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Datasheet for the decision of 7 January 2025

Case Number: T 0841/23 - 3.3.04

Application Number: 17784701.9

Publication Number: 3522923

IPC: A61K39/395, A61P35/00

Language of the proceedings: EN

Title of invention:
Dosing regimen of avelumab for the treatment of cancer

Applicant:
Pfizer Inc.
Merck Patent GmbH

Headword:
Avelumab flat dosing/PFIZER INC.

Relevant legal provisions:
RPBA 2020 Art. 13(1), 13(2)

Keyword:
Amendment to appeal case - suitability of amendment to resolve issues raised (no)

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Case Number: T 0841/23 - 3.3.04

D E C I S I O N
of Technical Board of Appeal 3.3.04
of 7 January 2025

Appellant: (Applicant 1)	Pfizer Inc. 235 East 42nd Street New York, NY 10017 (US)
Appellant: (Applicant 2)	Merck Patent GmbH Frankfurter Strasse 250 64293 Darmstadt (DE)
Representative:	Maschio & Soames IP Ltd 30 Carlton Crescent Southampton SO15 2EW (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 21 December 2022 refusing European patent application No. 17784701.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairwoman	M. Pregetter
Members:	O. Lechner
	R. Romandini

Summary of Facts and Submissions

I. The applicants (appellants) filed an appeal against the decision of the examining division refusing European patent application No. 17 784 701.9.

II. In the decision under appeal, the examining division held that the subject-matter of claims 2 and 5 to 8 of the main request (filed on 1 November 2022) lacked novelty. The subject-matter of claims 1 to 9 of the main request, to the extent that it was novel, was found not to involve an inventive step.

The subject-matter of claims 2 and 5 to 8 of the auxiliary request (filed on 1 December 2022) was found to lack novelty. In addition, claims 2, 5 and 8(iii) and dependent claims 6, 7 and 9 of the auxiliary request were found, to the extent that they were novel, not to involve an inventive step.
According to the examining division, for the subject-matter of the auxiliary request, an inventive step might only be recognised for independent claims 1, 3, 8(i) and 8(ii) as well as claims 4, 6, 7 and 9 dependent on these claims.

III. With the statement of grounds of appeal, the appellants resubmitted the set of claims according to the main request and the auxiliary request as dealt with in the decision under appeal.

IV. Claim 5 of the main request and the auxiliary request, on which the decision under appeal was based, read as follows:

(a) Main request:

"5. Avelumab for use in treating a cancer in a patient, according to a dosing regimen of 800 mg flat dose Q2W."

(b) Auxiliary request

"5. Avelumab for use in treating a cancer in a patient, according to a dosing regimen of 800 mg flat dose Q2W, wherein the cancer is a solid tumour."

V. The board expressed its preliminary opinion in a communication under Rule 100(2) EPC, stating that, *inter alia*, the subject-matter of the independent claims under consideration lacked an inventive step. In response, by letter dated 17 June 2024, the appellants withdrew their former main and auxiliary request and submitted a new main request along with new auxiliary requests 1 and 2.

VI. On 31 October 2024, the board issued summons and a communication pursuant to Article 15(1) RPBA, which informed the appellants that none of the newly filed claim requests were considered admissible.

VII. By letter dated 17 December 2024, the appellants submitted a new auxiliary request 2.

VIII. Oral proceedings took place as scheduled.
At the end of oral proceedings, the Chairwoman announced the decision of the board.

IX. Claim requests

(a) Main request

"1. Avelumab for use in treating a cancer in a patient, according to a dosing regimen of 800 mg flat dose Q2W, wherein the cancer is a solid tumour.

2. Avelumab for use according to claim 1, wherein the cancer is selected from the group consisting of MCC, NSCLC, RCC, bladder cancer, ovarian cancer, head and neck cancer and gastric cancer.

3. Avelumab for use according to claim 3, wherein the cancer is selected from MCC and NSCLC.

4. Avelumab for use according to any of the preceding claims, wherein the tumor proportion score of PD-L1 expression is 1% and above, 5% and above, 10% and above, 20% and above, 30% and above, 40% and above, 50% and above, 60% and above, 70% and above, 80% and above, or 95% and above."

