Title (en)

PLASMA TUNDISH HEATING

Publication

EP 0453188 A3 19930428 (EN)

Application

EP 91303238 A 19910411

Priority

GB 9008833 A 19900419

Abstract (en)

[origin: EP0453188A2] A method of heating molten material in a tundish employs a plasma torch. The plasma comprises a mixture of argon and one or more of nitrogen, hydrogen, neon and helium. A mixture of argon and helium including from 10 to 20% by volume of helium is useful for heating steel. For an arc of given length, a higher voltage is obtainable than when pure argon is used as the plasma gas. The torch is preferably engaged by a horizontal support arm which is pivotally mounted on an extensible support so as to facilitate location of the torch in a limited space above the tundish. <IMAGE>

IPC 1-7

B22D 11/10

IPC 8 full level

B22D 11/10 (2006.01); **B22D 11/11** (2006.01); **B22D 41/015** (2006.01); **H05H 1/32** (2006.01)

CPC (source: EP KR)

B22D 11/10 (2013.01 - KR); **B22D 11/11** (2013.01 - EP)

Citation (search report)

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- [Y] EP 0216398 A1 19870401 - METALLURGIE HOBOKEN [BE]
- [XE] PATENT ABSTRACTS OF JAPAN vol. 16, no. 34 (M-1204)28 January 1992 & JP-A-32 43 254 (NKK CORP) 30 October 1991
- [Y] STEEL TIMES INTERNATIONAL - INCORPORATING IRON & STEEL INTERNATIONAL vol. 13, no. 2, May 1989, ENGLAND GB pages 44 - 46 , XP46437 C.MOORE 'plasma tundish heating as an integral part of continuous casting'
- [Y] PATENT ABSTRACTS OF JAPAN vol. 9, no. 138 (C-286)13 June 1985 & JP-A-60 024 333 (DAIDO TOKUSHUKO KK) 7 February 1985
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Designated contracting state (EPC)

BE DE ES FR GB IT LU NL SE

DOCDB simple family (publication)

EP 0453188 A2 19911023; **EP 0453188 A3 19930428**; AU 7500291 A 19911024; CN 1057416 A 19920101; GB 9008833 D0 19900613; JP H05305422 A 19931119; KR 910019483 A 19911130; ZA 912855 B 19920429

DOCDB simple family (application)

EP 91303238 A 19910411; AU 7500291 A 19910415; CN 91103226 A 19910419; GB 9008833 A 19900419; JP 8839691 A 19910419; KR 910006187 A 19910418; ZA 912855 A 19910419