

Title (en)

MOBILE CONCRETE PUMP AND METHOD FOR STABILIZATION-RELEVANT CONTROL OF A MOBILE CONCRETE PUMP

Title (de)

AUTOBETONPUMPE UND VERFAHREN ZUR STABILITÄTSRELEVANTEN STEUERUNG EINER AUTOBETONPUMPE

Title (fr)

POMPE À BÉTON AUTOMOTRICE ET PROCÉDÉ POUR LA COMMANDE PERTINENTE POUR LA STABILITÉ D'UNE POMPE À BÉTON AUTOMOTRICE

Publication

**EP 3765686 A1 20210120 (DE)**

Application

**EP 19712723 A 20190315**

Priority

- DE 102018204079 A 20180316
- EP 2019056573 W 20190315

Abstract (en)

[origin: WO2019175400A1] The invention relates to a mobile concrete pump (10) having a chassis (12) which has extendable supporting legs (14), and a concrete distributor mast (18), which is arranged on a slewing mechanism (16) of the chassis (12) such that the concrete distributor mast can be slewed and the inclination thereof can be adjusted by means of an actuating cylinder (22), and which comprises multiple pivotable mast arms (20), and a computing unit for carrying out a stabilization calculation by using the vertical and/or horizontal forces on at least two supporting legs (14), and having a control device which is configured, depending on the stability check, to delimit a slewing movement on the slewing mechanism (16) and/or a pivoting movement of at least one mast arm (20.1, 20.2, 20.3) and/or the initiation of a pumping operation.

IPC 8 full level

**E04G 21/04** (2006.01); **B66C 23/78** (2006.01); **B66C 23/90** (2006.01)

CPC (source: EP KR US)

**B66C 23/78** (2013.01 - EP KR); **B66C 23/905** (2013.01 - EP KR); **B66C 23/94** (2013.01 - EP KR); **E04G 21/0436** (2013.01 - EP KR US); **E04G 21/0445** (2013.01 - EP KR US); **B66C 23/78** (2013.01 - US); **B66C 23/905** (2013.01 - US); **B66C 23/94** (2013.01 - US)

Citation (search report)

- [DXY] DE 102014215019 A1 20160204 - PUTZMEISTER ENGINEERING GMBH [DE]
- [Y] DE 102012106222 A1 20140116 - RUTHMANN GMBH & CO KG [DE]
- [Y] DE 102004012966 A1 20051006 - PUTZMEISTER AG [DE]
- [A] EP 2727876 A1 20140507 - MANITOWOC CRANE COMPANIES LLC [US]
- [XY] DE 10320382 A1 20041223 - UNIV STUTTGART VERTRETEN DURCH [DE]
- See also references of WO 2019175400A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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