(b) Auxiliary request 1

Auxiliary request 1 is identical to the main request except that claim 4 has been deleted.

(c) Auxiliary request 2

"1. Avelumab for use in treating a cancer in a patient, according to a dosing regimen of 800 mg flat dose Q2W, wherein the cancer is selected from the group consisting of MCC, NSCLC, RCC, bladder cancer, ovarian cancer, head and neck cancer and gastric cancer.

2. Avelumab for use according to claim 1, wherein the cancer is selected from MCC and NSCLC."

X. Reference is made to the following documents:

D2: WO 2016/137985 A1

D3: WO 2016/089873 A1

D9: D. Wang et al., J Clin Pharmacol 49(9), 2009, 1012-24

XI. The appellants' arguments can be summarised as follows.

Admittance of the main request and auxiliary requests 1 and 2

The case had not changed since the appellants had consistently argued in favour of novelty and inventive step for claims relating to flat dosage administration.

The board, in its communication pursuant to Rule 100(2) EPC, had contradicted the examining division's decision in at least two respects. Firstly, the board had alleged that the claimed subject-matter was only supported for "certain tumour types" rather than all solid tumours. Secondly, the board had raised objections to the claims that specified weight-based dosages.
The board's preliminary opinion that claims 1 to 3 and 8(ii) and (iii) might not be allowable, even if limited to solid tumours, was a new development as the examining division had previously indicated that the subject-matter of these claims involved an inventive step. In reaction to the board's preliminary opinion, claims 1 to 4 and 7 to 8 of the previous main request

were deleted at the earliest opportunity, choosing this course of action instead of contesting the board's new position.

Although the deletion of subject-matter on weight-based dosing regimens did not address all objections brought forward by the board in its communication pursuant to Rule 100(2) EPC, it responded to the new objections raised by the board and was an economical and reasonable action.

From closest prior-art document D2, the skilled person would derive that the appropriate dose for avelumab is 10 mg/kg once every two weeks (Q2W). The minimal data provided on 20 mg/kg Q2W did not allow the skilled person to conclude what effect an increase in the frequency of administration would have since the frequency of administration is the same. Document D2 did not provide any teaching or suggestion on a flat dose regimen for avelumab.

Document D3 did not show that the flat dosages proposed for some non-avelumab anti-PD-L1 antibodies resulted in any therapeutic effect.

Document D9 discussed flat dosage approaches for monoclonal antibodies in general and emphasised the unpredictability of dosing regimens, noting that the ideal regimen depends on factors such as response variability, therapeutic window, body size and, importantly, the individual antibody to be used. Selecting an optimal regimen required detailed pharmacokinetic and pharmacodynamic data, and depending on the antibody, the preferred approach might be either fixed or weight-based dosing. Importantly, document D9 did not provide any information on predicting the

safety or effectiveness of the 800 mg Q2W flat dosing regimen for avelumab. Thus, there was no reasonable expectation of success that a flat dose for avelumab could be used.

XII. The appellants requested that:
- the examining division's decision to refuse the patent application be set aside and a patent be granted on the basis of the main request or auxiliary request 1 (as submitted by letter dated 17 June 2024) or auxiliary request 2 (as submitted by letter dated 17 December 2024)
- the main request and auxiliary requests 1 and 2 be admitted

Reasons for the Decision

Admittance of the main request and auxiliary request 1 - Article 13(1) RPBA

1. The appellants filed the main request and auxiliary request 1 by letter dated 17 June 2024, within the period specified in the board's communication under Rule 100(2) EPC. While they provided detailed reasoning on inventive step, they failed to comply with the requirements of Article 13(1) RPBA as they did not offer a substantive justification for submitting the amended claim requests at this late stage of the appeal proceedings.

2. Only in response to the board's further communication under Article 15(1) RPBA of 31 October 2024 - where the board preliminarily deemed the claim requests not admissible - did the appellants provide a justification for the late filing in their letter dated 17 December 2024.

3. Under Article 13(1) RPBA, any amendment to a party's appeal case after the filing of the grounds of appeal or reply must be justified by the party. It may be admitted only at the discretion of the board. The board shall exercise its discretion in view of, *inter alia*, the current state of the proceedings, the suitability of the amendment to resolve the issues which were raised by the board, whether the amendment is detrimental to procedural economy, and, in the case of an amendment to a patent application or patent, whether the party has demonstrated that any such amendment, *prima facie*, overcomes the issues raised by the board and does not give rise to new objections.

