Datasheet for the decision of 6 May 2011

Case Number: T 1469/09 - 3.2.03
Application Number: 04705827.6
Publication Number: 1590598
IPC: F21V 17/06
Language of the proceedings: EN
Title of invention: Flight obstacle light with a tubular body
Applicant: Obelux Oy
Opponent: -
Headword: -
Relevant legal provisions: EPC Art. 54, 56
Relevant legal provisions (EPC 1973): -
Keyword: "Novelty (yes)"
"Inventive step (yes)"
Decisions cited: -
Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.03
of 6 May 2011

Appellant: Obelux Oy
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Representative: Järveläinen, Pertti Tauno Juhani
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 20 February 2009 refusing European patent application No. 04705827.6 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: U. Krause
Members: G. Ashley
J.-P. Seitz
Summary of Facts and Submissions

I. European patent application number 04 705 827 (international publication number WO-A1-2004/070266) concerns an obstacle light for providing warnings for approaching aircraft.

II. The Examining Division concluded that the subject-matter of claim 1 - filed during the examination proceedings - was not novel in light of WO-A-02/066889 (D1), and hence decided to refuse the patent application. The decision was posted on 20 February 2009. The applicant (Appellant) filed notice of appeal on 4 May 2009; both the appeal fee and the statement of the grounds of appeal had previously been received by the EPO on 27 April 2009.

III. In a communication dated 19 January 2011, the Board expressed the view that claim 1, filed as the main request with the grounds of appeal, appeared to define novel and inventive subject-matter. In response, the Appellant filed with the letter of 3 May 2011 an amended set of claims and description pages.

IV. Requests

The Appellant requests that the decision of the Examining Division be set aside and a patent be granted on the basis of the claims filed with the letter of 3 May 2011.
V. Claims

Claim 1 reads as follows:

"1. A flight obstacle light fitting having a tubular body (1) provided with light emitting semiconductor light sources (3), such as LEDs or emitters, fitted around it on its circumference at at least one level and provided with directional lenses, oriented horizontally outwards, characterized in that the tubular body (1) is when installed at the place of use completely open at both ends to allow more efficient cooling."

Dependent claims 2 to 6 define preferred embodiments of the light fitting of claim 1.

VI. Submissions of the Appellant

The Appellant argued that claim 1 defines a light which is open at both ends when in use; this increases circulation of air inside the body of the light, thereby improving the cooling effect.

The light of D1 is provided with a cover having a screen portion and a base also having a screen. Cooling air has to flow into the light through the screen in the base, through the tubular portion and out via the screen in the cover. Compared with the light of D1, the claimed light is completely open at both ends, which allows cooling air to flow straight through the tube and thereby provide maximum cooling effect. Since this arrangement is disclosed neither in D1, nor in any of
the documents referred to in the contested decision, the claimed subject-matter has an inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. Article 123(2) EPC

2.1 Claim 1 of the patent application as originally filed (WO-A1-2004/070266) contains the feature that "the tubular body (1) has a polygonal outer surface, providing an even mounting surface for the light sources, especially to permit more efficient transfer of heat to the body"; this feature has been deleted in the present claim 1.

Although this feature has as an effect improving the heat transfer from the LED's (see page 3, lines 11 to 13 of the application), this effect is neither related to the cooling effect of the open tubular body nor is it described in the application as being essential to the invention.

The deletion is therefore not contrary to Article 123(2) EPC

2.2 Claim 1 of the original application has also been amended to define the tubular body as being completely open at both ends to allow more efficient cooling when installed at the place of use. This feature is a combination of the first part of the characterising
part of claim 1 as originally filed and the disclosure at page 2, lines 19 to 21 of the description.

2.3 The description has been amended to mention briefly the state of the art disclosed in D1 and to reflect the subject-matter of the present claims.

2.4 The amendments to both the claims and the description meet the requirements of Article 123(2) EPC.

3. Novelty and Inventive Step (Articles 54 and 56 EPC)

3.1 Claim 1 before the Examining Division was directed to a flight obstacle light fitting having a tubular body that is completely open at both ends to allow more efficient cooling. Since the light fitting of D1 comprises a tubular body (formed from modules 20, see Figures 3 and 4A) which is completely open at both ends in order to improve cooling (see page 5, fourth paragraph), the Examining Division concluded correctly that the claimed subject-matter lacked novelty.

3.2 The present claim 1 requires that the tubular body is completely open at both ends when installed at the place of use.

3.3 Although the light of D1 includes an open-ended tubular body, when installed at the place of use, the tubular body is protected by an outer cover (3), which has base portion (6), and a top cover (1). It therefore cannot be said that the tubular body of D1 is completely open at both ends when installed at the place of use, and hence the claimed subject-matter is novel over D1.
3.4 Starting from D1 the objective problem can be seen as how to improve the cooling efficiency of the lamp.

3.5 According to D1 cooling is achieved, as in the present application, by free convection. Air flows into the lamp of D1 through screen portion (9) at the base and out of the lamp via screen (2) located near the top cover (1). It is plausible that the open-ended arrangement of the light fitting of claim 1 provides less of a resistance to air flow than the screens (2) and (9) of D1, so that the cooling effect created by convection of air is improved.

3.6 None of the documents cited in the contested decision discloses a lamp having a tubular body completely open at both ends when in use, hence the claimed solution to the objective problem is not obvious. The subject-matter of claim 1 thus has an inventive step.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Examining Division with the order to grant a patent on the basis of the following documents:

   Claims 1 to 6, filed with the letter of 3 May 2011;

   Description pages 1, 2, 2A and 3, filed with the letter of 3 May 2011;

   Figures 1 to 3, as originally filed.

The Registrar:    The Chairman:

A. Counillon     U. Krause