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# Datasheet for the decision of 2 June 2015

**Case Number:** T 0340/11 - 3.3.02

**Application Number:** 05708124.2

**Publication Number:** 1709448

**IPC:** G01N33/573, G01N33/577, C07K16/40

**Language of the proceedings:** EN

**Title of invention:**
IMPROVED METHOD FOR DIAGNOSING ACUTE CORONARY SYNDROME

**Patent Proprietor:**
Turun Yliopisto

**Opponent:**
Beckman Coulter, Inc.

**Headword:**
PAPP-A/TURUN YLIOPISTO

**Relevant legal provisions:**
EPC Art. 54
RPBA Art. 12(4)

**Keyword:**
Main request - novelty (no)
Auxiliary requests - admission (no)

**Decisions cited:**
T 0936/09, T 0935/12

**Catchword:**

Europäisches Patentamt
European Patent Office
Office européen des brevets

**Beschwerdekammern**
**Boards of Appeal**
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**Case Number: T 0340/11 - 3.3.02**

# D E C I S I O N
# of Technical Board of Appeal 3.3.02
# of 2 June 2015

| | |
|---|---|
| **Appellant:** (Patent Proprietor) | Turun Yliopisto<br>Yliopistonmäki<br>20014 Turun Yliopisto (FI) |
| **Representative:** | Turun Patenttitoimisto Oy<br>P.O. Box 99<br>Tykistökatu 2-4 B<br>20521 Turku (FI) |
| **Respondent:** (Opponent) | Beckman Coulter, Inc.<br>4300 N. Harbor Boulevard,<br>Mail Code A-42-C<br>Fullerton, California 92834-3100 (US) |
| **Representative:** | Boult Wade Tennant<br>Verulam Gardens<br>70 Gray's Inn Road<br>London WC1X 8BT (GB) |
| **Decision under appeal:** | **Decision of the Opposition Division of the European Patent Office posted on 14 January 2011 revoking European patent No. 1709448 pursuant to Article 101(3)(b) EPC.** |

**Composition of the Board:**

| | |
|---|---|
| **Chairman** | U. Oswald |
| **Members:** | K. Giebeler |
| | L. Bühler |

## Summary of Facts and Submissions

I. European patent No. 1 709 448, based on European patent application No. 05708124.2 (published as WO 2005/073727) and entitled "Improved method for diagnosing coronary syndrome", was granted with 17 claims.

II. An opposition was filed against the granted patent on the grounds of lack of novelty and lack of inventive step (Article 100(a) EPC), insufficiency of disclosure (Article 100(b) EPC) and added subject-matter (Article 100(c) EPC).

III. The opposition division decided that the subject-matter of the claims of the sole request before it lacked novelty under Article 54 EPC and revoked the patent.

IV. The patent proprietor (hereafter: appellant) lodged an appeal against the decision of the opposition division. With the statement of grounds of appeal, the appellant filed a main request and five auxiliary requests.

V. The opponent (hereafter: respondent) filed counter-arguments to the appeal by letter dated 3 October 2011.

VI. With letter of 4 October 2012, the appellant filed further submissions together with a new main request and three auxiliary requests. The main request and the second auxiliary request corresponded to the first and fifth auxiliary requests filed with the grounds of appeal, respectively, and the first and third auxiliary requests were newly presented.

Claim 1 of the **main request** is identical to claim 1 as granted and reads as follows:

"A method for diagnosing in vitro an acute coronary syndrome in a person by using as marker either free PAPP-A, defined as the pregnancy associated plasma protein A (PAPP-A) that is not complexed to the proform of major basic protein (proMBP), as such, or as a ratio
- free PAPP-A/total PAPP-A,
- free PAPP-A/PAPP-A complexed to proMBP, or
- PAPP-A complexed to proMBP/total PAPP-A."

