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Datasheet for the decision of 6 June 2024

Case Number: T 1809/20 - 3.3.02

Application Number: 10790452.6

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Title of invention:
WASH SOLUTION AND METHOD FOR AFFINITY CHROMATOGRAPHY

Patent Proprietor:
Novartis AG

Opponents:
Oetke, Cornelia
Hoffmann Eitle
Weinzierl, Gerhard
MorphoSys AG

Headword:

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Amendments

Decisions cited:
T 1241/03, T 0181/08, T 1621/16

Catchword:
Multiple selection made at different levels of preference.
Example(s) of the application as filed is(are) not a pointer.

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Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1809/20 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 6 June 2024

Appellant I: (Opponent 1)	Oetke, Cornelia Wallinger Ricker Schlotter Tostmann Patent- und Rechtsanwälte Partnerschaft mbB Zweibrückenstraße 5-7 80331 München (DE)
Representative:	Wallinger, Michael Wallinger Ricker Schlotter Tostmann Patent- und Rechtsanwälte Partnerschaft mbB Zweibrückenstraße 5-7 80331 München (DE)
Appellant II: (Opponent 2)	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Respondent: (Patent Proprietor)	Novartis AG Lichtstrasse 35 4056 Basel (CH)
Representative:	König Szynka Tilmann von Renesse Patentanwälte Partnerschaft mbB Düsseldorf Mönchenwerther Straße 11 40545 Düsseldorf (DE)
Party as of right: (Opponent 3)	Weinzierl, Gerhard Schiweck Weinzierl Koch European Patent Attorneys Landsberger Straße 98 80339 München (DE)

Representative:	Schiweck Weinzierl Koch Patentanwälte Partnerschaft mbB Ganghoferstraße 68 B 80339 München (DE)
Party as of right: (Opponent 4)	MorphoSys AG Semmelweisstraße 7 82152 Planegg (DE)
Representative:	Spiller, Stephan MorphoSys AG Semmelweisstraße 7 82152 Planegg (DE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 16 July 2020 concerning maintenance of the European Patent No. 2513134 in amended form**

Composition of the Board:

Chairman	M. O. Müller
Members:	S. Bertrand
	M. Blasi

Summary of Facts and Submissions

I. The appeals by opponents 1 and 2 ("appellants 1 and 2") lie from the opposition division's interlocutory decision according to which European patent No. 2 513 134 (hereinafter referred to as the "patent") in amended form according to the main request comprising the set of claims filed on 4 December 2018, and the invention to which it relates, meet the requirements of the EPC.

II. Claim 1 of the main request relates to a method of producing certain purified proteins of interest, using an affinity chromatography (AC) matrix to which one of the proteins of interest is bound, the method comprising washing the AC matrix with a specific wash solution.

III. In the impugned decision, the opposition division concluded that claim 1 of the main request complied with the requirements of Article 123(2) EPC.

IV. In their statements of grounds of appeal, appellants 1 and 2 raised objections regarding added subject-matter in the claims of the main request and in those of auxiliary requests 1 to 29.

V. In its reply to the statements of grounds of appeal, the patent proprietor ("the respondent") provided counter-arguments to the appellants' objections relating to the main request and auxiliary requests 1 to 29. It also submitted claim sets of auxiliary requests 30 to 36.

VI. In further letters, appellant 1 and appellant 2 provided additional submissions according to which the claims of the main request and those of auxiliary requests 1 to 36 did not meet the requirements of Article 123(2) EPC.

VII. The board summoned the parties to oral proceedings as per their requests, and issued a communication under Article 15(1) RPBA.

VIII. Oral proceedings before the board were held by videoconference on 6 June 2024, in the presence of the appellants and the respondent. Opponent 3 was also present but only as public, and without making any submissions. As announced previously in writing, opponent 4 did not attend the oral proceedings. During these oral proceedings, the respondent withdrew auxiliary requests 1 to 25 and 27 to 36. It made auxiliary request 26 its only auxiliary request.

IX. The parties' requests, where relevant to the present decision, were as follows:

Appellants 1 and 2 requested that the decision under appeal be set aside and the patent be revoked in its entirety.

