Datasheet for the decision of 18 January 2010

Case Number: T 0796/07 - 3.4.03
Application Number: 00110484.3
Publication Number: 1054435
IPC: H01J 9/24
Language of the proceedings: EN
Title of invention: Method for capping lamps
Applicant: Panasonic Corporation
Opponent: -
Headword: -
Relevant legal provisions: -
Relevant legal provisions (EPC 1973): EPC Art. 54(1)(2), 56
Keyword: "Novelty (yes) - after amendment" "Inventive step (yes) - after amendment"
Decisions cited: -
Catchword: -
Case Number: T 0796/07 - 3.4.03

DECISION
of the Technical Board of Appeal 3.4.03
of 18 January 2010

Appellant: Panasonic Corporation
1006, Oaza Kadoma
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Representative: Stippl, Hubert
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 20 February 2007 refusing European application No. 00110484.3 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: G. Eliasson
Members: R. Q. Bekkering
J. Van Moer
Summary of Facts and Submissions

I. This is an appeal against the refusal of application 00 110 484 for lack of novelty over document D3: US 3 897 124 A

II. The appellant applicant requested that the decision under appeal be set aside and a patent granted on the basis of the following documents:

   Claims: Claims 1 to 4 filed with letter dated 3 November 2009;

   Description: Pages 1 and 2 filed with letter dated 3 November 2009;
               Pages 3 to 5 as originally filed;

   Drawings: Sheets 1/3 to 3/3 as originally filed.

III. Claim 1 reads:

   "A method of capping a lamp comprising:
   drawing out a lead wire (8) from a hole (9) of a base eyelet (5) of a lamp (3),
   positioning a funnel-shaped holder (6) above said eyelet (5),
   supplying a conductive metal piece (11) through said funnel-shaped holder (6) to the vicinity of the eyelet hole (9) and the projected lead wire (8), and
   performing plasma arc welding to melt said metal piece (11) together with said lead wire (8) so that the lead wire (8) is connected to the eyelet (5)".
IV. Reference is also made to the following prior art document:

D1: DD 148 692 A

Reasons for the Decision

1. The appeal is admissible.

2. Amendments

Claim 1 is based on claims 1 and 2 as originally filed and on the description as originally filed (page 3, lines 18 to 31).

Dependent claims 2 to 4 correspond to original claims 3 to 5, respectively.

The amendments, thus, comply with Article 123(2) EPC.

2.1 Novelty

2.1.1 Document D3

Document D3 discloses a method of capping a lamp comprising drawing out an electrical lead (26) from a hole of a ferrule (12) of the base of a lamp, positioning a funnel-shaped holder (50) above the ferrule (12), positioning an electrode (70) of either the consumable or non-consumable type to within a given distance from the end of the lead and welding the lead to the ferrule (cf figures 1 to 3; column 2, line 44 to
The subject-matter of claim 1 differs from D3 in that it comprises supplying a conductive metal piece through the funnel-shaped holder to the vicinity of the eyelet (ferrule) hole and the projected lead wire, and performing plasma arc welding to melt the metal piece together with the lead wire so that the lead wire is connected to the eyelet.

The subject-matter of claim 1 is, thus, new over document D3 (Articles 54(1) and (2) EPC 1973).

2.1.2 Document D1

Document D1 discloses a method of capping a lamp comprising drawing out an electrical lead (2) from a hole of a base (3) with a centre contact plate (6) of a lamp. The lead is welded to the centre contact plate by placing a ring (7) of a wettable material over the end of the lead and melting the lead end, the ring and the centre contact plate by means of the welding arc (page 5, lines 1 to 11; claim 1; figures 1 to 4)).

The subject-matter of claim 1 differs from D1 in that it comprises supplying a conductive metal piece through a funnel-shaped holder to the vicinity of the eyelet (centre contact plate) hole and the projected lead wire.

The subject-matter of claim 1 is thus new over document D1 as well (Articles 54(1) and (2) EPC 1973).
The subject-matter of claim 1 is also new over the remaining cited prior art which is more remote.

3. Inventive step

In document D3 there is no supply of a metal conductive piece to the vicinity of the lead and the ferrule to be molten so as to connect the lead to the ferrule.

The closest prior art is considered to be provided by document D1 discussed above. In D1 the lead is welded to the centre contact plate by placing a ring of a wettable material over the end of the lead and melting the lead end, the ring and the centre contact plate by means of the arc.

There is, however, no funnel-shaped holder in D1 for supplying a conductive metal piece through it to the vicinity of the eyelet hole and the projected lead wire.

The funnel-shaped holder of claim 1 allows the conductive metal piece to be supplied to the vicinity of the eyelet hole and the projected lead wire, where, by plasma arc welding, the conductive metal piece together with said lead wire are molten so that the lead wire is connected to the eyelet.

This is considered easier to implement than placing a ring of a wettable material on the end of the lead as suggested in D1, and allows for automatic manufacture and provides high production efficiency (application page 5, lines 17 to 18). There is no suggestion in the cited prior art to proceed in this manner.
Accordingly, the subject-matter of claim 1, having regard to the available state of the art, is not considered to be obvious to the person skilled in the art and, thus, involves an inventive step (Article 56 EPC 1973).

3.1 Claims 2 to 4 are dependent on claim 1, providing further limitations. The subject-matter of these claims, therefore, also involves an inventive step.

4. The patent application as amended also meets the remaining requirements of the EPC, so that a patent can be granted on the basis of these documents.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of the first instance with the order to grant a patent in the following version:

   Claims:  Claims 1 to 4 filed with letter dated 3 November 2009;

   Description:  Pages 1 and 2 filed with letter dated 3 November 2009;
                Pages 3 to 5 as originally filed;

   Drawings:  Sheets 1/3 to 3/3 as originally filed.

Registrar:     Chair:

S. Sánchez Chiquero     G. Eliasson