

Title (en)  
CENTRIFUGE

Title (de)  
ZENTRIFUGE

Title (fr)  
CENTRIFUGEUSE

Publication  
**EP 3771796 B1 20240207 (DE)**

Application  
**EP 20187270 A 20200722**

Priority  
DE 102019121011 A 20190802

Abstract (en)

[origin: CN112302448A] The invention relates to a holding and opening mechanism for a pivoting element, such as a lid, a cover, a door or the like, which is mounted to be pivotable relative to a supporting element such as a housing, a frame or the like about a first axle via a joint, with a pivoting arm acting between the pivoting element and the supporting element, which arm is pivotally mounted about a second axle that is not the same as the first axle, wherein the free end of the pivoting arm acts, preferably via a roller, on a control surface of a guide element, wherein a torsion spring is provided which acts on the pivoting arm in the direction around the second axle, in order to generate a holding and opening force on the pivoting arm and the control surface, comprising a fixed part and a part pivotable relative thereto, with the one part including the guide element and the other part including the pivoting arm, wherein the pivotable part is adapted to be pivotable relative to the fixed part about the joint and the first axle, the pivotable part is connected to the pivoting arm and the pivoting element and the fixed part is connected to the supporting element, wherein the control surface in cooperation with the torsion spring and the pivoting arm determines the holding and opening force via the pivot angle of the pivoting element. The invention is characterized in that a plurality of pivoting arms, guide elements, joints and fixed and pivotable parts are provided, with the pivoting arms being coupled together by a common torsion spring Spin the second axle.

IPC 8 full level

**E05F 1/12** (2006.01); **D06F 58/20** (2006.01); **E05D 7/081** (2006.01); **E05F 1/10** (2006.01)

CPC (source: CN EP KR US)

**B02C 17/24** (2013.01 - EP); **E05C 17/32** (2013.01 - CN); **E05D 3/06** (2013.01 - CN); **E05D 7/04** (2013.01 - KR); **E05D 7/081** (2013.01 - EP); **E05D 7/082** (2013.01 - KR); **E05D 11/00** (2013.01 - CN); **E05D 15/406** (2013.01 - EP); **E05F 1/1016** (2013.01 - EP); **E05F 1/1033** (2013.01 - KR); **E05F 1/12** (2013.01 - CN); **E05F 1/1215** (2013.01 - EP); **E05F 1/123** (2013.01 - EP KR); **E05F 3/18** (2013.01 - US); **E05F 3/20** (2013.01 - KR US); **D06F 39/14** (2013.01 - EP); **E05D 2007/0461** (2013.01 - KR); **E05Y 2201/62** (2013.01 - EP); **E05Y 2201/638** (2013.01 - EP); **E05Y 2201/688** (2013.01 - EP); **E05Y 2900/30** (2013.01 - EP); **E05Y 2999/00** (2024.05 - KR)

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 3771796 A1 20210203**; **EP 3771796 B1 20240207**; CN 112302448 A 20210202; CN 112302448 B 20240412;  
DE 102019121011 A1 20210204; KR 20210015708 A 20210210; US 11359427 B2 20220614; US 2021032918 A1 20210204

DOCDB simple family (application)

**EP 20187270 A 20200722**; CN 202010755247 A 20200730; DE 102019121011 A 20190802; KR 20200095623 A 20200731;  
US 202016940706 A 20200728