The respondent requested:

- that the appeals be dismissed, implying that the opposition division's decision that the patent as amended in the form of the main request before it should be upheld,

- or alternatively, that the patent be maintained in amended form on the basis of the claims of the auxiliary request filed as auxiliary request 26 on 4 December 2018.

X. Opponents 3 and 4 did not make any submissions and did not file any requests.

XI. The appellants'cases and the respondent's case, in so far as they are relevant to the present decision, are summarised in the Reasons below.

Reasons for the Decision

Main request

Added subject-matter - Article 123(2) EPC

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

"*1. A method of producing a purified ~~protein of interest~~* ***antibody, antibody fragment,or Fc fusion protein,*** *using an affinity chromatography (AC) matrix to which the ~~protein of interest~~* ***antibody, antibody fragment,or Fc fusion protein*** *is bound,the method comprising:*
(a) loading a mixture comprising the antibody, antibody fragment, or Fc fusion protein onto the AC matrix; and
(b) *washing the AC matrix with ~~one or more~~* ***a*** *wash solution~~s~~ comprising* ***both*** *(i) arginine, or an arginine derivative* ***selected from the group consisting of acetyl arginine, N-alpha-butyroyl-arginine, agmatine, arginic acid and N-alpha-pyvaloyl-arginine, at a concentration in a range of 0.05-0.85 M,*** *and (ii) a nonbuffering* [sic] *salt ~~prior to elution of the protein of interest~~* ***at a concentration in a range of 0.1-2.0 M, wherein the pH of the wash solution is greater than 8.0, and wherein the wash solution removes impurities*** *from the AC matrix;* ***and***
(c) eluting the antibody, or antibody fragment, or Fc fusion protein, from the AC matrix;

with the proviso that if a purified Fc fusion protein is produced, the AC matrix is selected from the group consisting of a Protein A column, a Protein G column, a Protein A/G column and a Protein L column." (Emphasis added by the board; strikethrough representing deletion and bold text representing addition, compared to claim 1 as filed.)

The following reasons make reference to D2, which is the published PCT application of the patent.

2. Appellants 1 and 2 objected that claim 1 of the main request contained subject-matter extending beyond the content of the application as filed.

3. As submitted by the appellants, claim 1 of the main request comprises at least the following multiple selections deriving from the disclosure of the application as filed:

- the protein to be purified being an antibody, antibody fragment, or Fc fusion protein,
- the concentration of arginine or arginine derivative in the wash solution,
- the concentration of the non-buffering salt in the wash solution, and
- the pH of the wash solution being greater than 8.0.

Each selection will be dealt with in turn below.

3.1 The protein to be purified in claim 1 of the main request being an antibody, antibody fragment, or Fc fusion protein

The protein to be purified according to claim 1 of the main request is an antibody, an antibody fragment, or an Fc fusion protein.

Claim 1 of D2 (claim 1 as filed), on which claim 1 of the main request is partially based, refers to a "*purified protein of interest*", without specifying it.

The respondent cited page 4, lines 7 to 10, page 10, lines 3 to 11, and page 10, line 31 to page 11, line 2, of D2 as a basis.

The passage on page 4, lines 7 to 10, of D2 discloses that "[i]*n a preferred embodiment, the protein of interest is an antibody or antibody fragment that binds to the AC matrix, such as a Protein A column, although other proteins that bind to the affinity matrices described herein are also suitable for purification according to the methods of the invention.*" This passage discloses the antibody and antibody fragment required by claim 1 of the main request, but it does not disclose any Fc fusion proteins.

According to the passage on page 10, lines 3 to 11, of D2, "[f]*or example, in a preferred embodiment of the invention, the AC matrix is a Protein A column, which comprises as the target attached to the solid phase a bacterial cell wall protein, Protein A, that specifically binds the CH_2 and CH_3 domains within the Fc region of certain immunoglobulins. The binding properties of Protein A are well established in the art. Accordingly, in a preferred embodiment of the invention, the protein of interest (to be purified) is an antibody or antibody fragment comprising an Fc*

region. Furthermore, additional proteins that can be purified using Protein A chromatography include Fc fusion proteins."

The passage on page 10, line 31 to page 11, line 2, of D2 reads "[t]*hus, an AC matrix that is a Protein G matrix, a Protein A/G matrix or a Protein L matrix can be used to purify antibodies, antibody fragments comprising an Fc region and Fc fusion proteins*".

