

Title (en)

CONTINUOUS HAMMERING DEVICE FOR CONTINUOUSLY MANUFACTURING CAST PIECES

Title (de)

DAUERHAMMERVORRICHTUNG ZUR KONTINUIERLICHEN HERSTELLUNG VON GUSSSTÜCKEN

Title (fr)

DISPOSITIF DE MARTÈLEMENT CONTINU POUR FABRIQUER EN CONTINU DES PIÈCES MOULÉES EN FONTE

Publication

EP 2258499 A1 20101208 (EN)

Application

EP 09729055 A 20090310

Priority

- JP 2009054485 W 20090310
- JP 2008098544 A 20080404

Abstract (en)

A continuous hammering device for continuous casting includes a hammering member 22 for hammering a cast 1, a compression spring 30 which pushes the hammering member toward the cast, a cam mechanism 32 which compresses the compression spring by moving the hammering member away from the cast and then allows the hammering member to freely move, and a main body 14 which supports the hammering member, the compression spring, and the cam mechanism. At the time of hammering, the cam mechanism 32 leaves the hammering member 22 to allow the hammering member to freely accelerate so as to convert compression energy of the compression spring 30 into kinetic energy of the hammering member 22, and the hammering member 22 collides with the cast 1, thereby applying predetermined hammering energy to the cast.

IPC 8 full level

B22D 11/128 (2006.01); **B06B 1/10** (2006.01); **B22D 11/114** (2006.01); **B22D 11/12** (2006.01); **B22D 27/20** (2006.01)

CPC (source: EP)

B22D 11/114 (2013.01); **B22D 11/12** (2013.01); **B22D 11/1206** (2013.01)

Cited by

EP3401038A1; WO2020221657A1; DE102012009870A1; WO2013170844A1

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2258499 A1 20101208; **EP 2258499 A4 20170419**; **EP 2258499 B1 20180815**; CN 101983113 A 20110302; CN 101983113 B 20130612; ES 2687109 T3 20181023; JP 2009248127 A 20091029; JP 5188862 B2 20130424; KR 101242730 B1 20130311; KR 20100122490 A 20101122; PL 2258499 T3 20190131; TW 200948512 A 20091201; TW I481455 B 20150421; WO 2009122865 A1 20091008

DOCDB simple family (application)

EP 09729055 A 20090310; CN 200980112020 A 20090310; ES 09729055 T 20090310; JP 2008098544 A 20080404; JP 2009054485 W 20090310; KR 20107019229 A 20090310; PL 09729055 T 20090310; TW 98108870 A 20090319