

Title (en)

Ladle equipped with gas-blowing device having accumulator cylinder

Title (de)

Giesspfanne ausgerüstet mit einer Gaseinblasvorrichtung mit Zylinderspeicher

Title (fr)

Poche de coulée munie d'un dispositif d'injection de gaz comprenant un cylindre accumulateur

Publication

EP 1340563 B1 20070411 (EN)

Application

EP 03003057 A 20030212

Priority

JP 2002041843 A 20020219

Abstract (en)

[origin: EP1340563A2] A ladle (1) equipped with a gas blowing device having an accumulator cylinder (7) is provided, which has the capability of suppressing molten metal from penetrating into an injection plug (3) embedded in the ladle (1) and having a high resistance leading to a longer service life of the injection plug (3). The gas-blowing device (5) comprises a main pipe (8) for blowing gas into the ladle (1) via a gas-blowing plug (3) from a positionally independent gas supply source (4); an accumulator cylinder (7) for accumulating the gas supplied through the main pipe (8); and a controller (6). The controller (6) is used for accumulating the gas into the accumulator cylinder (7) when the gas blowing through the main pipe (8) begins or when the gas blowing is carried out, and for starting to blow the gas accumulated in the accumulator cylinder (7) simultaneously with a termination of the gas blowing through the main pipe (8). <IMAGE>

IPC 8 full level

B22D 1/00 (2006.01); **B22D 41/00** (2006.01); **C21C 5/48** (2006.01); **C21C 7/072** (2006.01)

CPC (source: EP KR)

B22D 1/005 (2013.01 - EP); **B22D 41/00** (2013.01 - EP KR)

Cited by

US8071012B2; US8236234B2

Designated contracting state (EPC)

AT BE ES IT LU SE

DOCDB simple family (publication)

EP 1340563 A2 20030903; **EP 1340563 A3 20041027**; **EP 1340563 B1 20070411**; AT E359138 T1 20070515; AU 2002300920 A1 20030904; AU 2002300920 B2 20041007; BR 0204002 A 20040518; BR 0204002 B1 20120207; EG 23352 A 20050131; ES 2286340 T3 20071201; JP 2003239010 A 20030827; JP 4107409 B2 20080625; KR 100568324 B1 20060405; KR 20030069033 A 20030825; MX PA03001402 A 20050829; TW 571044 B 20040111

DOCDB simple family (application)

EP 03003057 A 20030212; AT 03003057 T 20030212; AU 2002300920 A 20020906; BR 0204002 A 20020930; EG 2002121407 A 20021229; ES 03003057 T 20030212; JP 2002041843 A 20020219; KR 20020068408 A 20021106; MX PA03001402 A 20030214; TW 91120469 A 20020909