The above two passages disclose antibodies and Fc fusion proteins. However, they do not disclose an antibody fragment as required by claim 1 of the main request, since they refer to a specific antibody fragment, namely one comprising an Fc region, i.e. an antibody fragment more specific than the antibody fragment required by claim 1 of the main request.

It follows that two selections are needed: firstly, the selection of an antibody and an antibody fragment out of the antibody, antibody fragment and other proteins that bind to the affinity matrices disclosed on page 4, lines 7 to 10, of D2; and secondly, the selection of an Fc fusion protein out of the antibodies, antibody fragments comprising an Fc region and Fc fusion proteins disclosed in the passage on page 10, lines 3 to 11, or page 10, line 31 to page 11, line 2, of D2, to arrive at the list of proteins to be purified referred to in claim 1 of the main request.

3.2 The concentration of arginine or arginine derivative in the wash solution

Claim 1 of the main request requires a concentration in a range of 0.05-0.85 M of arginine or arginine derivative in the wash solution.

Claim 1 of D2 does not disclose any concentration of arginine or arginine derivative in the wash solution.

The concentration of arginine or arginine derivative in the wash solution, as submitted by the respondent, is disclosed on page 11, line 29 to page 12, line 6, of D2, which reads as follows: "*The concentration of arginine or arginine derivative in the wash solution typically is between 0.05 M and 2.0 M* [...] *more preferably between 0.05 and 0.85 M* [...] *most preferably between 0.1 and 0.5 M*."

Therefore, the selection of the range "*between 0.05 and 0.85 M*" out of the three ranges disclosed on page 11, line 29 to page 12, line 6, of D2 ("*between 0.05 M and 2.0 M*", "*between 0.05 and 0.85 M*" and "*between 0.1 and 0.5 M*") is needed, in order to arrive at a concentration in a range of 0.05-0.85 M of arginine or arginine derivative in the wash solution, as required by claim 1 of the main request.

3.3 The concentration of the non-buffering salt in the wash solution

Claim 1 of the main request requires a concentration in a range of 0.1-2.0 M of the non-buffering salt in the wash solution.

Claim 1 of D2 does not disclose any concentration of the non-buffering salt in the wash solution.

As regards the concentration of the non-buffering salt in the wash solution, the passage on page 12, lines 19 to 28, of D2, referred to by the respondent, discloses that "[T]*he concentration of nonbuffering* [sic] *salt in the wash solution typically is between 0.1 M and 2.0 M*

[...] *or between 0.5 M and 1.5 M* [...] *or between 1 M and 2 M*".

In view of the above disclosure, the selection of the range "*between 0.1 M. and 2.0 M*" out of the three ranges disclosed on page 12, lines 19 to 28, of D2 ("*between 0.1 M and 2.0 M*", "*between 0.5 M and 1.5 M*" and "*between 1 M and 2 M*") is needed, in order to arrive at a concentration in a range of 0.1-2.0 M of the non-buffering salt in the wash solution, as required by claim 1 of the main request.

3.4 The pH of the wash solution being greater than 8.0

Claim 1 of the main request requires the pH of the wash solution to be greater than 8.0.

Claim 1 of D2 does not define the pH of the wash solution.

The passage on page 4, lines 26 to 32, of D2, referred to by the respondent, reads as follows: "*In a particular embodiment, the pH of the one or more wash solutions is greater than 8.0, preferably at least 8.1, more preferably at least 8.5 and even more preferably at least 8.9. In one embodiment, the pH of the one or more wash solutions is in a range of 8.1-9.5. In another embodiment, the pH of the one or more wash solutions is in a range of 8.5-9.5. In another embodiment, the pH of the one or more wash solutions is about 9.0. In another embodiment, the pH of the one or more wash solutions is 9.0.*"

Considering the above disclosure, the selection of the pH greater than 8.0 out of a pH greater than 8.0, a pH of at least 8.1, a pH of at least 8.5, a pH of at least 8.9, a pH in a range of 8.1-9.5, a pH in a range of 8.5-9.5, a pH of about 9.0 and a pH of 9.0 disclosed on

page 4, lines 26 to 32, is needed, in order to arrive at the pH of the wash solution required by claim 1 of the main request.

