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**Datasheet for the decision  
of 6 September 2012**

**Case Number:** T 1494/08 - 3.4.03

**Application Number:** 01954370.1

**Publication Number:** 1251548

**IPC:** H01J 61/073

**Language of the proceedings:** EN

**Title of invention:**

Short-arc high-pressure discharge lamp

**Applicant:**

USHIO DENKI KABUSHIKI KAISYA

**Headword:**

-

**Relevant legal provisions (EPC 1973):**

EPC Art. 84, 111(1)

**Relevant legal provisions:**

EPC R. 103(1)(a)

**Keyword:**

"Clarity (yes)"  
"Remittal for further prosecution"  
"Reimbursement of the appeal fee (no) - no substantial  
procedural violation, error of judgment"

**Decisions cited:**

T 0019/87, T 0680/89, T 0875/98

**Catchword:**

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Case Number: T 1494/08 - 3.4.03

**D E C I S I O N**  
of the Technical Board of Appeal 3.4.03  
of 6 September 2012

**Appellant:**  
(Applicant)

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**Decision under appeal:**

Decision of the Examining Division of the  
European Patent Office posted 17 March 2008  
refusing European patent application  
No. 01954370.1 pursuant to Article 97(1)  
EPC 1973.

**Composition of the Board:**

**Chairman:** G. Eliasson  
**Members:** V. L. P. Frank  
T. Bokor

## Summary of Facts and Submissions

I. This is an appeal from the refusal of application 01 954 370 for the reason that claim 1 of the main and auxiliary requests were not clear (Article 84 EPC 1973).

II. At the oral proceedings before the board the appellant applicant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 3 of the main request, filed with letter of 21 June 2007, or alternatively on the basis of any of the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> or 4<sup>th</sup> auxiliary requests, filed with letter dated 1 August 2012, and a remittal to the department of first instance. Additionally, reimbursement of the appeal fee was requested.

III. The independent claim of the main request reads (emphasis added by the board):

"1. High pressure discharge lamp (10) of the short arc type, in the emission tube (11) of which there is a pair of electrodes (20, 30), wherein in at least one of the above described electrodes (20, 30) at least part (23) of its side is provided with a groove area (24) consisting of V-shaped grooves (24), **the depth D of the grooves (24) being within 12% of the electrode diameter,** characterized in that the relation D/P between the depth D of the grooves (24) and the pitch P between the grooves (24) is greater than or equal to 2 and that the angle of the V-shaped grooves (24) is less than or equal to 30°."

IV. The following prior art document is cited in this decision:

D3: JP 11 102 662 A.

V. The examining division found in the decision under appeal that claim 1 did not specify which electrode diameter was meant rendering thus the feature "*the depth D of the grooves (24) being within 12% of the electrode diameter*" and consequently also the claim unclear.

According to the division, the "electrode diameter" could be considered to be eg:

- the outer diameter measured between "uppermost parts" of the grooves on opposite sides of the electrode, or
- the diameter between opposite "bottom areas" of the grooves, or
- the diameter of the ungrooved cylindrical part, or
- some other diameter of the electrode, like the diameter of the electrode tip.

Neither the description nor any of the drawings gave unambiguous indications which diameter of the electrode was meant.

Although the applicant asserted that it was completely clear for the expert that "the electrode diameter" in claim 1 should be the "outer diameter" of the final electrode, since the groove area was manufactured by removing material from the electrode surface, this view was not shared by the examining division, since the diameter of the ungrooved cylindrical part in figures

2(a) and 3(a)-3(e) was not necessarily equal to the outer diameter measured at groove crests (i.e. the groove crests may protrude from the entire rest of the electrode), since the entire outer surface of the electrode may have been machined reducing its diameter. For example, in the high pressure discharge lamp of document D3, the outside diameter of the electrode in the ungrooved areas was indeed reduced by machining to the level of the bottom areas of the grooves. In the finished electrode of D3, the crests in the grooved area protruded from an - otherwise approximately constant - electrode diameter. Thus, the possibility of taking such a diameter as "the electrode diameter" - and not that at the crests of the grooves - was not fictitious.

