

Title (en)
BRAKE RELEASE MECHANISM

Title (de)
BREMSAUSLÖSEMECHANISMUS

Title (fr)
MÉCANISME DE RELÂCHEMENT DES FREINS

Publication
EP 2586739 A1 20130501 (EN)

Application
EP 10853667 A 20100625

Priority
JP 2010060828 W 20100625

Abstract (en)
Provided is a brake release mechanism capable of reducing effort required for a brake releasing operation. The brake release mechanism includes a movable lever (13) and a fixed lever (15) provided so as to be rotatable relative to each other, and a plurality of rolling bodies (17) provided between the levers. On one surface (13a) of a pair of surfaces of the levers which face each other, a plurality of supporting holes (19) are formed, and on another surface (15a) thereof, a plurality of elongated holes (21) each extending in an arc-like manner so as to enable the rolling bodies to move while rolling are formed. Each of the elongated holes is formed so that a depth for housing a corresponding one of the rolling bodies changes when the rolling bodies move along the elongated holes. A distance between both the levers in a direction of a relative rotation axis changes in accordance with the relative rotation of the levers. The brake release mechanism further includes a release bolt (43) which avoids securing a position of the fixed lever in the direction of the relative rotation axis and secures a position of the movable lever in the direction of the relative rotation axis. Through the rotation of the movable lever, the fixed lever applies a traveling force to a movable body in the direction of the relative rotation axis, to thereby release a brake.

IPC 8 full level
B66B 5/00 (2006.01); **B66B 11/08** (2006.01)

CPC (source: EP KR)
B66B 5/00 (2013.01 - KR); **B66B 5/027** (2013.01 - EP); **B66B 11/08** (2013.01 - KR); **B66D 5/08** (2013.01 - EP); **B66D 5/24** (2013.01 - EP)

Citation (search report)
See references of WO 2011161807A1

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 SE SI SK SM TR

DOCDB simple family (publication)
EP 2586739 A1 20130501; CN 102958820 A 20130306; JP WO2011161807 A1 20130819; KR 20130043641 A 20130430;
WO 2011161807 A1 20111229

DOCDB simple family (application)
EP 10853667 A 20100625; CN 201080067672 A 20100625; JP 2010060828 W 20100625; JP 2012521238 A 20100625;
KR 20127033444 A 20100625