3.5 It is established case law that the content of the application as filed must not be considered to be a reservoir from which features pertaining to separate embodiments are taken and combined to artificially create a particular embodiment without the presence of a pointer to combine the features of the separate embodiments.

However, as submitted by appellant 2, in the present case nothing points to the specific combination of claim 1 of the main request, for the following reasons.

3.5.1 Firstly, regarding the selection of the protein to be purified being an antibody, antibody fragment, or Fc fusion protein, as set out above, it is necessary to combine two selections of the antibody, antibody fragment, or Fc fusion protein, from two lists, one disclosed on page 4, lines 7 to 10 (an antibody and an antibody fragment), and one disclosed on page 10, line 31 to page 11, line 2 of D2. There is, however, nothing in D2 that points to any preference for making the combination of these selections.

3.5.2 Secondly, with regard to the concentration of arginine or arginine derivative in the wash solution, the concentration range of "*between 0.05 and 0.85 M*" was selected from page 12, line 2, in favour of the general and broadest range of "*between 0.05 and 2.0 M*" (page 11, line 30) and the most preferred range of "*between 0.1 and 0.5 M*" (page 12, line 5), as set out above. It follows that the concentration of arginine or arginine derivative in the wash solution of claim 1 of the main request (0.05 to 0.85 M) represents the preferred range

disclosed in the passage from page 11, line 29 to page 12, line 8, of D2, but not the most preferred range. This is not changed by the fact that the chosen range of between 0.05 and 0.85 M is followed by the wording *"(which is the upper solubility of arginine in water at 20°C)"*. The fact remains that, after this wording, an even narrower range of between 0.1 and 0.5 M is disclosed as the most preferred range, which - unmistakably - puts the chosen range at only an intermediate level of preference.

3.5.3 Furthermore, as regards the concentration of the non-buffering salt in the wash solution, the range of "*between 0.1 and 2.0 M*" was selected (page 12, line 20), while concentrations in a range "*between 0.5 M and 1.5 M*" and "*between 1 M and 2 M*" are presented in lines 24 and 26, both these ranges being narrower than - and lying completely within - the selected range. The selected range thus represents the selection of the broadest range out of the list of ranges in D2.

This conclusion is not changed by the fact that this broadest range is preceded by the adverb "typically" (page 12, line 20, of D2). Firstly, the sentence containing "typically", which starts on page 12, line 19 of D2 and ends at line 27, encompasses the three ranges "*between 0.1 M and 2.0 M*" (line 20), "*between 0.5 M and 1.5 M*" (line 24), and "*between 1 M and 2 M*" (lines 26 and 27). It follows that the term "typically" applies to each of the three ranges. In any case, the board does not see why the term "typically", even if referring only to the chosen range of between 0.1 M and 2.0 M, should confer a preference for the chosen range. The fact remains that the ranges that are subsequently cited in this sentence of D2 are narrower than the chosen range. Hence, as set out above, if

anything, these two narrower ranges are preferred over the chosen broadest range of "*between 0.1 M and 2.0 M*".

3.5.4 Finally, with regard to the pH of the wash solution, the pH of greater than 8.0 is the broadest range for the pH disclosed on page 4, lines 26 to 28, and it does not constitute a preferred embodiment. More specifically, the passages in D2 referred to by the respondent read as follows.

- page 3, lines 19 and 20: "*Preferably, the wash solution is at high pH, above 8.0*"
- page 4, lines 26 and 27: "*In a particular embodiment, the pH of the one or more wash solutions is greater than 8.0,...*"
- page 7, lines 15 to 18: "*Accordingly, in a preferred embodiment, the wash solution provided by the present invention is advantageously performed at a high pH, greater than 8.0,...*"
- page 8, line 23: "*With respect to the use of a pH greater than 8.0 in the wash solution, a basic pH may partially denature HCPs and HMWs, ..*"
- page 13, line 1: "*The pH of the wash solutions of the invention typically is greater than 8.0,*"
- claim 11: "*The method of any one of claims 1-10,wherein the pH of the one or more wash solutions is greater than 8.0.*"

While these passages of D2 refer to a pH of the wash solution of greater than 8.0, they should be considered in the context of the whole disclosure of D2. For instance, the passages on page 4, lines 26 and 27, and on page 13, line 1 of D2 are part of a sentence which also discloses that the pH of the wash solution is

