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**Datasheet for the decision
of 26 November 2019**

Case Number: T 0234/16 - 3.4.03

Application Number: 12152823.6

Publication Number: 2447981

IPC: H01J61/28, H01J61/70, H01J61/52

Language of the proceedings: EN

Title of invention:

Low-pressure mercury vapor discharge lamp with amalgam, lamp system, water treatment system, use of a lamp system

Patent Proprietor:

Signify Holding B.V.

Opponent:

Heraeus Noblelight GmbH

Headword:

Relevant legal provisions:

EPC Art. 52(1)
EPC 1973 Art. 54, 56, 84, 100(a), 100(c), 111(1)
RPBA Art. 12(4), 13(1)

Keyword:

Claims - clarity in opposition appeal proceedings
Grounds for opposition - fresh ground for opposition - not
admitted into appeal proceedings
Late-filed novelty objection - admitted (no)
New inventive step objections - admitted (no)

Decisions cited:

G 0010/91, G 0003/14, T 2233/09, T 0392/16

Catchword:



Beschwerdekammern
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Case Number: T 0234/16 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 26 November 2019

Appellant: Heraeus Noblelight GmbH
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
11 December 2015 concerning maintenance of the
European Patent No. 2447981 in amended form.

Composition of the Board:

Chairman G. Eliasson
Members: T. M. Häusser
G. Decker

Summary of Facts and Submissions

- I. The appeal of the opponent concerns the interlocutory decision of the opposition division to maintain the European patent EP-B-2 447 981 as amended during the opposition proceedings (Article 101(3) (a) EPC).
- II. The opposition had been filed against the patent as a whole. Grounds of opposition were lack of novelty, lack of inventive step, and extension of the subject-matter beyond the content of the parent application (Articles 100(a) and (c), 54(1) and (2), and 56 EPC 1973).
- III. At the oral proceedings before the board the appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked.

The respondent (patent proprietor) requested as a main request that the appeal be dismissed and, auxiliarily, that the decision under appeal be set aside and that the patent be maintained according to the claims of auxiliary request I filed with the reply to the grounds of appeal dated 18 August 2016.

- IV. Reference is made to the following documents:

D3: US-A-5,274,305,
D6: WO 2004/089429 A2,
D10: WO 03/001856 A1,
D11: WO 93/11556 A1,
D17: JP 10074487 A,
D18: JP 10074488 A.

- V. The wording of independent claims 1 and 8 of the main request, i. e. in the version maintained by the opposi-

tion division, is as follows (board's labelling "(i)" and "(ii)"):

"1. A lamp system comprising a low-pressure mercury vapor discharge lamp, the lamp comprising:

- at least one discharge vessel (6) enclosing, in a gastight manner, a discharge space (8) provided with a filling of mercury and a rare gas, the discharge vessel having a first end section (28) and a second end section,

- a first electrode (10, 30) arranged at the first end section and a second electrode arranged at the second end section for maintaining a discharge along a discharge path between the first electrode and the second electrode,

- an amalgam (18) having an optimal temperature range arranged at the first end section out of the discharge path,

- a heating element (22) arranged at the first end section for heating the amalgam to a temperature within its optimal temperature range, the lamp system further comprising

- an electronic circuit (38) arranged to generate an electrical discharge current for maintaining the discharge, and an electrical heating current for heating the heating element, independently from the electrical discharge current,

- (i) - a temperature sensor for measuring the temperature level at a position near the amalgam,

- a control circuit (40) for generating at least one control signal to activate the electronic circuit to generate the electrical heating current

- the control circuit (40) being programmable to generate the at least one control signal in dependence on the temperature level provided by the temperature

sensor, characterized in that the lamp further comprises:

- a pressed end (14) at the first end section (28) for sealing the first end section in a gastight manner, wherein the amalgam is positioned in a recess of the pressed end (14) at the side facing the discharge vessel (6), whereby the heating element (22) is arranged to heat the amalgam (18) independently of the first electrode (10), or the first electrode (10) is further arranged to operate as the heating element; or in that the lamp further comprises

- a pressed end (14) at the first end section (28) for sealing the first end section in a gastight manner, wherein the amalgam is positioned in a container encapsulating the amalgam, adjacent to the heating element and having a gas opening enabling exchange of mercury with the discharge space, whereby the first electrode (10) is further arranged to operate as the heating element."