VI. The appellant applicant argued essentially as follows:

- Clarity

The decision of the examining division was unjustified and based on an over-sophisticated and hypercritical interpretation of the wording of the claims. The examining division took a lot of effort to invent theoretical embodiments which might have eventually fallen within the scope of the claims and allegedly rendered them unclear. The obvious interpretation of the expert was mostly ignored.

The electrode of the invention consisted of a tip area, a conical part and a body part. Claim 1 spoke of "the electrode diameter". That meant, in the normal understanding, one diameter, not several diameters. The diameter of the electrode was neither the diameter of

the electrode tip nor one of the "diameters" of the conical part but the diameter of the body part. This interpretation of the electrode's diameter as the diameter of the body part was also in accordance with the general use of this term in the prior art.

It did not make sense at all to assume that the electrode diameter was the inner diameter measured at the bottom of the grooves. It was perfectly clear to the skilled reader that the groove area was part of the body part (or the electrode) and located in the body part. It belonged thus to the electrode or its body part. It did not make sense to take the diameter at a location which left out the outer part of the electrode or of its body part. A diameter taken at the bottom of the grooves would not be *the* diameter but only a *partial* diameter of the body part or, respectively, the electrode.

The groove area was prepared according to the application by removing material from the body part of the electrode. Diamond cutting or irradiations with laser or electron beams were mentioned as preparation methods. In view of the wording of claim 1 and the disclosure in the description, it was completely artificial to find that the grooves might have been formed by adding material to the body part.

- Remittal for further prosecution

The applicant's representative also requested that the board remits the case to the department of first instance for further prosecution in order not to lose an appellate instance. It should be considered in

particular that the present situation, in which the patentability of the application would be assessed for the first time by the board of appeal, was not a result of his way of conducting the proceedings, but a consequence of the decision under appeal which did not address at all the issue of inventive step.

- Reimbursement of the appeal fee

It could be seen from the communication pursuant to Rule 71(3) EPC issued for EP 06 710 732 that the corresponding patent application was declared allowable by the examining division and would have been granted if the applicant had not withdrawn the application. Claim 1 of this application comprised as distinguishing feature "*that the number of grooves (6) in a cross section of the electrode rod (3;21,22) is between 250 and 4000 times the diameter of the electrode rod (3;21,22) measured in mm*". This feature was in every respect commensurable with the feature "*the depth D of the grooves (24) being within 12% of the electrode diameter*" of the present invention, which was considered ambiguous and declared unallowable for lack of clarity. The fact that the communication of the intention to grant issued for that patent application was endorsed by the same two examiners who approved the decision to refuse the subject application made this discrepancy all the more incomprehensible. It was further pointed out that the diameter of the electrode rod in EP 06 710 732 was recognized immediately and without further enquiry by the examining division and, in fact, was not called into question for a moment during examination. What was meant by the diameter of

the electrode was thus immediately recognizable to the person skilled in the art.

The refund of the appeal fee was requested, since the decision of the examining division was based on a blatant misunderstanding of the present application that forced the applicant to incur considerable additional expenses.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Clarity (Article 84 EPC 1973)*
  - 2.1 The claims of the main request in appeal are identical to the claims of the main request before the examining division and therefore the objections of the examining division still apply.
  - 2.2 The examining division objected in the decision under appeal that the feature "*the depth D of the grooves (24) being within 12% of the electrode diameter*" of claim 1 of the main request was not clear, since it was not defined in the claim which diameter was meant. The examining division gave several examples of what in their view could be understood as being the electrode diameter (see point V of this decision).
  - 2.3 The board cannot follow this reasoning. All electrodes for high pressure discharge lamps shown in the available prior art documents have the overall shape of a cylindrical rod, some with a conical front part and a

foremost tip portion. It is clear for the skilled person, and even for any reasonable reader, that a reference to the diameter of a rod-like electrode with grooves, is intended to be a reference to the diameter of the body part of the electrode. If any other dimension other than the diameter of the body part would be intended to be referred by the term "the electrode diameter" such a definition would have to be made explicitly in the claims and the description.