"*preferably at least 8.1, more preferably at least 8.5 and even more preferably at least 8.9*". The pH of at least 8.1, at least 8.5 or at least 8.9 - like the pH of greater than 8.0 in the passages on page 4, lines 26 and 27, and on page 13, line 1 of D2 - is part of a converging list. The pH of greater than 8.0 does not correspond to the preferred range disclosed in these passages. The same conclusion applies to the range of claim 11 of D2. Claim 11 of D2 refers to a pH of the wash solution of greater than 8.0, but claims 12 and 13 of D2 disclose pH values in a range of about 8.5-9.5, and a pH value of 9.0. Claims 12 and 13 of D2, which are directly or indirectly dependent on claim 11, represent embodiments of a converging list of increasing preference formed by claims 11 to 13 of D2. The pH of greater than 8.0 thus does not represent the preferred range disclosed in the combination of claims 11 to 13 in D2.

3.5.5 Also, looking at the examples of the application as filed, nothing can be seen that points to all selections made in claim 1 of the main request, as set out in more detail below:

In the examples of D2, arginine or arginine-HCl is used at a concentration 0.1 M ("*100 mM*", solution 4 of table 18), 0.25 M ("*250 mM*", solution 3 of table 2, solution 4 of table 9, solution 3 of table 11, solution 6 of table 13, solution 3 of table 15 and solutions 1 and 2 of table 18) and 0.5 M ("*500 mM*", solution 3 of table 18), and sodium chloride, i.e. the non-buffering salt, is used at 0.75 M (solution 1 of table 18), 1.0 M (solution 3 of table 2, solution 4 of table 9, solution 3 of table 11, solution 6 of table 13, solution 3 of table 15 and solutions 3 and 4 of table 18) and 1.25 M (solution 2 of table 18).

Each of the concentration values of arginine and arginine-HCl in the wash solution of the examples of D2 (0.1 M, 0.25 M and 0.5 M) falls within the range of "*between 0.05 and 0.85 M*" chosen in claim 1 of the main request and disclosed on page 12, line 2, of D2. However, each of these concentration values also falls within the most preferred range of "*between 0.1 and 0.5 M*" disclosed on page 12, line 5, of D2. Thus, the examples are not a pointer that the range of "*between 0.05 and 0.85 M*" according to claim 1 of the main request disclosed on page 12, line 2, should be selected over the most preferred range of between 0.1 and 0.5 M disclosed on page 12, line 5, of D2.

Moreover, each of the concentration values of the non-buffering salt (NaCl) in the wash solution of the examples of D2 (0.75 M, 1.0 M and 1.25 M) falls within the range of "*between 0.1 M and 2.0 M*" according to claim 1 of the main request disclosed on page 12, line 20, of D2. However, each of these concentration values also falls within the range of "*between 0.5 and 1.5 M*" disclosed on page 12, line 24, of D2. Therefore, the examples are not a pointer that the range of "*between 0.1 M. and 2.0 M*" according to claim 1 of the main request disclosed on page 12, line 20, should be selected over at least one of the two other ranges disclosed on page 12, lines 24 to 28, of D2.

Therefore, the examples of D2 do not point to the combination of features resulting from the selections of at least the concentration of arginine or arginine derivative and the concentration of the non-buffering salt in the wash solution.

3.5.6 In view of the above, the board concludes that the combination of the features relating to the specification of the protein to be purified, the

concentration of arginine or arginine derivative in the wash solution, the concentration of the non-buffering salt in the wash solution and the pH of the wash solution is based on multiple selections at different levels of preference without any pointer being present in the application as filed for these selections. The skilled person reading the application as filed would thus find no guidance as to which of the preferred features they should start with and which of the other features are then to be combined.

It follows that claim 1 of the main request does not meet the requirements of Article 123(2) EPC. This finding is in line with decision T 181/08 (Reasons 2.2 and 2.3).

3.6 The respondent relied on decision T 1621/16 and submitted that the concentrations of arginine or arginine derivative and non-buffering salt mentioned in claim 1 were "fall-back positions", which had been disclosed as "more or less preferred elements" taken from a list of converging alternatives. According to the respondent, the two conditions outlined in decision T 1621/16 for the allowability of a multiple selection were fulfilled, since (i) the examples of the application as filed clearly pointed to the combination of these features, and (ii) this combination of features did not lead to an undisclosed technical contribution.