"8. A low-pressure mercury vapor discharge lamp arranged to operate in a lamp system according to claim 1, comprising:

- at least one discharge vessel (6) enclosing, in a gastight manner, a discharge space (8) provided with a filling of mercury and a rare gas, the discharge vessel having a first end section (28) and a second end section,

- a first electrode (10, 30) arranged at the first end section and a second electrode arranged at the second end section for maintaining a discharge along a discharge path between the first electrode and the second electrode,

- an amalgam (18) having an optimal temperature range arranged at the first end section out of the discharge path,

- a heating element (22) arranged at the first end section for heating the amalgam to a temperature within its optimal temperature range,
- (ii) - a temperature sensor for measuring the temperature level at a position in the discharge vessel near the amalgam,

characterized in that the lamp further comprises:

- a pressed end (14) at the first end section (28) for sealing the first end section in a gastight manner, wherein the amalgam is positioned in a recess of the pressed end (14) at the side facing the discharge vessel (6), whereby the heating element (22) is arranged to heat the amalgam (18) independently of the first electrode (10), or the first electrode is further arranged to operate as the heating element;

or in that the lamp further comprises

- a pressed end (14) at the first end section (28) for sealing the first end section in a gastight manner, wherein the amalgam is positioned in a container encapsulating the amalgam, adjacent to the heating element and having a gas opening enabling exchange of mercury with the discharge space, whereby the first electrode is further arranged to operate as the heating element."

VI. The parties argued essentially as follows:

(a) Main request - clarity, amendments

The *appellant* argued that amended claim 8 of the main request lacked clarity and extended beyond the application as filed.

The *respondent* was of the opinion that the lack of clarity and added subject-matter objections should not be

admitted into the proceedings and had no merits, either.

(b) Main request - novelty

During the oral proceedings before the board the *appellant* raised a lack of novelty objection over document D10.

In the *respondent's* view this new objection should not be admitted into the proceedings.

(c) Main request - inventive step

The *appellant* brought forward lack of inventive step objections over document D3 in combination with document D6 and over document D11 in combination with document D6. The objection based on documents D17 and D18 was withdrawn during oral proceedings before the board.

The *respondent* argued that the lack of inventive step objections should have been raised during the opposition proceedings and therefore should not be admitted into the appeal proceedings.

Reasons for the Decision

1. Main request - clarity, amendments

- 1.1 The *appellant* argued that the amendment in claim 8 of the main request - effected during the opposition proceedings - that the temperature sensor of the discharge lamp was for measuring the temperature level at a position "in the discharge vessel" near the amalgam (see point V. above, feature (ii)) rendered the claim acces-

sible for a clarity objection. The position of the temperature sensor was in fact not determined by the amendment. Furthermore, it was unclear whether the temperature sensor of the discharge lamp as defined in claim 8 of the main request was also the temperature sensor of the lamp system as defined in claim 1 of the main request (see point V. above, feature (i)) or whether different temperature sensors were intended so that the lamp system comprises in total two temperature sensors. There was also no basis in the application as filed for the latter understanding of the claims, i. e. a lamp system comprising two temperature sensors.

- 1.2 The board notes first that the clarity and added subject-matter objections were filed with the grounds of appeal and were - in the appellant's view - evoked by amendments effected during the oral proceedings before the opposition division. The board sees no reason to hold these objections inadmissible under Article 12(4) RPBA 2007.

