

Title (en)
Inter-torch plasma transfer device

Title (de)
Zwischen-Brenner-Plasma-Übertragungsvorrichtung

Title (fr)
Dispositif de déplacement d'un plasma entre torches

Publication
EP 1194018 A3 20040623 (EN)

Application
EP 01123094 A 20010927

Priority
JP 2000298308 A 20000929

Abstract (en)
[origin: EP1194018A2] A plasma device is provided to be used upon furnaces for smelting metal or detoxifying burnt ash by melting, to perform effective heating or melting regardless whether the targeted melting object is conductive or non-conductive, and further, to provide higher efficiency and satisfactory activation and maneuverability. <?>The plasma transfer device A comprising: a primary torch 1 and a secondary torch 2 having an internal electrode 1a, 2a of different polarity, and an external electrode 1b, 2b; a main power source circuit 3 shared by the primary torch 1 and the secondary torch 2; a pilot power source circuit 4, 5 formed to each of the torches 1,2 and electrically discharged between internal electrode and the external electrode for generating a pilot arc; wherein each of the torches 1, 2 forms and emits a pilot arc 8; and wherein the main power source circuit 3 is activated for forming an inter-torch transfer plasma 9 between the internal electrodes 1a, 2a of both torches when the pilot arc of both torches become substantially conducting. <IMAGE>

IPC 1-7
H05H 1/48; **H05H 1/44**; **H05H 1/36**

IPC 8 full level
B01J 19/08 (2006.01); **F27D 11/08** (2006.01); **H05B 7/18** (2006.01); **H05H 1/44** (2006.01); **H05H 1/48** (2006.01)

CPC (source: EP US)
H05H 1/3421 (2021.05 - US); **H05H 1/44** (2013.01 - EP)

Citation (search report)
• [XY] US 4670290 A 19870602 - ITOH TSUTOMU [JP], et al
• [Y] US 3786306 A 19740115 - SCHOU MAKER H
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• [A] US 3472995 A 19691014 - BROWNING JAMES A, et al

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CZ304722B6; WO03084294A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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EP 1194018 A2 20020403; **EP 1194018 A3 20040623**; JP 2002110399 A 20020412

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EP 01123094 A 20010927; JP 2000298308 A 20000929