2.4 The examining division argued that the electrode diameter could be the distance between the "uppermost parts 27" of the grooves on opposite sides of the electrode which could be very different from the diameter of the remaining ungrooved body part. It referred in this connection to document D3 to show that such an interpretation was not fictitious, since D3 disclosed an electrode 11 having projecting parts 11b which extended outwards from the cylindrical body of the electrode. The diameter of the cylindrical body was much less than the diameter of the projections.

2.5 Claim 1 is however directed to a discharge lamp in which at least one of the electrodes has part of its side provided with grooves. The reasonable understanding of an electrode having grooves on its side is that these grooves extend below the surrounding surface. Otherwise they would not be grooves. In document D3 the corresponding parts are correctly referred as projections and any sensible reader would not equate them with grooves formed in an electrode. This is so irrespective as how the projections were formed, either by reducing the diameter of the

"ungrooved" area or by adding material to form the projections.

2.6 The examining division gave as a further example of the electrode diameter the distance between opposite "bottom areas 28" of the grooves. The board however does not consider this a reasonable interpretation of the diameter of a cylindrical rod with grooves. If the applicant would have wanted this distance to be the correct definition for the electrode diameter it would have been necessary to explicitly to refer to it. This is not the case.

2.7 The board finally wants to point out that it fully approves the established case law that the description should not be used for rendering clear an unclear claim. This is however not the circumstances of the present case. The appellant's references to the description and his reliance on it were made for showing that no contradiction existed between the original disclosure and a reasonable understanding of the claim, not for clarifying it.

2.8 The board finds for these reasons that claim 1 of the main request is clear.

3. *Remittal for further prosecution*

3.1 The appellant applicant requested that the case be remitted to the department of first instance for further prosecution, as the patentability of the application and, in particular, the presence of an inventive step has not been decided by the examining division. The applicant would lose the possibility of

challenging a negative finding, if the board decides this issue for the first time adversely to him.

3.2 In the present circumstances, the board considers it appropriate to remit the case to the first instance for further prosecution on the basis of the appellant's main and first to fourth auxiliary requests (Article 111(1) EPC 1973).

3.3 To avoid any doubts, it is pointed out that the examining division is solely bound by the finding of the board in the present decision that the feature "*the depth D of the grooves (24) being within 12% of the electrode diameter*" is clear in accordance with Article 84 EPC 1973. All the possibly remaining issues have to be decided freely by the examining division.

4. *Reimbursement of appeal fees (Rule 103 EPC, former Rule 67 EPC 1973)*

4.1 The appeal fee shall be reimbursed if the appeal is allowable and if such reimbursement is equitable by reason of a substantial procedural violation (Rule 103(1)(a) EPC).

The appeal fee shall also be reimbursed if the appeal is withdrawn before filing the statement of grounds of appeal and before the corresponding period has expired (Rule 103(1)(b) EPC). This is evidently not the case.

4.2 In the present case the examining division committed an error of judgment when assessing the clarity of the claims. However, an error of judgment, even a possibly blatant one, does not constitute a substantial

procedural violation (see T 680/89, reasons point 6; T 19/87, OJ EPO 1988, 268, reasons point 5).

4.3 The appellant applicant also pointed out the different outcome in patent application EP 06 710 732 in which a similar feature was not objected as lacking clarity by an examining division comprising the same two members as in the present case. There is however no rule of procedure in the EPC imposing to an examining or opposition division an obligation to abide, in its decision concerning a certain case, by a decision in a different case (see T 875/98, reasons point 4). The departments of first instance are bound by the *ratio decidendi* of a board of appeal only if the case is remitted for further prosecution and in so far as the facts remain the same (Article 111(2) EPC).

4.4 Since in the present case the board is unable to recognize any substantial procedural violation, it is not empowered to order the reimbursement of the appeal fee according to Rule 103(1)(a) EPC.

**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 first instance for further prosecution.
3. The request for reimbursement of the appeal fee is refused.

Registrar

Chair

S. Sánchez Chiquero

G. Eliasson