Title (en)
METHOD FOR OPERATION OF A STEAM PLASMA BURNER AND STEAM CUTTING DEVICE

Title (de)
VERFAHREN ZUM BETREIBEN EINES WASSERDAMPFPLASMABRENNERS UND WASSERDAMPF-SCHNEIDGERÄT

Title (fr)
PROCEDE DE FONCTIONNEMENT D'UN CHALUMEAU AU PLASMA DE VAPEUR D'EAU ET APPAREIL DE DECOUPAGE A LA VAPEUR D'EAU

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Application
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Abstract (en)
[origin: WO2007028182A2] The invention relates to a method for operation of a steam plasma burner (6), comprising a cathode (22) and an anode (24) in the form of a nozzle (23) for machining a workpiece (20), wherein during the operation a current is applied between the cathode (22) and the anode (24) and/or the workpiece (20) by means of a power supply (2). After starting a pilot arc between the cathode (22) and the anode (24) by approaching the steam plasma burner (6) to the workpiece (20), a working arc is formed between the cathode (22) and the workpiece (20) and the pilot arc is extinguished by switching off the power supply (2) to the anode (24) and the current increased to a given working current. In order to achieve an optimal operation of a steam plasma burner, the voltage (U_{UE}) between the cathode (22) and the workpiece (20) is monitored during working operation and the power supply (2) reconnected to the anode (24) to reform the pilot arc when the voltage (U_{UE}) exceeds a threshold (I_{UEs}).

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