- 1.3 However, the different interpretations of claims 1 and 8 of the main request presented by the appellant and leading to the alleged lack of clarity are based on wording which was already present in granted claims 1 and 11. In particular, a temperature sensor is specified to be part of the *lamp system* in claim 1 of the main request ("the lamp system further comprising ... a temperature sensor"), whereas claim 8 of the main request contains a reference to claim 1 and defines a temperature sensor to be part of the *discharge lamp* ("A low-pressure mercury vapor discharge lamp ... comprising ... a temperature sensor"). Precisely the same wording is already used in the corresponding granted claims 1 and 11. Furthermore, in these granted claims it is merely defined that the temperature sensor is

intended to measure the temperature level at a position near the amalgam without indicating the location of the sensor.

The invoked lack of clarity is therefore not introduced into the claims by the amendments effected during the opposition proceedings, but is based on wording which was already present in the granted claims. Hence, in accordance with the principles set out in the decision G 3/14 of the Enlarged Board of Appeal, the clarity objection under Article 84 EPC 1973 raised by the appellant may not be examined during the present opposition appeal proceedings.

- 1.4 The added subject-matter objection was first raised by the appellant in the grounds of appeal and relates to a fresh ground for opposition, namely extension of the subject-matter of the patent beyond the *application as filed* (first option in Article 100(c) EPC 1973), which is to be distinguished from the ground for opposition concerning the extension of the subject-matter of the patent beyond the *parent application* (second option in Article 100(c) EPC 1973) (see T 2233/09, point 1.2 of the Reasons).

In particular, the fresh ground for opposition had not been raised by the appellant in its notice of opposition, where - apart from lack of novelty and lack of inventive step - only extension of the subject-matter of the patent beyond the *parent application* had been raised. On the other hand, the appellant's objection is not related to any amendments effected during the opposition proceedings but is based on wording which was already present in the granted claims and could thus well have been raised in the notice of opposition.

The Enlarged Board of Appeal held in the decision G 10/91 that a fresh ground for opposition may in principle not be introduced at the appeal stage and that an exception to this principle is only justified in case the patentee agrees that the fresh ground for opposition may be considered (see point 18 of the Reasons).

In the present case the respondent did not agree that the fresh ground for opposition may be considered during the appeal proceedings. The board has therefore no power to introduce it at the appeal stage.

In view of the above, the fresh ground for opposition concerning the extension of the subject-matter of the patent beyond the application as filed is not admitted into the appeal proceedings.

2. Main request - novelty

2.1 At the oral proceedings before the board the appellant raised the objection that the subject-matter claimed according to the main request was not new over document D10 and stated that this document had already been discussed in the notice of opposition.

The respondent argued that this new objection should not be admitted into the proceedings.

2.2 According to Article 12(2) RPBA 2007, the statement of the grounds of appeal must contain a party's complete case and should specify all the facts, arguments and evidence relied on.

Any amendment to a party's case after it has filed its grounds of appeal may, according to Article 13(1) RPBA

2007, be admitted and considered at the board's discretion. The discretion must be exercised in view of *inter alia* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

2.3 In the present case the objection of lack of novelty over document D10 was submitted for the first time at the oral proceedings before the board. Hence, this objection was submitted after the statement of the grounds of appeal and is an amendment to the appellant's case within the meaning of Article 13(1) RPBA 2007. Consequently, the admission of this objection is at the board's discretion.

2.4 The appellant did not provide any justification for raising the new objection at such a late stage of the proceedings. Indeed, the board does not see any reason why the appellant should not have been in a position to submit the objection at the earliest possible stage of the appeal proceedings, i. e. with the grounds of appeal. In this case a thorough exchange of views concerning the objection could have taken place already during the written stage of the appeal proceedings.

By contrast, if the new objection were admitted into the appeal proceedings at the oral hearing, the focus of the discussion could be expected to shift - at a very late stage of the appeal proceedings - to entirely new issues which had played no role in these proceedings up to that point. In particular, since document D10 was not even cited during the written stage of the appeal proceedings neither the respondent nor the board had any reason to consider the content of D10 at that stage of the proceedings, let alone to examine whether the claimed subject-matter lacked novelty in view of

that document, especially since this ground for opposition played no role at that stage. The new issues may well be complex and entail lengthy discussions, e. g. concerning the question of what is not explicitly but only implicitly disclosed in document D10. The fact that this document had been referred to in the notice of opposition is not relevant in this respect. In any case, it had merely been discussed there in the context of inventive step and moreover the claimed subject-matter has changed since then due to amendments effected during opposition proceedings.