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

"A method for diagnosing in vitro an acute coronary syndrome in a person by using as marker either free PAPP-A, defined as the pregnancy associated plasma protein A (PAPP-A) that is not complexed to the proform of major basic protein (proMBP), as such, or as a ratio
- free PAPP-A/total PAPP-A,
- free PAPP-A/PAPP-A complexed to proMBP, or
- PAPP-A complexed to proMBP/total PAPP-A,
wherein free PAPP-A is determined by a bioaffinity assay method for quantitative determination in a sample of free PAPP-A, either
i) as a calculated difference between measured total PAPP-A and measured PAPP-A complexed to proMBP, or
ii) by a direct bioaffinity assay method measuring only free PAPP-A."

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

"A method for diagnosing in vitro an acute coronary syndrome in a person by using as marker either free

PAPP-A, defined as the pregnancy associated plasma protein A (PAPP-A) that is not complexed to the proform of major basic protein (proMBP), as such, or as a ratio
- free PAPP-A/total PAPP-A,
- free PAPP-A/PAPP-A complexed to proMBP, or
- PAPP-A complexed to proMBP/total PAPP-A,
wherein free PAPP-A is determined by a bioaffinity assay method for quantitative determination in a sample of free PAPP-A, either
i) as a calculated difference between measured total PAPP-A and measured PAPP-A complexed to proMBP, or
ii) by a direct bioaffinity assay method measuring only free PAPP-A by making PAPP-A complexed to proMBP non-capable of participating in the bioaffinity reaction in which the sample is exposed to a binder binding total PAPP-A."

Claim 1 of the **third auxiliary request** reads as follows:

"A method for diagnosing in vitro an acute coronary syndrome in a person by using as marker free PAPP-A, defined as the pregnancy associated plasma protein A (PAPP-A) that is not complexed to the proform of major basic protein (proMBP),
wherein free PAPP-A is determined by a bioaffinity assay method for quantitative determination in a sample of free PAPP-A as a calculated difference between measured total PAPP-A and measured PAPP-A complexed to proMBP."

VII. The following document is mentioned in the present decision:

D1: WO 02/056015

VIII. The board summoned the parties to oral proceedings and issued a communication in which it gave its preliminary opinion. In said communication, the board raised questions concerning the novelty of the subject-matter of claim 1 of the main request over document D1. Furthermore, the board stated that depending on its conclusion with respect to the main request, the admissibility and allowability of the auxiliary requests would be discussed at the oral proceedings.

IX. By letter dated 12 March 2015, the appellant announced that it would not attend the scheduled oral proceedings and requested a decision on the basis of the contents of the file.

X. By letter dated 1 May 2015, the respondent filed further observations.

XI. Oral proceedings were held before the board on 2 June 2015 in the absence of the duly summoned appellant.

XII. The appellant's arguments submitted in writing, insofar as they are relevant for the present decision, can be summarised as follows:

Claim 1 of the main request was novel over document D1, which disclosed only that antibodies having specific binding affinity for PAPP-A and not for PAPP-A/proMBP complexes could be produced, but it was unclear and undisclosed that such antibodies had been used in the diagnosis of acute coronary syndrome. In addition, document D1 showed no intention to diagnose acute coronary syndrome based on free PAPP-A measured directly with an antibody. Evidence for this was claim 1 of document D1, which included the steps of

comparing the measured PAPP-A level with that of control subjects to make the diagnosis.

XIII. The respondent's arguments, insofar as they are relevant for the present decision, can be summarised as follows:

Claim 1 of the main request lacked novelty over document D1, which disclosed the free, uncomplexed form of PAPP-A as a marker in the diagnosis of acute coronary syndrome.

The first, second and third auxiliary requests should not be admitted into the proceedings under Article 12(4) RPBA, because they could and should have been presented already during the first-instance proceedings.

XIV. The final requests of the parties were:

The appellant requested in writing that the contested decision be set aside and that the patent be maintained on the basis of the claims of the main request or, alternatively, of one of the first to third auxiliary requests, all filed with letter dated 4 October 2012.

The respondent requested that the appeal be dismissed.

