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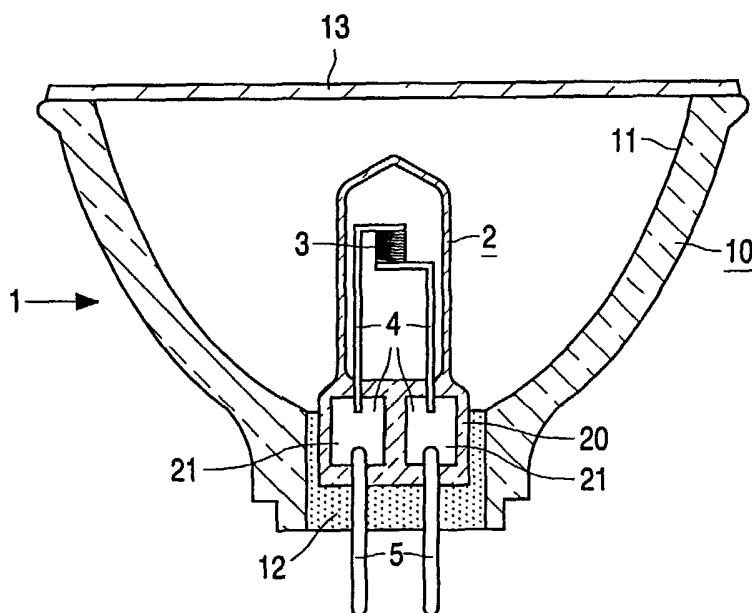
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(54) Title: ELECTRIC LAMP WITH OXIDATION-RESISTANT LEAD-IN CONDUCTORS



(57) Abstract: The electric lamp (1) has a lamp vessel (2), wherein an electric element (3) is accommodated. Said element is connected to current conductors (4), molybdenum portions (5) and (21) which have a coating of material chosen from the group consisting of chromium-manganese, chromium-cobalt, chromium-iron and chromium-boron alloys as a protection against oxidation.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB 03/02280

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01J9/28 H01J5/46 H01K1/40 H01J9/32 H01K1/38

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01J H01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 015 165 A (HARDIES ALFONS EUGEN MARIA) 29 March 1977 (1977-03-29)	1-3
Y	column 1, line 5 - line 10 column 1, line 49 - line 60; figure 1 -----	5
X	GB 688 859 A (CHARLES SYKES;CHARLES STOKES; JOSEPH WOOLMAN) 18 March 1953 (1953-03-18) page 2, line 68 - line 95 -----	1,4
X	US 3 959 682 A (WESSELINK GUSTAAF ADOLF ET AL) 25 May 1976 (1976-05-25) abstract column 1, line 56 - column 2, line 18 column 3, line 21 - line 31; figure 2 ----- -/--	1,4

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

7 October 2003

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13.01.2004

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INTERNATIONAL SEARCH REPORT

Intern: Application No
PCT. 03/02280

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 777 404 A (BLUM KARL ET AL) 11 October 1988 (1988-10-11) column 2, line 50 - line 65; figure -----	1
Y	US 3 420 944 A (HOLCOMB RICHARD H) 7 January 1969 (1969-01-07) column 4, line 3 - line 64; figure 2 -----	5
Y	US 3 105 867 A (MARIA MEIJE RIKSTERUS AUGUSTE) 1 October 1963 (1963-10-01) column 2, line 32 - line 34; figure 2 -----	5

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 03/02280

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-3 and 5 (1st to 3rd alternative), 4

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3 and 5 (first to third alternatives); 4

An electric lamp, comprising current conductors made at least partly from molybdenum and at least partly embedded in a gastight seal of the lamp vessel, which conductors are partly provided with means for protection against oxidation chosen from a chromium alloy;

wherein the chromium alloy is a chromium-manganese alloy (first alternative of claim 1).

1.1. claims: 1-3 and 5 (second alternative)

The chromium alloy is a chromium-cobalt alloy.

1.2. claims: 1-3 and 5 (third alternative)

The chromium alloy is a chromium-iron alloy.

2. claims: 1-3 and 5 (fourth alternative)

An electric lamp, comprising current conductors made at least partly from molybdenum and at least partly embedded in a gastight seal of the lamp vessel, which conductors are partly provided with means for protection against oxidation chosen from a chromium alloy;

wherein the chromium alloy is a chromium-boron alloy.

INTERNATIONAL SEARCH REPORT

Information on patent family members

Intern. Application No

PCT, No. 03/02280

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