2.5 In view of the above considerations, exercising its discretion under Article 13(1) RPBA 2007, the board did not admit the new objection of lack novelty over document D10 into the appeal proceedings.

3. Main request - inventive step

3.1 The appellant argued that the subject-matter claimed according to the main request lacked inventive step over document D3 as closest state of the art in combination with document D6 and over document D11 as closest state of the art in combination with D6. The former line of attack was merely stopped but not abandoned during oral proceedings before the opposition division.

The respondent argued that these objections should have been raised during the opposition proceedings and should not be admitted into the appeal proceedings.

3.2 According to Article 12(4) RPBA 2007, everything presented by the parties under Article 12(1) RPBA 2007, in particular the statement of the grounds of appeal (Article 12(1)(a) RPBA 2007), is taken into account by

the board if and to the extent it relates to the case under appeal and meets the requirements of Article 12(2) RPBA 2007, the board having the power to hold inadmissible facts, evidence or requests which could have been presented or were not admitted in the first instance proceedings.

- 3.3 In the present case the objections of lack of inventive step on the basis of document D3 or document D11 as closest state of the art in combination with document D6 were submitted for the first time in the letter setting out the grounds of appeal. In the opposition proceedings the appellant had merely argued in relation to inventive step of the subject-matter claimed according to the main request starting from document D6 as the closest state of the art. The objection based on documents D3 and D6, which was raised during the oral proceedings before the opposition division and then not further pursued, also assumed document D6 to be the closest state of the art (see points 4.20 to 4.24 of the minutes of these oral proceedings).

The board has thus the power to hold these new objections, which represent a new factual framework that could have been submitted during the opposition proceedings, inadmissible under Article 12(4) RPBA 2007 (see T 392/16, points 2.1 and 2.2 of the Reasons).

- 3.4 The appellant did not provide any justification for raising the new objections only during the appeal proceedings rather than already during the opposition proceedings. The board does not see any reason why the appellant should not have been in a position to submit these objections already during the opposition proceedings, in particular at the oral hearing before the opposition division, especially since the combination

of documents D3 and D6 had been considered during this hearing in the context of document D6 constituting the closest state of the art. In that case the objections would have been dealt with in the contested decision, the parties would have been in a position to comment on these parts of the decision and the board would be able to review the decision in this respect.

Furthermore, during the oral hearing before the opposition division the appellant had admitted that document D3 did not disclose all the features of claim 1 of the main request which were not disclosed in document D6 (see point 4.24 of the minutes of the hearing). In accordance with this appraisal there are thus features in this claim which are disclosed in neither one of these documents. The objection based on documents D11 and D6 was only briefly discussed in the grounds of appeal using a reference to the objection based on document D3 as closest state of the art in combination with D6 and is apparently - as admitted by the appellant - less relevant than the objection based on documents D3 and D6. Hence, both objections appear to lack *prima facie* the relevance warranting their admission into the proceedings and in-depth discussion as to their significance in relation to inventive step.

3.5 In view of the above, the board does not admit under Article 12(4) RPBA 2007 the new objections of lack of inventive step of the subject-matter claimed according to the main request over

- document D3 as closest state of the art in combination with document D6 and
- document D11 as closest state of the art in combination with D6.

4. Conclusion

Since none of the appellant's objections under the EPC against the patent in the version maintained by the opposition division is successful, the opposition division's decision maintaining the patent is to be confirmed. Consequently, the appeal has to be dismissed in accordance with the respondent's main request (Article 101(3)(a) EPC and Article 111(1) EPC 1973). Consideration of the respondent's auxiliary request I is therefore not necessary.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



S. Sánchez Chiquero

G. Eliasson

Decision electronically authenticated