining division has not addressed the issue of inventive step, the board, exercising its discretion under Article 111(1), second sentence, EPC, and in accordance with the appellant's request, remits the case to the examining division for further prosecution.

Violation of the right to be heard and reimbursement of the appeal fee (Article 113(1) and Rule 103(1)(a) EPC)

29. The appellant requested reimbursement of the appeal fee under Rule 103(1)(a) EPC, arguing that points 3 to 5 and 7 of the decision under appeal contained two new objections under Article 83 EPC against the invention defined in claim 1 which had not been communicated to

it before, and that this had deprived it of an opportunity to comment on them before the decision was taken; that was in breach of Article 113(1) EPC.

30. According to Rule 103(1)(a) EPC, the appeal fee shall be reimbursed where the board deems an appeal to be allowable, if such reimbursement is equitable by reason of a substantial procedural violation.

31. The present appeal is being allowed because the board has overturned the examining division's finding concerning sufficiency of disclosure on which the impugned decision was essentially based (see point 26 above). The fact that the case is being remitted to the examining division for further prosecution is no impediment to a possible refund.

32. A violation of Article 113(1) EPC may constitute a substantial procedural violation justifying reimbursement of the appeal fee. Article 113(1) EPC stipulates that decisions of the European Patent Office may only be based on grounds or evidence on which the parties concerned have had an opportunity to present their comments. The right to be heard is an important procedural right intended to ensure that no party is caught unawares by grounds and evidence, in a decision turning down its request, on which that party has not had the opportunity to comment (see e.g. R 2/14, point 6 of the Reasons). "*Grounds or evidence*" under Article 113(1) EPC are to be understood as meaning the essential legal and factual reasoning on which the decision is based (see e.g. T 951/92, OJ EPO 1996, 53, point 3(v) of the Reasons).

33. With regard to the first objection allegedly made for the first time in the impugned decision, the examining

division's arguments in point 3.1 of its communication dated 28 March 2012 (hereinafter the "communication"), immediately preceding the impugned decision read as follows "*The peptides of claims 1 are peptides having between 9 to 16 residues or its retro-inverso peptidomimetic and must bind to T cell corss-reacting the said peptide. Sufficiency of disclosure is not met, because it is impossible that peptides longer than 10 residues bind to the MHC complex and therefore being capable of activating T cells*".

34. The corresponding objection in the impugned decision (see point 3 of the reasons) reads "*The examining division considers that the requirements of sufficiency of disclosure are not met, because it is impossible that all the peptides between 9 to 16 amino acids bind to the MHC molecules, in particular those peptides longer than 10 amino acids and therefore they cannot induce T cells*" (emphasis added).

35. In the board's view, both statements raise the same issue, *i.e.* that peptides having a length of between 11 and 16 amino acids cannot bind to MHC class-I molecules, a property which however is needed to induce cross-reactive T cells as required by the claim. In other words, the examining division held that the invention defined in claim 1 could not be carried out over the whole ambit of the claim. Indications for this are the cited ranges of "*9 to 16 residues*" and "*peptides longer than 10 residues*" in the communication (see point 33 above) and the ranges "*all the peptides between 9 to 16 amino acids*" and "*in particular those peptides longer than 10 amino acids*" cited in the impugned decision (see point 34 above).

36. The appellant argued that the objection in the impugned decision was new, because the statement "*all the peptides between 9 to 16*" (see point 34 above) implied that the examining division's view was that peptides of 9 and 10 amino acids also did not bind to MHC class-I molecules, a position which differed from that taken in the communication (see point 33 above). A further indication that the objection had substantially changed was derivable from point 5, second paragraph of the impugned decision, which stated that "*As regards binding to MHC class I, it is noted that the two peptides extended out of the cleft mentioned in the textbook seem to be an exception of what the textbook discloses, namely that MHC class I molecules only bind those peptides having between 8 to 10 amino acids. The application lacks sufficiency of disclosure as to any peptide comprising SEQ. ID. No.: 1 and having more than 9 (length of the peptide of SEQ. ID. No.: 1) amino acids and binding to MHC class I molecules*" (emphasis added). In particular, the indication of "*more than 9*" implied that the examining division held that peptides of 10 amino acids in length also did not bind.

