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**EUROPEAN PATENT APPLICATION**

21 Application number: **86107492.0**

51 Int. Cl.<sup>3</sup>: **H 01 J 61/36**

22 Date of filing: **03.06.86**

30 Priority: **03.06.85 US 740165**

43 Date of publication of application:  
**10.12.86 Bulletin 86/50**

88 Date of deferred publication of search report: **02.11.88**

84 Designated Contracting States:  
**BE DE FR GB NL**

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54 **High temperature tapered inlead for ceramic discharge lamps.**

57 The present invention provides a ceramic arc tube seal comprising an electrical feed-through or conductive inlead (56) for a high-intensity discharge lamp having a high pressure gas discharge tube (50) made of polycrystalline aluminum oxide (PCA). The conductive inlead (56) is formed in a frusto-conical shape such that a mating relationship is created with tapered apertures in the opposed ends of the PCA tube. A seal is provided between the conductive inlead and the PCA tube such that exposure of the sealing frit glass (60) to the inner chamber (59) of the discharge tube (50) and its fill constituents is substantially reduced or ideally prevented. An additional benefit provided by this invention is improved alignment and centering of the electrode (58) that is supported by the conductive inlead (56) in the discharge tube (50).

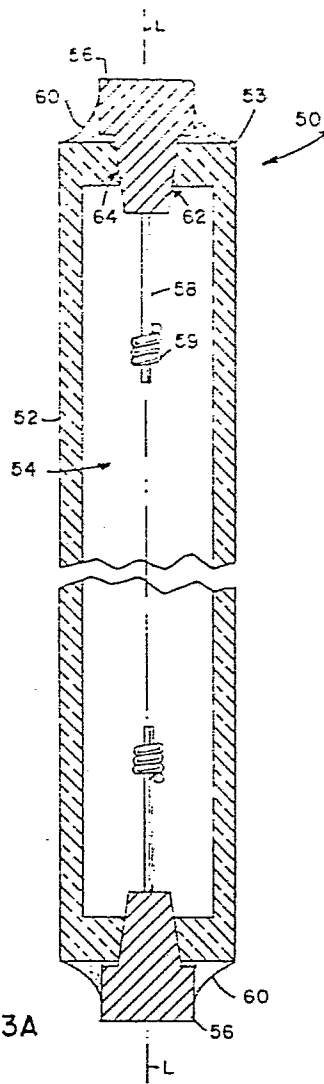


FIG.3A



European Patent  
Office

# EUROPEAN SEARCH REPORT

0204303

Application Number

EP 86 10 7492

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.4)
A	US-A-3 531 853 (KLOMP) * Column 2, lines 42-58; figure 2 * ---	1,6,7,8 ,9,14, 15	H 01 J 61/36
A	GB-A-1 410 297 (PHILIPS ELECTRONIC AND ASSOCIATED IND.) * Page 2, lines 71-130; page 3, lines 1-15; figures 1-5 * ---	1,6,7,8 ,9,14, 15	
D,A	EP-A-0 136 564 (GTE PRODUCTS) * Figures 1-3 * ---	1,8,9	
A	EP-A-0 136 505 (GTE PRODUCTS) * Claims 1,2; figures 1,2; abstract * ---	1,4,6,7 ,8,12, 14,15	
A	FR-A-1 388 226 (ASSOCIATED ELECTRICAL IND.) * Abstract 1,2C; figures 1,2,11,12 * ---	1,6,7,8 ,9,14, 15	
A	EP-A-0 060 582 (PHILIPS) * Figure 2 * -----	1,8,9	TECHNICAL FIELDS SEARCHED (Int. Cl.4)  H 01 J 61/00
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	16-08-1988	ASSI	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	