

Title (en)

CASTING MOLD HEIGHT CHANGING UNIT, FLASKLESS MOLDING MACHINE, AND CASTING MOLD HEIGHT CHANGING METHOD

Title (de)

VORRICHTUNG ZUM VERÄNDERN DER HÖHE EINER GUSSFORM, KASTENLOSE FORMMASCHINE UND VERFAHREN ZUM VERÄNDERN DER HÖHE EINER GUSSFORM

Title (fr)

UNITÉ DE CHANGEMENT DE HAUTEUR DE MOULE DE COULÉE, MACHINE DE MOULAGE SANS CHÂSSIS ET PROCÉDÉ DE CHANGEMENT DE HAUTEUR DE MOULE DE COULÉE

Publication

**EP 3656484 A4 20201216 (EN)**

Application

**EP 18834651 A 20180413**

Priority

- JP 2017139042 A 20170718
- JP 2018015575 W 20180413

Abstract (en)

[origin: EP3656484A1] A flaskless molding machine includes an upper flask, a lower flask capable of clamping a match plate with the upper flask, a filling frame connectable to the lower flask, a first squeeze board movable into and out from the upper flask, a second squeeze board movable into and out from the filling frame, a filling frame cylinder moving the filling frame relative to the second squeeze board, a squeeze cylinder integrally moving the filling frame, the second squeeze board, and the filling frame cylinder, and a control unit configured to control the filling frame cylinder and the squeeze cylinder. A mold height changing unit includes a stopper limiting a stroke length of the filling frame cylinder to a predetermined length.

IPC 8 full level

**B22C 15/28** (2006.01); **B22C 11/00** (2006.01); **B22C 11/02** (2006.01); **B22C 11/10** (2006.01); **B22C 15/02** (2006.01); **B22C 15/08** (2006.01); **B22C 19/04** (2006.01)

CPC (source: EP KR US)

**B22C 11/00** (2013.01 - KR); **B22C 11/02** (2013.01 - EP); **B22C 11/10** (2013.01 - EP); **B22C 15/02** (2013.01 - KR); **B22C 15/08** (2013.01 - EP US); **B22C 15/28** (2013.01 - EP KR US); **B22C 19/04** (2013.01 - EP); **B22C 9/02** (2013.01 - US); **B22C 11/04** (2013.01 - US); **B22C 11/10** (2013.01 - US); **B22C 19/04** (2013.01 - US)

Citation (search report)

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- [XY] JP S5924552 A 19840208 - SINTOKOGIO LTD
- [Y] JP H06262299 A 19940920 - KANAMORI SHINTOU KK
- [Y] US 7191818 B2 20070320 - HIRATA MINORU [JP], et al
- [Y] JP 2000094094 A 20000404
- See references of WO 2019017024A1

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)

**EP 3656484 A1 20200527; EP 3656484 A4 20201216;** BR 112020000598 A2 20200714; CN 110891709 A 20200317; JP 6856123 B2 20210407; JP WO2019017024 A1 20200528; KR 20200031640 A 20200324; RU 2020106895 A 20210818; TW 201908032 A 20190301; US 2020222973 A1 20200716; WO 2019017024 A1 20190124

DOCDB simple family (application)

**EP 18834651 A 20180413;** BR 112020000598 A 20180413; CN 201880046911 A 20180413; JP 2018015575 W 20180413; JP 2019530879 A 20180413; KR 20207003882 A 20180413; RU 2020106895 A 20180413; TW 107115005 A 20180503; US 201816630958 A 20180413