## Reasons for the Decision

1. The appeal is admissible.

*2. Main request - Novelty*

2.1 The claims of the main request correspond to the claims of the sole request on which the opposition division took its decision.

Claim 1 relates to a method for diagnosing in vitro an acute coronary syndrome in a person by using as marker either free PAPP-A, defined as the pregnancy-associated plasma protein A (PAPP-A) that is not complexed to the proform of major basic protein (proMBP), as such, or as a ratio of free PAPP-A/total PAPP-A, free PAPP-A/PAPP-A complexed to proMBP, or PAPP-A complexed to proMBP/ total PAPP-A.

2.2 Document D1 relates to uses of PAPP-A as a marker for acute coronary syndromes (page 1, lines 3-5) and to a method of diagnosing acute coronary syndrome including measuring the level of PAPP-A in a biological sample (page 2, lines 4-8). The level of PAPP-A can be assessed by measuring PAPP-A protein, message (mRNA), or activity (page 6, lines 5-6). PAPP-A protein can be detected immunologically, using antibodies (page 6, lines 11-17). It is stated on page 6, lines 17-20 that "antibodies having affinity for PAPP-A/proMBP complexes are available. (...) Monoclonal antibodies having specific binding affinity for PAPP-A, but not for PAPP-A/proMBP complexes, can be produced through standard techniques." A way of obtaining such antibodies is disclosed on page 6, line 21 to page 9, line 6. Page 9, lines 2-6 states that "Antibodies having affinity for PAPP-A are identified in a positive selection. Antibodies identified in such a selection can be negatively selected against PAPP-A/proMBP, to identify antibodies having specific binding affinity for

epitopes of PAPP-A that are not accessible in the specific complex of PAPP-A and proMBP."

In view of this disclosure, the board considers that a skilled person would be able to obtain the described antibodies having specific binding affinity for PAPP-A, but not for PAPP-A/proMBP complexes on the basis of common general knowledge. The board furthermore considers that when following the teaching of document D1 to diagnose acute coronary syndrome by detecting PAPP-A immunologically with said antibodies having specific binding affinity for PAPP-A, but not for PAPP-A/proMBP complexes, a skilled person would inevitably arrive at a method according to claim 1 in which free PAPP-A is used as marker.

Therefore, the board is convinced that document D1 discloses a method according to claim 1.

2.3 The appellant submitted that it was unclear and undisclosed in document D1 that the antibodies having specific binding affinity for PAPP-A, but not for PAPP-A/proMBP complexes, had been used in the diagnosis of acute coronary syndrome.

It is true that the examples of document D1 do not exemplify the diagnosis of acute coronary syndrome using the antibodies having specific binding affinity for PAPP-A, but not for PAPP-A/proMBP complexes. However, the general part of document D1 directly and unambiguously discloses the use of said antibodies for the detection of PAPP-A protein in the diagnosis of acute coronary syndrome, as set out in point 2.2 above.

2.4 In addition, the appellant submitted that document D1

showed no intention to diagnose acute coronary syndrome based on free PAPP-A measured directly with an antibody, which was apparent from claim 1 of document D1 which included the steps of comparing the measured PAPP-A level with that of control subjects to make the diagnosis.

The board considers that although document D1 does not explicitly refer to measuring "free" PAPP-A, this is not relevant with respect to the novelty of the claimed method, because the skilled person would be well aware that the disclosed antibodies having specific binding affinity for PAPP-A, but not for PAPP-A/proMBP complexes, detect only free PAPP-A as defined in claim 1. Furthermore, the presence in the method of claim 1 of document D1 of steps of comparing the measured PAPP-A level with that of control subjects to make the diagnosis is not relevant for the issue of novelty, since the method of claim 1 of the main request does not preclude the presence of such steps of comparison. Moreover, the general parts of the description of document D1 disclose the use of PAPP-A as marker for acute coronary syndrome without referring to a comparison with control subjects.

