

## Title (en)

MOLD DISPLACEMENT DETECTING DEVICE AND MOLD DISPLACEMENT DETECTING METHOD FOR UPPER AND LOWER MOLDS

## Title (de)

VORRICHTUNG ZUR ERFASSUNG VON FORMVERSCHIEBUNG UND VERFAHREN ZUR ERFASSUNG VON FORMVERSCHIEBUNG FÜR OBERE UND UNTERE FORMEN

## Title (fr)

DISPOSITIF DE DÉTECTION DE DÉPLACEMENT DE MOULE ET PROCÉDÉ DE DÉTECTION DE DÉPLACEMENT DE MOULE POUR DES MOULES SUPÉRIEUR ET INFÉRIEUR

## Publication

**EP 3403742 A4 20190807 (EN)**

## Application

**EP 16885112 A 20161221**

## Priority

- JP 2016003646 A 20160112
- JP 2016088068 W 20161221

## Abstract (en)

[origin: EP3403742A1] To provide a device and a method for detecting, before pouring starts, any misalignment between a cope and a drag that have been molded by a flaskless molding machine and then assembled. The device (40) that can detect any misalignment between the cope (2) and the drag (3) that have been molded by the flaskless molding machine (1) and then assembled and that are being transported to the position for pouring comprises a plurality of means (51), (52), (53) for measuring distances to the cope and the drag that measures the distances (S11), (S12), (S13), (S21), (S22), (S23) to the cope and the drag, and a means (48) for calculating a degree of a misalignment between the cope and the drag on a basis of the distances to the cope and the drag that have been measured by the means for measuring distances to the cope and the drag.

## IPC 8 full level

**B22C 9/00** (2006.01); **B22C 11/00** (2006.01); **B22C 11/02** (2006.01); **B22C 19/04** (2006.01); **B22D 45/00** (2006.01)

## CPC (source: EP KR US)

**B22C 9/00** (2013.01 - EP US); **B22C 9/20** (2013.01 - KR); **B22C 11/00** (2013.01 - EP US); **B22C 11/02** (2013.01 - EP US); **B22C 11/12** (2013.01 - KR); **B22C 19/04** (2013.01 - EP US); **B22D 45/00** (2013.01 - EP KR US)

## Citation (search report)

- [XYI] JP 2002336934 A 20021126 - SINTOKOGIO LTD
- [XYI] JP H10249487 A 19980922 - TOYOTA MOTOR CORP
- [XYI] JP H07229712 A 19950829 - HITACHI METALS LTD
- See references of WO 2017122510A1

## 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 3403742 A1 20181121**; **EP 3403742 A4 20190807**; BR 112018011114 A2 20181121; CN 108348987 A 20180731; CN 108348987 B 20200623; JP 6589997 B2 20191016; JP WO2017122510 A1 20181101; KR 20180103832 A 20180919; MX 2018006484 A 20180815; US 2018326475 A1 20181115; WO 2017122510 A1 20170720

## DOCDB simple family (application)

**EP 16885112 A 20161221**; BR 112018011114 A 20161221; CN 201680064557 A 20161221; JP 2016088068 W 20161221; JP 2017561564 A 20161221; KR 20187014581 A 20161221; MX 2018006484 A 20161221; US 201615777313 A 20161221