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EUROPEAN PATENT APPLICATION

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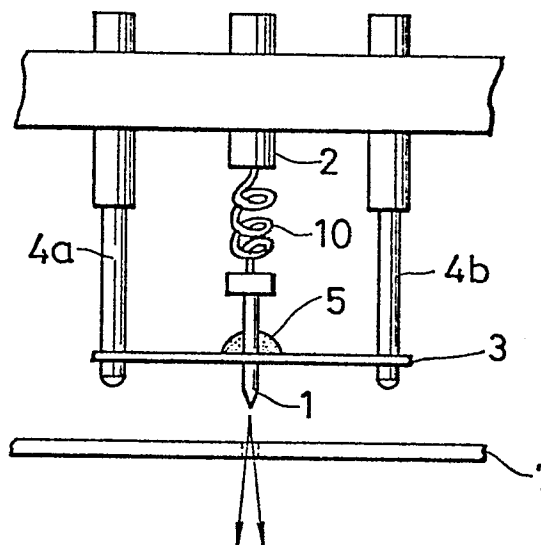
⑧④ Designated Contracting States: **DE FR GB**

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⑤④ **Liquid metal ion source.**

⑤⑦ A liquid metal ion source has a carrier strip 3 which melts and holds a substance 5 being ionized, a needle anode 1 located so that its pointed tip projects the ions of the molten substance supplied by the carrier strip, and a draw-out electrode 7 to apply a strong electric field between itself and the anode, thereby drawing out the ions from the pointed tip of the anode. The ion source has a thermal stress-absorbing element 10 installed between the needle anode and its support 2, or a plurality of such members between the carrier strip and its supports, to take up the thermal stresses that would result from the difference in thermal expansion coefficients between the needle anode and the carrier strip when both are secured to their supports and which would damage the connected components.





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. ³)
A	US-A-4 318 030 (J.B. JERGENSON) * Abstract *	1	H 01 J 27/26

A	US-A-2 146 365 (J.C. BATCHELOR) * Claim 1 *	1	

			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			H 01 J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 06-02-1985	Examiner GALANTI M.
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	

