

Title (en)  
APPARATUS FOR LIFTING A LADLE AND SETTING SAME DOWN AGAIN, PLANT HAVING SUCH AN APPARATUS, AND METHOD

Title (de)  
VORRICHTUNG ZUM ANHEBEN UND WIEDER ABSETZEN EINER PFANNE, ANLAGE MIT EINER SOLCHEN VORRICHTUNG UND VERFAHREN

Title (fr)  
DISPOSITIF SERVANT À SOULEVER ET REPOSER UNE POCHE DE COULÉE, INSTALLATION ÉQUIPÉE D'UN TEL DISPOSITIF ET PROCÉDÉ

Publication  
**EP 3019432 B1 20170809 (DE)**

Application  
**EP 14736683 A 20140627**

Priority  
• DE 102013213718 A 20130712  
• EP 2014063639 W 20140627

Abstract (en)  
[origin: WO2015003925A1] The invention relates to an apparatus (1) for lifting, and setting down again, a ladle (9) for handling liquid metal (8) in the ladle (9) by means of a handling device (3), wherein the apparatus (1) comprises: – at least three vertically oriented metal struts (2), – at least two horizontally oriented transverse struts (2a), wherein each transverse strut (2a) connects two of the metal struts (2) together and is fastened thereto, – two transverse beams (5), wherein each transverse beam (5) is connected to one of the transverse struts (2a) in a movable manner in the vertical direction, – at least one positioning element (4) for moving in each case one transverse beam (5), wherein each positioning element (4) is connected on one side to one of the transverse struts (2a) and on the other side to one of the transverse beams (5) such that the transverse beams (5) are movable independently of one another, – in each case one ladle pick-up element (7) which is connected to each particular transverse beam (5) and by means of which the ladle (9) is able to be picked up, and – at least one positioning means (4') for orienting a position of each particular ladle pick-up element (7).

IPC 8 full level  
**B66C 17/10** (2006.01); **B22D 41/12** (2006.01)

CPC (source: EP RU)  
**B22D 41/12** (2013.01 - EP); **B66C 17/10** (2013.01 - EP RU); **B66F 3/46** (2013.01 - RU); **C21C 7/10** (2013.01 - RU); **C21C 7/0075** (2013.01 - EP); **C21C 7/072** (2013.01 - EP); **C21C 7/10** (2013.01 - EP)

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 102013213718 B3 20141030**; BR 112016000176 A2 20170725; BR 112016000176 B1 20220315; EP 3019432 A1 20160518; EP 3019432 B1 20170809; ES 2646324 T3 20171213; MX 2016000248 A 20160420; MX 365901 B 20190619; RU 2016104507 A 20170816; RU 2016104507 A3 20180903; RU 2685620 C2 20190422; WO 2015003925 A1 20150115

DOCDB simple family (application)  
**DE 102013213718 A 20130712**; BR 112016000176 A 20140627; EP 14736683 A 20140627; EP 2014063639 W 20140627; ES 14736683 T 20140627; MX 2016000248 A 20140627; RU 2016104507 A 20140627