The board disagrees with the respondent. As set out above, nothing points to the combination of features now contained in claim 1 of the main request, either in the description or in the examples of the application as filed.

3.7 Finally, the respondent relied on decision T 1241/03 in its written submissions. It submitted that the present case closely resembled the case which was based on that decision. In the present case, taking the concentration of each of the arginine or arginine derivative and the non-buffering salt present in the wash solution from a different section of D2 was not considered to amount to an amendment which extended beyond the content of the application as filed, which was in line with decision T 1241/03.

The board does not subscribe to the respondent's view.

In decision T 1241/03 (points 4 to 7 of the Reasons), the board allowed the limitation, in claims 1 and 2 of the main request, of the pH range of a buffer to 5.5-7 and of the concentration of a non-ionic surfactant to 0.1%-1%. The reasons for this were that both the pH range of the buffer and the concentration range of the non-ionic surfactant were disclosed in the description in the context of preferred alternatives.

In contrast, in the present case, as set out above, at least the type of protein to be purified, the concentration of the non-buffering salt in the wash solution and the pH are not disclosed as preferred alternatives.

4. For the above reasons, the main request is not allowable.

Auxiliary request

Added subject-matter - Article 123(2) EPC

5. Claim 1

Claim 1 of the auxiliary request reads as follows:

"*1. A method of producing a purified antibody, antibody fragment* ***comprising an Fc region****, or Fc fusion protein, using an affinity chromatography (AC) matrix to which antibody, antibody fragment, or Fc fusion protein is bound, the method comprising:*
(a) loading a mixture comprising the antibody, antibody fragment, or Fc fusion protein onto the AC matrix; and
(b) washing the AC matrix with a wash solution comprising both (i) arginine, ~~*or an arginine derivative selected from the group consisting of acetyl arginine, N-alpha-butyroyl-arginine, agmatine, arginic acid and N-alpha-pyvaloyl-arginine,*~~*at a concentration in a range of* ~~*0.05-0.85 M*~~ ***0.1-0.5 M,*** *and (ii) a nonbuffering salt at a concentration in a range of* ~~*0.1-2.0 M*~~ ***0.5-1.5 M,*** *wherein the pH of the wash solution is* ~~*greater than 8.0*~~ ***in a range of about 8.5-9.5,*** *and wherein the wash solution removes impurities from the AC matrix; and*
(c) eluting the antibody, or antibody fragment, or Fc fusion protein, from the AC matrix;
~~*with the proviso that if a purified Fc fusion protein is produced, wherein the AC matrix is selected from the group consisting of a Protein A column, a Protein G column, a Protein A/G column and a Protein L column*~~ ***wherein the AC matrix is a Protein A column.***" (Emphasis added by the board; strikethrough representing deletion and bold text representing addition, compared to claim 1 of the main request).

Claim 1 of the auxiliary request differs from claim 1 of the main request in that:

- the antibody fragment comprises an Fc region,

- compound (i) of the wash solution is limited to arginine (arginine and arginine derivatives in claim 1 of the main request),

- the concentration of arginine is limited to a range of 0.1-0.5 M (0.05-0.85 M in claim 1 of the main request),

- the concentration of the non-buffering salt is limited to a range of 0.5-1.5 M (0.1-2.0 M in claim 1 of the main request),

- the pH of the wash solution is limited to a range of about 8.5-9.5 (greater than 8.0 in claim 1 of the main request), and

- the AC matrix is limited to a Protein A column (the AC matrix is selected from the group consisting of a Protein A column, a Protein G column, a Protein A/G column and a Protein L column, for an Fc fusion protein to be purified, in claim 1 of the main request).

6. Appellants 1 and 2 contended that claim 1 of the auxiliary request contained subject-matter extending beyond the content of the application as filed.

7. Starting from claim 1 of D2, at least the following selections are needed to arrive at the feature combination of claim 1 of the auxiliary request:

- the protein to be purified being an antibody, antibody fragment comprising an Fc region, or Fc fusion protein,

- the concentration of arginine in the wash solution,

- the concentration of the non-buffering salt in the wash solution,

- the pH of the wash solution, and

- the Protein A column as an AC matrix.

