

Title (en)

A METHOD OF STABILISING A PLASMA COLUMN PRODUCED BY A MULTI-CATHODE GENERATOR.

Title (de)

VERFAHREN ZUR STABILIZIERUNG EINES DURCH EINEN MEHRFACHKATHODENGENERATOR ERZEUGTEN PLASMAS.

Title (fr)

METHODE DE STABILISATION D'UN JET DE PLASMA PRODUIT PAR UN GENERATEUR DE PLASMA A ARC MULTIPLE.

Publication

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Application

**EP 85904768 A 19850925**

Priority

US 65534084 A 19840927

Abstract (en)

[origin: WO8602024A1] A multiple cathode (Fig. 1, 12, 13, 14) DC arc plasma generator (11) arrangement (10) is used in connection with a single anode for thermal arc plasma processing of materials. A nozzle (32) is provided to introduce a gas in approximately the center of the multiple cathodes (12, 13, 14), towards the anode (11). The nozzle (32) injects the gas into the center of the plasma column (39) generated between the cathodes (12, 13, 14) and anode (11) to stabilize such column and affect the self-induced electrode jets. This provides control of the heat transfer to the anode (11) and permits feeding of particulate matter (41) into the core (40) of the plasma column (39) to enhance inflight processing (melting and/or chemical reaction) of the matter. A set of gas nozzles (56) positioned radially about the anode (11) may be employed for feeding of particulate matter at the anode surface.

IPC 1-7

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IPC 8 full level

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Citation (search report)

- [X] US 3197810 A 19650803 - HUBERT BILDSTEIN
- [AD] US 3989512 A 19761102 - SAYCE IAN GEORGE
- See references of WO 8602024A1

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