

Title (en)
CASTING PLUNGER AND CASTING UNIT WITH SHUT-OFF VALVE

Title (de)
GIESSKOLBEN UND GIESSEINHEIT MIT ABSPERRVENTIL

Title (fr)
PISTON D'INJECTION ET UNITÉ DE COULÉE À SOUPAPE D'ARRÊT

Publication
EP 2701866 B1 20181114 (DE)

Application
EP 12706559 A 20120227

Priority
• DE 102011017610 A 20110427
• EP 2012053288 W 20120227

Abstract (en)
[origin: WO2012146408A1] The invention relates to a casting plunger (3) with an integrated shut-off valve (7) and to a casting unit for a casting machine having a casting vessel (1), wherein the casting unit comprises a casting plunger, which is arranged axially movably in a casting cylinder of the casting vessel and/or a standpipe shut-off valve (8) in a standpipe (4) of the casting vessel. A casting plunger according to the invention has a plunger sleeve (9), which can be brought to bear against an inner wall (10) of a casting cylinder (2) of the casting unit and comprises a valve seat (11) for the integrated shut-off valve, and has a plunger ram (12), which comprises an associated valve body (13), wherein the plunger sleeve and the plunger ram are movable axially with respect to each other by a predeterminable valve stroke. A casting unit according to the invention has such a casting plunger and/or a standpipe shut-off valve (8) with a special valve body (20) through which molten material can flow. Use for example for hot-chamber pressure diecasting machines. Figure 1.

IPC 8 full level
B22D 17/04 (2006.01); **B22D 17/20** (2006.01); **B22D 39/02** (2006.01)

CPC (source: EP KR US)
B22D 17/04 (2013.01 - EP KR US); **B22D 17/20** (2013.01 - KR); **B22D 17/2015** (2013.01 - EP US); **B22D 17/203** (2013.01 - EP US); **B22D 39/02** (2013.01 - EP KR US); **B22D 39/023** (2013.01 - EP US)

Cited by
EP3919204A1; DE102020207016A1; US11376656B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102011017610 B3 20120621; BR 112013027599 A2 20170214; BR 112013027599 B1 20200128; CN 103596714 A 20140219; CN 103596714 B 20160921; DK 2701866 T3 20190304; EP 2701866 A1 20140305; EP 2701866 B1 20181114; ES 2708377 T3 20190409; HU E042185 T2 20190628; JP 2014512274 A 20140522; JP 5878624 B2 20160308; KR 101962342 B1 20190527; KR 20140021660 A 20140220; MX 2013012517 A 20140203; MX 362093 B 20190107; PL 2701866 T3 20190628; PT 2701866 T 20190221; RU 2013151382 A 20150610; RU 2598069 C2 20160920; SI 2701866 T1 20190329; TR 201820511 T4 20190121; US 2014042193 A1 20140213; US 9505053 B2 20161129; WO 2012146408 A1 20121101

DOCDB simple family (application)
DE 102011017610 A 20110427; BR 112013027599 A 20120227; CN 201280020890 A 20120227; DK 12706559 T 20120227; EP 12706559 A 20120227; EP 2012053288 W 20120227; ES 12706559 T 20120227; HU E12706559 A 20120227; JP 2014506797 A 20120227; KR 20137029641 A 20120227; MX 2013012517 A 20120227; PL 12706559 T 20120227; PT 12706559 T 20120227; RU 2013151382 A 20120227; SI 201231529 T 20120227; TR 201820511 T 20120227; US 201214113979 A 20120227