


**EUROPEAN PATENT APPLICATION**

 Application number: **82307012.3**

 Int. Cl.<sup>3</sup>: **H 01 J 61/72, H 01 J 63/00**

 Date of filing: **31.12.82**

 Priority: **04.01.82 US 337047**

 Applicant: **GTE Laboratories Incorporated, 100 W. 10th Street, Wilmington Delaware (US)**

 Date of publication of application: **27.07.83 Bulletin 83/30**

 Inventor: **Budinger, Bowman A., 11, Christopher Road, Westford Massachusetts 01886 (US)**  
 Inventor: **Byszewski, Wojciech W., 142, Oakland Avenue, Arlington Massachusetts 02174 (US)**  
 Inventor: **Proud, Joseph M., 347, Linden Street, Wellesley Hills Massachusetts 02181 (US)**

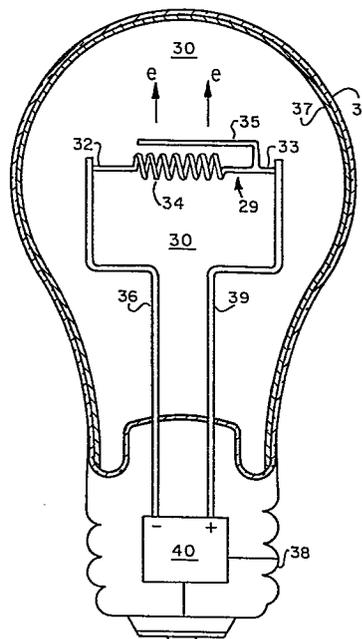
 Designated Contracting States: **DE FR GB NL**

 Date of deferred publication of search report: **02.05.84 Bulletin 84/18**

 Representative: **Bubb, Antony John Allen et al, GEE & CO. Chancery House Chancery Lane, London WC2A 1QU (GB)**

 **Single electrode beam mode fluorescent lamp for D.C. use.**

 The lamp shown herein is a beam mode fluorescent lamp for general lighting applications. The lamp comprises a light transmitting envelope (31), having a phosphor coating (37) on its inner surface, enclosing a single electrode (29) including a thermionic cathode (34) for emitting electrons and an integral anode (35) for accelerating the electrons and forming an electron beam, and a fill material, such as mercury, which emits ultraviolet radiation upon excitation. The electrode configuration provides for use of a single power source and minimal number of power leads. In addition, a separate cathode heater filament is not required.





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. <sup>3</sup> )
Y	US-A-2 409 771 (E.F. LOWRY et al.) * Whole document *	1,2,6	H 01 J 61/72 H 01 J 63/00
Y	--- US-A-2 774 918 (E. LEMMERS) * Column 20, line 72 - column 21, line 53; figure 13 *	1,2	
A	--- US-A-3 369 143 (J.F. GILMORE et al.) * Whole document *	1	
A	--- US-A-2 403 184 (E. LEMMERS) * Column 2, line 42 - column 3, line 5; figure *	1,2	
D,P A	--- EP-A-0 054 959 (G.T.E. LABORATORIES INC.) * Whole document *	1-6	TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )  H 01 J 61/00 H 01 J 63/00
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20-01-1984	Examiner SARNEEL A.P.T.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			