

Title (en)

PROCESS FOR STABLE OPERATION OF A PLASMATRON WITH STEAM AS THE PLASMA GAS

Title (de)

VERFAHREN ZUM STABILEN BETRIEB EINES PLASMATRONS MIT WASSERDAMPF ALS PLASMAGAS

Title (fr)

PROCEDE DE FONCTIONNEMENT STABLE D'UN PLASMATRON A VAPEUR D'EAU COMME GAZ DE PLASMA

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Application

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Abstract (en)

[origin: US5498826A] PCT No. PCT/EP91/00348 Sec. 371 Date Mar. 1, 1993 Sec. 102(e) Date Mar. 1, 1993 PCT Filed Feb. 26, 1991 PCT Pub. No. WO91/13532 PCT Pub. Date Sep. 5, 1991. The present invention refers to a plasmatron as well as to a process for stable operation of plasmatrons with steam as the plasma gas, in the case of which the operational fluctuations which are typical of steam plasmas as well as the increased degree of electrode erosion are to be avoided. In accordance with the present invention, this is achieved on the basis of a limitation of electrode cooling by using hot water as a coolant having a temperature of at least 80 DEG C. If necessary, it is possible to use, on the one hand, hot water cooling and to exclude, on the other hand, a condensation of the steam on the electrodes by admixing a gas which will lower the condensation temperature of the steam.

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