2.5 Consequently, the subject-matter of claim 1 of the main request lacks novelty over document D1 (Article 54 EPC).

*3. Admission of the first to third auxiliary requests (Article 12(4) RPBA)*

3.1 Pursuant to Article 12(4) RPBA, it is at the board's discretion to hold inadmissible facts, evidence or requests which could have been presented in the first-instance proceedings.

Considering that the main purpose of the appeal proceedings is to give the losing party the possibility of challenging the decision of the opposition division on its merits, the appeal proceedings are largely determined by the factual and legal framework of the case of the preceding opposition proceedings; the parties have only limited scope to amend the subject of the dispute in second-instance proceedings (see for instance T 0935/12 of 5 December 2012).

According to decision T 936/09 of 1 March 2012, headnote, "the patent proprietor is not free to present or complete his case at any time that he wishes during the opposition or opposition appeal proceedings, depending, for example, on his procedural strategy or his financial situation. In view of the judicial nature and purpose of inter partes appeal proceedings (...) and in the interests of an efficient and fair procedure, the board considers it necessary that all parties to opposition proceedings complete their submissions during the first-instance proceedings in so far as this is possible. If a patent proprietor (...) chooses not to complete his submissions at the stage of the first-instance proceedings, but rather presents or completes his case only in the notice of appeal or the statement setting out the grounds of appeal, then he will need to face the prospect of being held to account for such conduct by the board when, for example, exercising its discretion under Article 12(4) RPBA."

3.2 None of the auxiliary requests was presented in the first-instance proceedings.

Claim 1 of the first and second auxiliary requests differs from granted claim 1 in that the features of

granted claims 2 and 8, respectively, have been included, and claim 1 of the third auxiliary request differs from granted claim 1 in that the alternatives relating to a ratio have been deleted and the feature of alternative (i) of granted claim 2 has been included.

These amendments aim to overcome the novelty objection based on document D1. This novelty objection was first raised by the opponent in its notice of opposition, points 25 to 50, and in particular points 25 to 31. Therefore, the appellant could already have filed auxiliary requests addressing said objection with its response to the notice of opposition. Furthermore, the appellant could have filed the auxiliary request before or during the oral proceedings in which the opposition division decided to revoke the patent for lack of novelty over document D1. Instead, the appellant chose not to attend the oral proceedings before the opposition division, and not to file auxiliary requests as fall-back positions before the oral proceedings. In view of the contentious nature of opposition proceedings, the appellant must have been well aware of the possibility that at the oral proceedings the opposition division could follow the opponent's argumentation and decide that the claimed subject-matter lacked novelty.

The board thus concludes that the first to third auxiliary requests could have been filed in the first-instance proceedings.

3.3 Since none of the auxiliary requests was presented in the first-instance proceedings, no decision was taken by the opposition division on any of these requests.

Whereas the amendments in claim 1 of the first auxiliary request prima facie do not overcome the lack of novelty over document D1 as set out above for the main request, the novelty of the subject-matter of the second and third auxiliary requests was not contested by the respondent in its letter of 1 May 2015. Admitting either the second or third auxiliary request into the proceedings would thus oblige the board either to give a first ruling on the issue of an inventive step with respect to these requests, or to remit the case to the department of first instance. Such a prolongation of the proceedings would deprive the respondent and the public of legal certainty about the validity of the patent in suit.

3.4 Moreover, when summoning the parties to oral proceedings, the board had indicated in its communication accompanying the summons that depending on the board's conclusion with respect to the main request, the admissibility of the auxiliary requests would have to be discussed at the oral proceedings.

Nevertheless, the appellant chose not to attend the oral proceedings before the board and also made no written submissions offering arguments as to why the auxiliary requests had been filed only on appeal, or why they should be admitted into the proceedings before the board.

3.5 In view of these particular circumstances of the case at issue, the board has decided to make use of its discretionary power according to Article 12(4) RPBA not to admit any of the auxiliary requests into the proceedings.

4. In view of the above, none of the claim requests is both admissible and allowable.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar: The Chairman:

N. Maslin U. Oswald

Decision electronically authenticated