

Title (en)  
MOLD FORMING METHOD

Title (de)  
FORMHERSTELLUNGSVERFAHREN

Title (fr)  
PROCÉDÉ DE FORMATION DE MOULE

Publication  
**EP 3488945 A4 20191204 (EN)**

Application  
**EP 17830645 A 20170316**

Priority  
• JP 2016142452 A 20160720  
• JP 2017010595 W 20170316

Abstract (en)  
[origin: US2019111474A1] A method for molding by which the density of sand of a mold is almost uniform. The method includes a step of forming a molding space by using a flask, using an auxiliary flask that has a lower opening that is connectable to an upper opening of the flask, using a squeeze head that has a squeeze board and has a plurality of squeeze feet that pass through the squeeze board and vertically move, and using a pattern plate, a step of filling the molding sand into the molding space, and a step of squeezing the molding sand by lowering the squeeze head, wherein the squeeze feet that face a concavity of a pattern are lowered at the same time as the step of squeezing starts or during the step of squeezing.

IPC 8 full level  
**B22C 15/02** (2006.01); **B22C 11/00** (2006.01); **B22C 11/08** (2006.01); **B22C 11/10** (2006.01); **B22C 15/24** (2006.01)

CPC (source: EP KR US)  
**B22C 9/02** (2013.01 - KR); **B22C 11/00** (2013.01 - KR); **B22C 11/08** (2013.01 - EP US); **B22C 11/10** (2013.01 - EP US);  
**B22C 15/02** (2013.01 - EP KR US); **B22C 15/24** (2013.01 - EP US); **B22C 15/30** (2013.01 - US)

Citation (search report)  
• [X] US 2011024071 A1 20110203 - HIRATA MINORU [JP], et al  
• [XI] JP 2005152938 A 20050616 - AISIN TAKAOKA LTD  
• [A] US 2002129917 A1 20020919 - KANETO KIMIKAZU [JP], et al  
• See references of WO 2018016123A1

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)  
**US 2019111474 A1 20190418**; BR 112018074860 A2 20190306; CN 109195729 A 20190111; CN 109195729 B 20210312;  
EP 3488945 A1 20190529; EP 3488945 A4 20191204; EP 3488945 B1 20200819; JP 6665935 B2 20200313; JP WO2018016123 A1 20190509;  
KR 20190027777 A 20190315; MX 2018014692 A 20190228; WO 2018016123 A1 20180125

DOCDB simple family (application)  
**US 201716087289 A 20170316**; BR 112018074860 A 20170316; CN 201780033315 A 20170316; EP 17830645 A 20170316;  
JP 2017010595 W 20170316; JP 2018528397 A 20170316; KR 20187032614 A 20170316; MX 2018014692 A 20170316