Title (en)

METHOD FOR FEEDING FLUSHING GAS INTO A DISCHARGE HOLE WITH A SLIDE GATE NOZZLE FOR METALLURGICAL VESSELS

Publication

EP 0293564 A3 19891011 (DE)

Application

EP 88104040 A 19880315

Priority

DE 3718890 A 19870605

Abstract (en)

[origin: US5119976A] A sliding closure unit includes a movable plate movable between open and closed positions to control the discharge of molten metal through an outlet opening of a metallurgical vessel. When the movable plate is in the closed position, a continuous flow of gas is injected from a gas supply system through the area of the movable plate confronting the outlet opening into the outlet opening. When a predetermined gas back pressure occurs in the gas supply system, indicative of solidification of molten metal in the outlet opening, at least one pressurized gas jet at a pressure of at least 12 bar is injected from a compressed gas supply system into the outlet opening, thereby clearing away any solidified metal from the outlet opening. This makes it possible to ensure that, when the movable plate is moved to the open position, the molten metal will be discharged through the outlet opening at a full flow rate of discharge.

IPC 1-7

B22D 41/08

IPC 8 full level

B22D 11/10 (2006.01); **B22D 37/00** (2006.01); **B22D 41/08** (2006.01); **B22D 41/42** (2006.01); **B22D 41/58** (2006.01)

CPC (source: EP KR US)

B22D 11/10 (2013.01 - KR); **B22D 41/42** (2013.01 - EP US)

Citation (search report)

- [A] DE 2012691 B2 19770804
- [A] EP 0166147 A1 19860102 - USS ENG & CONSULT [US]
- [A] EP 0171589 B1 19880504
- [AD] DE 3506426 C1 19851128 - STOPINC AG

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Designated contracting state (EPC)

AT CH ES FR GB IT LI

DOCDB simple family (publication)

US 5119976 A 19920609; AT E69186 T1 19911115; BR 8802713 A 19881227; CN 1008331 B 19900613; CN 1030037 A 19890104; DE 3718890 C1 19880331; EP 0293564 A2 19881207; EP 0293564 A3 19891011; EP 0293564 B1 19911106; ES 2028156 T3 19920701; IN 169578 B 19911116; JP H0317588 B2 19910308; JP S63313655 A 19881221; KR 890000187 A 19890313; ZA 883087 B 19881228

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US 17618388 A 19880331; AT 88104040 T 19880315; BR 8802713 A 19880603; CN 88103257 A 19880531; DE 3718890 A 19870605; EP 88104040 A 19880315; ES 88104040 T 19880315; IN 397CA1988 A 19880517; JP 13761988 A 19880606; KR 880005608 A 19880513; ZA 883087 A 19880429