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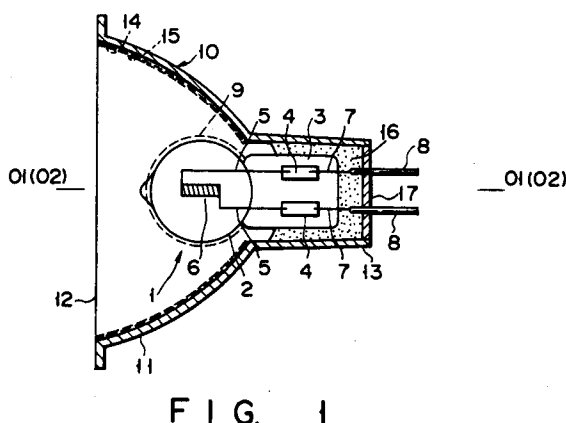
(11) Publication number:

**0 470 496 A3**

(12)

**EUROPEAN PATENT APPLICATION**(21) Application number: **91112878.3**(51) Int. Cl.<sup>5</sup>: **H01K 1/32, H01K 1/02, H01K 7/02, F21V 9/04**(22) Date of filing: **31.07.91**(30) Priority: **07.08.90 JP 209464/90**  
**07.08.90 JP 209465/90**(43) Date of publication of application:  
**12.02.92 Bulletin 92/07**(84) Designated Contracting States:  
**DE GB**(88) Date of deferred publication of the search report:  
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**W-8000 München 80(DE)**(54) **Incandescent lamp and reflector type projection lamp.**

(57) A reflector type projection lamp comprising an incandescent lamp (1) provided on the inner or outer surface of its bulb (2) with an interference layer for reflecting infrared light and transmitting visible light and a reflector (10) provided on its reflecting surface with an interference layer (15) for reflecting visible light and transmitting infrared light is characterized in that the bulb (2) of said incandescent lamp is either spherical or spheroidal. Of the light emitted from the filament (6) of the incandescent lamp, the infrared component is effectively reflected by an interference layer (9) on the bulb and returned to the filament to enhance the overall lighting efficiency of the lamp and reduce the rate of heat irradiated from the lamp into the atmosphere.


**EP 0 470 496 A3**



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## EUROPEAN SEARCH REPORT

Application Number

EP 91 11 2878

### DOCUMENTS CONSIDERED TO BE RELEVANT

| Category  | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim   | CLASSIFICATION OF THE APPLICATION (Int. Cl.5) |
|---|--|---|---|
| X<br>Y<br>A   | US-A-4 707 632 (WALSH)<br>* column 1, line 46 - line 64; claims 17,19,23 *<br><br>---  | 1,2<br><br>7,8<br>3,4,9,10  | H01K1/32<br>H01K1/02<br>H01K7/02<br>F21V9/04  |
| X   | FR-A-1 125 844 (COMPAGNIE FRANCAISE THOMSON-HOUSTON)<br>* abstract; figures 1-3 *<br><br>---   | 1   |   |
| Y<br><br>A  | EP-A-0 339 130 (W.C. HERAEUS GMBH)<br>* column 3, line 10 - line 18 *<br>* column 3, line 34 - line 43; claims 1-4; figures 1A,18 *<br><br>--- | 7,8<br><br>1-4,10,<br>11,13   |   |
| A   | DE-A-3 810 917 (TOSHIBA ELECTRIC EQUIPMENT CORP)<br>* abstract; claim 1 *<br><br>---   | 7-16  |   |
| A   | US-A-3 488 543 (J. DE RIDDER ET AL.)<br>* column 3, line 29 - line 57 *<br>* claim 1; figure 1 *<br><br>---                                    | 3,4,7-16  | TECHNICAL FIELDS<br>SEARCHED (Int. Cl.5)      |
| A   | FR-A-648 112 (PECH)<br>* page 1, line 60 *<br>* page 2, line 1 - line 5; figure 1 *<br><br>-----   | 13  | H01K<br>F21V<br>G02B<br>F21M                  |
| The present search report has been drawn up for all claims  |  |   |   |
| Place of search<br>THE HAGUE  |  | Date of completion of the search<br>26 JUNE 1992  | Examiner<br>DE MAS A. G.                      |
| <b>CATEGORY OF CITED DOCUMENTS</b>  |  |   |   |
| X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |  | T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>.....<br>& : member of the same patent family, corresponding document |   |