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(54) Plasma torch shutdown circuit.

(57) A plasma torch (11) is supplied with its d.c. operating voltage by a drooping transformer (33) and a rectifier (31), for striking an arc between an electrode (19) and a workpiece (13). If the arc strikes between the electrode and the torch casing (17), the operating voltage drops. A control circuit (51) senses when the operating voltage is below a threshold value and turns off the power supply by opening a solenoid switch (39, 41, 43). This action is briefly disabled each time the power supply is turned on to allow the operating voltage to build up to its normal level, above the threshold.

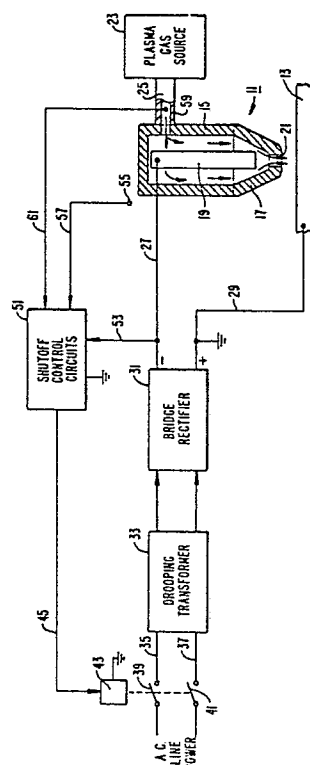


FIG. 1

EP 0 213 689 A3



EP 86 30 3754

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)
X	FR-A-2 151 219 (I.S. SHAPIRO et al.) * Page 3, line 17 - page 4, line 31; page 9, lines 3-12; claim 3; figures 1,3 *	1	H 05 H 1/36 B 23 K 9/10
X	PATENT ABSTRACTS OF JAPAN, vol. 8, no. 90 (M-292)[1527], 25th April 1984; & JP-A-59 7480 (MATSUSHITA DENKI SANGYO K.K.) 14-01-1984	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			H 05 H B 23 K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 06-07-1988	Examiner WINKELMAN, A. M. E.
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			