4. The filing of an amended set of claims in reaction to the board's preliminary opinion - even if the amendment is limited to the deletion of (independent) claims, and the remaining claims were already part of the claim set in the appeal proceedings - constitutes an amendment to the appeal case. The admittance of such an amendment is at the discretion of the board. The relevant criteria are set out in Article 13(1) RPBA.

5. In a communication pursuant to Rule 100(2) EPC, the board expressed its preliminary opinion that, *inter alia*, the subject-matter relating to a flat dose of 800 mg avelumab Q2W did not involve an inventive step when starting from document D2 as the closest prior art.

Furthermore, the board found that the subject-matter of claim 5 of the claim requests pending at that time, which is identical to claim 1 of the main request and auxiliary request 1, lacked an inventive step (see points 6 to 15).

Document D2, being the most promising springboard, discloses the use of a programmed cell death-protein 1 (PD-1) / programmed cell death-ligand 1 (PD-L1) inhibitor, preferably avelumab in an amount of 10 to 20 mg/kg Q2W, for use in the treatment of PD-L1-positive cancers, including solid tumours such as non-small cell lung cancer (NSCLC), Merkel cell carcinoma (MCC), renal cell carcinoma (RCC), bladder cancer, ovarian cancer, head and neck cancer, and gastric cancer (see point 7 of the board's Rule 100(2) EPC communication).

Assuming that a 10 mg/kg avelumab Q2W dosage regimen is not identical to an 800 mg avelumab Q2W flat dosage regimen, the objective technical problem was identified as the provision of an alternative dosage regimen (see points 8 to 11 of the board's Rule 100(2) EPC communication).

This also represents the appellants' position, as can be seen in both the minutes of the oral proceedings before the board (see page 2, paragraph 1) and their statement of grounds of appeal (see point 6.2). Therefore, only the issue of *prima facie* obviousness remains to be judged.

6. The board considered subject-matter relating to an 800 mg avelumab flat dose Q2W obvious in view of the combined teachings in document D2 and document D3 or D9 and therefore to lack an inventive step (see points 12 to 15, especially point 14, of the board's Rule 100(2) EPC communication).

Nothing substantial has changed since then. Claim 1 of the main request and auxiliary request 1 (both as filed

by letter dated 17 June 2024) remained identical to independent claim 5 of auxiliary request 1 as filed with the statement of grounds of appeal (see points III. to VII. above).

Therefore, the claimed subject-matter is *prima facie* still considered to be obvious when combining the disclosure of document D2 with that of document D3 or D9.

7. The appellants failed to show how the amendments in the main request or auxiliary request 1 would *prima facie* overcome the board's inventive-step objections. As a result, these requests were not admitted into the proceedings.

Admittance of auxiliary request 2 - Article 13(2) RPBA

8. Auxiliary request 2 was submitted by letter dated 17 December 2024. It is identical to auxiliary request 2 filed by letter of 17 June 2024 (see above, point V. of this decision), except for a corrected dependency in claim 2.

9. The board considers that when deciding whether to admit an amendment made at this stage of the proceedings - i.e. in exercising its discretion in accordance with Article 13(2) RPBA, the third level of the convergent approach - it may also rely on criteria applicable at the second level of the convergent approach, i.e. as set out in Article 13(1) RPBA (see point3. above).

10. Since the limitation of claim 1 to the treatment of MCC, NSCLC, RCC, bladder cancer, ovarian cancer, head and neck cancer, and gastric cancer (i.e. the subject-matter of claim 2 of the main request and auxiliary

request 1) is not found suitable for overcoming the inventive-step objections raised against the main request and auxiliary request 1 (see points 1. to 7. above), the set of claims of auxiliary request 2 is also *prima facie* not allowable. Therefore, auxiliary request 2 is not admitted into the proceedings under Article 13(2) RPBA.

Order

For these reasons it is decided that:

- The appeal is dismissed

The Registrar: The Chairwoman:

A. Vottner M. Pregetter

Decision electronically authenticated