

Title (en)

PROCESS AND DEVICE FOR CLOSING A TAP HOLE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM VERSCHLIESSEN EINER ABSTICHOFFNUNG

Title (fr)

PROCEDE ET DISPOSITIF POUR L'OBTURATION D'UN TROU DE COULEE

Publication

**EP 0859678 A1 19980826 (DE)**

Application

**EP 96938971 A 19961104**

Priority

- DE 9602133 W 19961104
- DE 19543058 A 19951110

Abstract (en)

[origin: WO9718050A1] The invention relates to a process for closing a tap hole (14) in the bottom (13) of a vessel (10) filled with a metal melt, with a tubular closure (31) in the furnace vessel movable vertically towards and away from the entrance of the tap hole (14) and a closing device (20) fitted beneath the vessel bottom, in the following steps: a) a compressible fireproof material is fitted at the aperture (16) of the closure (31) before each closing process, b) immediately before the immersion of the fireproof material in the melt, a medium is supplied in the closing direction in sufficient quantity largely to prevent its contact with the melt, c) during the closing process the aperture (16) of the closure (31) for blocking the tap hole (14) is guided through the melt and pressed against the vessel bottom (13) with sufficient force to compress the fireproof material, d) then the closing device (20) is taken in the known manner outside the vessel in front of the tap mouth and the tap hole is filled with a pourable fireproof compound via the tubular closure. The invention also relates to the device.

IPC 1-7

**B22D 41/46; B22D 41/14**

IPC 8 full level

**B22D 41/14** (2006.01); **B22D 41/46** (2006.01)

CPC (source: EP KR US)

**B22D 41/14** (2013.01 - EP KR US); **B22D 41/46** (2013.01 - EP KR US)

Citation (search report)

See references of WO 9718050A1

Cited by

WO2011009579A1

Designated contracting state (EPC)

AT BE DE DK ES FI FR GB GR IT SE

DOCDB simple family (publication)

**WO 9718050 A1 19970522;** AT E194530 T1 20000715; AU 7620396 A 19970605; BR 9611528 A 19990713; CA 2237174 A1 19970522; CA 2237174 C 20010904; CN 1076996 C 20020102; CN 1202123 A 19981216; DE 19543058 A1 19980716; DE 19543058 C2 20010104; DE 59605603 D1 20000817; DK 0859678 T3 20001120; EP 0859678 A1 19980826; EP 0859678 B1 20000712; ES 2147939 T3 20001001; GR 3034488 T3 20001229; KR 100299742 B1 20011122; KR 19990064309 A 19990726; MY 113630 A 20020430; NO 981765 D0 19980420; NO 981765 L 19980420; RU 2160656 C2 20001220; TW 355186 B 19990401; US 5914087 A 19990622; ZA 967940 B 19970407

DOCDB simple family (application)

**DE 9602133 W 19961104;** AT 96938971 T 19961104; AU 7620396 A 19961104; BR 9611528 A 19961104; CA 2237174 A 19961104; CN 96198189 A 19961104; DE 19543058 A 19951110; DE 59605603 T 19961104; DK 96938971 T 19961104; EP 96938971 A 19961104; ES 96938971 T 19961104; GR 20000402177 T 20000926; KR 19980702805 A 19980417; MY PI19964646 A 19961107; NO 981765 A 19980420; RU 98110969 A 19961104; TW 85113557 A 19961106; US 6860298 A 19980511; ZA 967940 A 19960919