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**Datasheet for the decision
of 29 March 2012**

Case Number: T 1572/07 - 3.3.08

Application Number: 01961827.1

Publication Number: 1307557

IPC: C12N 15/12

Language of the proceedings: EN

Title of invention:
Endothelial cell expression patterns

Applicant:
THE JOHNS HOPKINS UNIVERSITY

Headword:
TEM 17/THE JOHNS HOPKINS UNIVERSITY

Relevant legal provisions:
EPC Art. 123(2)

Relevant legal provisions (EPC 1973):
-

Keyword:
"All requests - added matter (yes)"

Decisions cited:
G 0010/93

Catchword:
-



Case Number: T 1572/07 - 3.3.08

D E C I S I O N
of the Technical Board of Appeal 3.3.08
of 29 March 2012

Appellant:
(Applicant)

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 10 April 2007
refusing European patent application
No. 01961827.1 pursuant to Article 97(1) EPC
1973.

Composition of the Board:

Chairman: R. Moufang
Members: M. R. Vega Laso
T. J. H. Mennessier

Summary of Facts and Submissions

I. European patent application No. 01961827.1 with the title "Endothelial cell expression patterns" was filed as international application under the Patent Cooperation Treaty with 86 claims. The application was published as WO 02/010217 (referred to in the following as "the application as filed").

II. Claim 11 of the **application as filed** read as follows:

"11. A method of inhibiting neoangiogenesis, comprising:
administering to a subject in need thereof an effective amount of an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a TEM protein selected from the group consisting of: 1, 9, 17, 19, 22, and 44, as shown in SEQ ID NO: 196, 212, 230, 232, 238, and 271, respectively, whereby neoangiogenesis is inhibited."

III. In a decision posted on 10 April 2007, the examining division of the European Patent Office found that the subject-matter of the claims according to the main request and the second auxiliary request then on file did not meet the requirements of Articles 54 and 56 EPC 1973, and that the amendments introduced into claim 1 according to the first auxiliary request then on file offended against Article 123(2) EPC 1973. Consequently, the examining division decided to refuse the application pursuant to Article 97(1) EPC 1973.

IV. The applicant (appellant) filed an appeal against the decision of the examining division. Together with the statement of grounds of appeal, the appellant submitted

three sets of claims as, respectively, main request, first and second auxiliary request. The fresh sets of claims of the main request and first auxiliary request differ from those of the corresponding requests on which the decision under appeal was based, in that claim 26 of each of the present requests is drafted in a "second medical use" format. The claims of the second auxiliary request are identical to those of the corresponding request in examination.

V. Claims 1 and 11 of the **main request** read as follows:

"1. An isolated molecule comprising an antibody variable region which specifically binds to the protein shown in SEQ ID NO: 230.

11. Use of the isolated molecule according to claim 1 in the manufacture of a medicament for inhibiting neoangiogenesis."

Claims 2 to 10 and claims 12 to 16 are directed to various embodiments of, respectively, the isolated molecule of claim 1 and the use of claim 11. Claim 17 relates to an isolated and purified human transmembrane protein as shown in SEQ ID NO: 230, and claims 18 and 19 to isolated and purified nucleic acid molecules comprising a sequence coding for the transmembrane protein. Claims 20 and 21 concern recombinant host cells. Claims 22, 23 and 33 relate to the use of, respectively, the nucleic acid of claim 18 or 19, the transmembrane protein of claim 17 or a cell expressing the transmembrane protein for inducing an immune response. Independent claims 24, 25 and 32 are directed to various methods for identifying a ligand involved in

endothelial cell regulation. Claim 26 relates to the use of a molecule as defined in claim 1 for identifying regions of neoangiogenesis in a patient, and claim 27 to a method of screening for neoangiogenesis in a patient. Finally, independent claims 28 to 31 are directed to various methods for identifying candidate drugs for treating tumours.

VI. Claim 1 of the **first auxiliary request** reads as follows:

"1. An isolated molecule comprising an antibody variable region which specifically binds to the protein shown in SEQ ID NO: 230, wherein the antibody variable region does not specifically bind to a protein having the following sequence:

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xrpqpepgpp pssgpgqqag rgqvraptmr gelwllvlvl reaaralspg pgaghdegpg
sgwaakgtvr gwnrraresp ghvsepdrdq lsqdlgggtl amdtlpdnrt rvvednhsyy
vsrlygpsep hsrelwvdva eanrsqvkih tilsnthrqa srvvlsfdfp fyghplrquit
iatggfifmg divhrmltat qyvaplmanf npgysdnstv vyfdngtvfv vqwdhvyllqg
wedkgsftfq aalhhdgriv faykeipmsv peisssqhpv ktglsdafmi lnpspdvpes
rrrsifeyhr ieldskvts msaveftplp tclqhrscda cmssdltnfc swchvlqrccs
sgfdryrqew mdygcaqae grmcedfjde dhdsaspdtf.
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Claims 2 to 33, and in particular claim 11 are identical to the corresponding claims of the main request.