37. The board does not agree. In the communication, the examining division indicated that it was "*impossible that peptides longer than 10 residues bind to the MHC complex*". Against this background, the reference to "*all peptides*" in conjunction with "*in particular those peptides longer than 10 amino acids*" in point 3 of the reasons of the decision (see point 34 above) can, in the circumstances of the present case, be interpreted only in the sense that peptides having 11 to 16 amino acids in length do not bind to MHC class-I molecules and that this was the reason why it was held "*impossible that all the peptides between 9 to 16 amino acids bind to the MHC molecules*". In other words, the

board understands the term "*in particular*" in this context as the announcement of the reason given by the examining division as to why not all peptides between 9 and 16 amino acids bind to the MHC molecules, and not in the sense that the examining division was expressing its view that peptides with a length of 9 and 10 amino acids would not bind.

38. This interpretation is not changed by the statement "*more than 9 [...] amino acids*" in point 5 of the reasons (see point 36 above), because the passage as a whole further indicates "*that MHC class I molecules only bind those peptides having between 8 to 10 amino acids".* Moreover, the expression "*peptides longer than 10 amino acids*" in point 3 of the reasons (see point 34 above) addresses the same issue, albeit in other words. Both phrases cited imply that the examining division took the view that peptides with 10 amino acids bind to MHC class-I molecules, which contradicts the single statement "*more than 9 [...] and binding to MHC class I molecules*" (see point 36), since the above-cited wording of point 3 excludes 10. Therefore, in the board's view, the number "*9*" in point 5 of the reasons appears rather to be a clerical error and should have read "*10*".

39. In a further line of argument with regard to insufficiency of disclosure of the retro-inverso peptidomimetics according to claim 1, the examining division held in point 7 of the impugned decision that "*The application also lacks disclosure as to any retro-inverso peptidomimetic binding to MHC class I molecules. Only the description indicates that some retro-inverso peptidomimetics have been shown to bind to MHC molecules (reference to Meziere et al on p. 30 of the description and available under http://*

www.jimmunol.org/content/159/7/3230.full.pdf+html). However, this document relates to retro-inverso peptidomimetics binding to MHC class II molecules, whereas the present peptide binds to class I molecules". The examining division had not raised this objection in any earlier communication.

40. Therefore the board notes that the appellant was not given an opportunity to comment on this objection before the examining division took its decision. Accordingly, the appellant's right to be heard under Article 113(1) EPC has been violated in this respect.

41. However, in the board's view, this does not warrant reimbursement of the appeal fee. For such reimbursement to be equitable, there must be a causal link between a substantial procedural violation and the filing of the appeal (see CLBA, IV.E.8.6.1).

42. In the present case, the board cannot see any such causal link between the violation of the appellant's right to be heard and the need to file an appeal, because it would have had to file the appeal anyway, in view not only of the examining division's first objection under Article 83 EPC (in respect of which the board found no violation of the right to be heard see points 33 to 38 above) but also of the objection under Article 84 EPC in relation to claims 10 to 12. The second objection indicated in point 39 above was raised only additionally against the retro-inverso peptidomimetics referred to in claim 1, since the first objection - that peptides longer than 10 amino acids did not bind to MHC class-I molecules - was also directed against them (see point 7, first paragraph of the impugned decision). It was therefore incidental in the sense that - leaving aside the particular

formulation - the impugned decision is based on objections on which the appellant had the opportunity to comment, and to reverse that decision it would have had to file an appeal, and also pay the appeal fee.

43. Lastly, the fact that the examining division's reasoning on sufficiency of disclosure has not convinced the board (see point 26 above) amounts to an error of judgement which, according to established jurisprudence, does not constitute a procedural violation (see CLBA, IV.E.8.4.5).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted for further prosecution on the basis of claims 1 to 12 of the main request filed with letter dated 11 May 2017.

3. The request for reimbursement of the appeal fee is refused.

The Registrar: The Chairwoman:

L. Malécot-Grob G. Alt

Decision electronically authenticated