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DE FR GB NL(88) Date of deferred publication of the search report:
08.04.92 Bulletin 92/15(71) Applicant: **N.V. Philips' Gloeilampenfabrieken
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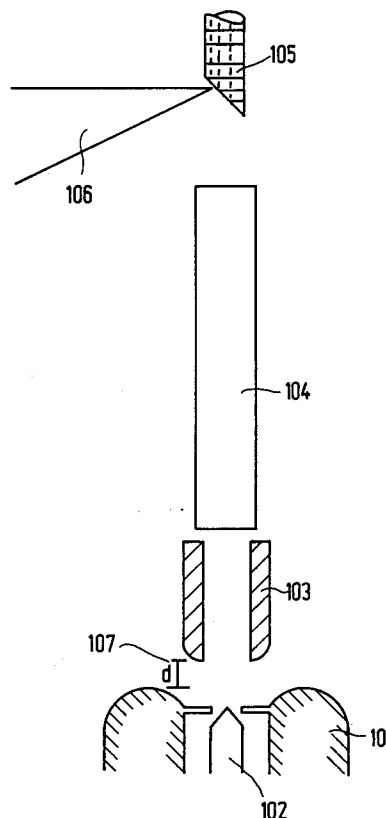
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(54) **Improved anode for arc discharge devices.**

(57) Materials for the electrodes of arc discharge devices reduce arcing damage.

In an X-ray tube, the anode (105) is made of a material which has a ductile-to-brittle transition temperature at or below the normal operating temperature of the device. Such an anode may be chosen from the group comprising molybdenum, tantalum, rhenium and combinations thereof. Other embodiments include spark gaps.

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EUROPEAN SEARCH REPORT

Application Number

EP 91 20 2143

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)
Y	EP-A-0 168 777 (SCANRAY A/S) * the whole document ** - - -	1-7	H 01 J 35/08 H 01 T 1/24
Y	SOVIET INVENTIONS ILLUSTRATED Section Ch, Week 7249, October 1972 Derwent Publications Ltd., London, GB; Class M, Page 30, AN 72-77985T/49 & SU-A-334 270 (HIGH MELTING METALS AND HARD ALLOYS RES. INST.) 6 May 1972 * abstract ** - - -	1-7	
A	PATENT ABSTRACTS OF JAPAN vol. 13, no. 93 (P-838)(3441) 6 March 1989 & JP-A-63 275 987 (TOSHIBA) 14 November 1988 * abstract ** - - - - -	1,2	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H 01 J H 01 T
Place of search		Date of completion of search	Examiner
The Hague		27 January 92	DAMAN M.A.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		E : earlier patent document, but published on, or after the filing date	
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