VII. Claim 1 of the **second auxiliary request** reads as follows:

"1. Use of an isolated molecule comprising an antibody variable region which specifically binds to the protein shown in SEQ ID NO: 230 in the manufacture of a medicament for inhibiting neoangiogenesis."

Claims 2 to 6 and claims 7 to 10 correspond to, respectively, claims 12 to 16 and claims 28 to 31 of the main request.

- VIII. The examining division did not rectify the decision to refuse the application. The appeal was remitted to the boards of appeal (Article 109 EPC).
- IX. The board summoned the appellant to oral proceedings. In a communication under Rule 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA) attached to the summons, the board, after drawing the appellant's attention to decision G 10/93 of the Enlarged Board of Appeal (OJ EPO 1995, 172), raised fresh objections under Article 123(2) EPC, in particular in respect of claims 11 to 16 of each of the main request and the first auxiliary request (see paragraphs 8 to 10 and 31 of the communication), and in respect of claims 1 to 6 of the second auxiliary request (see paragraph 37 of the communication). Further objections were raised under Articles 84 and 83 EPC. The board also expressed a provisional opinion on some of the findings in the decision under appeal, in particular those concerning the validity of the priority, novelty and inventive step.
- X. The appellant did not submit any observations in reply to the communication, but informed the board that it would not attend the oral proceedings. The requests set out in the statement of grounds of appeal were maintained.

- XI. At the oral proceedings held on 29 March 2012 the appellant was not represented.
- XII. The appellant requested in writing that the decision under appeal be set aside and that a patent be granted on the basis of the claims according to any of the main request, first auxiliary request or second auxiliary request filed together with the statement of grounds of appeal.

Reasons for the Decision

Main request - Article 123(2) EPC

1. Claim 11 as presently on file appears to be derived from independent claim 11 of the application as filed (see paragraph II above), which related to a method of inhibiting neoangiogenesis using an isolated molecule comprising an antibody variable region which specifically binds to **an extracellular domain of, inter alia**, the protein shown in SEQ ID NO: 230. The same subject-matter is disclosed in paragraph [08] of the application as filed.
2. Claim 11 on file, which has been re-formulated as a "second medical use" claim, does not specify any features of the isolated molecule, but refers in this respect to claim 1. In claim 1 the isolated molecule is defined as "... comprising an antibody variable region which specifically binds to the protein shown in SEQ ID NO: 230". Hence, claim 1 does not specify a particular protein domain to which the isolated molecule binds.

3. It follows from the above that claim 11 as presently on file is not limited to the use of isolated molecules comprising an antibody variable region which binds to an extracellular domain of the defined protein in the manufacture of a medicament for inhibiting angiogenesis, but encompasses also the use of those molecules comprising an antibody variable region which binds to domains of the protein **other** than the extracellular domain, i.e. the transmembrane or the intracellular domain.

4. There is, however, no basis in the application as filed for this subject-matter. Thus, as a result of the amendment to omit the wording "*an extracellular domain of*", claim 11 on file contains subject-matter which extends beyond the content of the application as filed. Consequently, claim 11 offends against Article 123(2) EPC. Claims 12 to 16 depending from claim 11 suffer from the same deficiency.

First and second auxiliary requests - Article 123(2) EPC

5. By virtue of the reference to claim 1, which includes a disclaimer (see paragraph VI above), the use of an isolated molecule comprising an antibody variable region which binds to the particular protein specified in claim 1 is excluded from the scope of claim 11. However, for the reasons given above in respect of claim 11 of the main request, claim 11 of the first auxiliary request - as well as dependent claims 12 to 16 - include subject-matter which extends beyond the content of the application as filed.

6. The same reasons apply to claim 1 of the second auxiliary request, which is directed to the same use as claim 11 of the main request, but specifies the features defining the isolated molecule of claim 1 of the higher-ranking request (see paragraph VII above). Consequently, the amendments introduced into claim 1 of the second auxiliary request contravene Article 123(2) EPC.

7. For the reasons given above, none of the requests on file can serve as a basis for the grant of a patent. Thus, there is no need for the board to decide on further issues under Article 123(2) EPC or on the issues under Articles 84, 83 and 54 raised in the board's communication under Article 15(1) RPBA.

Article 113(1) EPC

8. The reasons given above for the adverse findings on Article 123(2) EPC were communicated to the appellant in the communication sent by the board pursuant to Article 15(1) RPBA. However, the appellant did not present any comments in this respect, nor attended the oral proceedings to which it had been summoned.

9. Article 113(1) EPC has been complied with.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

A. Wolinski

R. Moufang