7.1 Protein to be purified and type of matrix

Regarding the selection of the protein to be purified in claim 1 of the auxiliary request, the board acknowledges that the passage on page 10, lines 3 to 11, discloses antibodies, antibody fragments comprising an Fc region, and Fc fusion proteins, i.e. the protein to be purified according to claim 1 of the auxiliary request, with an AC matrix being a Protein A column. This passage can point to both selections relating to the protein to be purified being an antibody, antibody fragment comprising an Fc region, or Fc fusion protein, and the AC matrix being a Protein A column.

7.2 Compound (i) of the wash solution being arginine, the concentration of arginine in the wash solution, the concentration of the non-buffering salt in the wash solution and the pH

For the other selections involved in claim 1 of the auxiliary request (compound (i) of the wash solution being arginine, the wash solution comprising both (i) arginine and (ii) non-buffering salt, the concentration of arginine in the wash solution being in the range of 0.1-0.5 M, the concentration of the non-buffering salt in the wash solution being in the range of 0.5-1.5 M, and the pH of the wash solution being in the range of about 8.5-9.5), the respondent referred to example 6 of D2 and submitted that this example pointed to each of these other selections.

7.3 The board disagrees. Table 18 in example 6 of D2 discloses four wash solutions. The first wash solution comprises (*inter alia*) 0.75 M NaCl and 250 mM

L-Arginine, and has a pH of 8.5. The second wash solution comprises (*inter alia*) 1.25 M NaCl and 250 mM L-Arginine, and has a pH of 9.5. The third wash solution comprises (*inter alia*) 1 M NaCl and 500 mM L-Arginine, and has a pH of 9.0. The fourth wash solution comprises (*inter alia*) 1 M NaCl and 100 mM L-Arginine, and has a pH of 9.0.

The concentrations of arginine in the four wash solutions disclosed in table 18 of example 6 of D2 are 100 mM (solution 4), 250 mM (solutions 1 and 2) and 500 mM (solution 3). These three values correspond to 0.1 M, 0.25 M and 0.5 M, and are representative of the lower limit, a medium value and the higher limit of the most preferred range of "*between 0.1 and 0.5 M*" disclosed in the passage from page 11, line 29 to page 12, line 6, of D2 and chosen in claim 1 of the auxiliary request.

The pH of the four wash solutions in table 18 of example 6 of D2 is 8.5 (solution 1), 9.0 (solutions 2 and 3) and 9.5 (solution 4). These three values are representative of the lower limit, the medium value and the higher limit of the range of about 8.5-9.5 disclosed in claim 12 of D2 and chosen in claim 1 of the auxiliary request.

Thus, example 6 can be acknowledged to be a pointer that the concentration of arginine and the pH as defined in claim 1 of the auxiliary request should be combined. However, this conclusion does not apply to the selection of the concentration of the non-buffering salt in a range of "*between 0.5 and 1.5 M*".

The three values of the concentration of NaCl in the four wash solutions of example 6 of D2, namely 0.75 M, 1 M and 1.25 M, even if they are values falling within

the range of "*between 0.5 and 1.5 M*" (according to claim 1 of the auxiliary request), also fall within the range "*between 0.1 M. and 2.0 M*" disclosed on page 12, line 20, of D2, which is one of the three ranges disclosed - as set out above - on page 12, lines 19 to 28, of D2 ("*The concentration of nonbuffering salt in the wash solution typically is between 0.1 M. and 2.0 M ... or between 0.5 M and 1.5 M ... , or between 1 M and 2 M*").

Since the three values of the concentration of NaCl in the wash solution of the four compositions of example 6 of D2 cannot to be used to distinguish which one of the ranges "*between 0.1 M. and 2.0 M*" and "*between 0.5 M and 1.5 M*" is suggested, example 6 of D2 cannot be seen as a pointer to the selection of the concentration of the non-buffering salt "*between 0.5 M and 1.5 M*" according to claim 1 of the auxiliary request.

7.4 Therefore, claim 1 of the auxiliary request therefore does not meet the requirements of Article 123(2) EPC.

8. Thus, the auxiliary request is not allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

U. Bultmann M. O. Müller

Decision electronically authenticated