

Title (en)
ROTARY DAMPER

Title (de)
DREHDÄMPFER

Title (fr)
AMORTISSEUR ROTATIF

Publication
EP 3818282 A1 20210512 (DE)

Application
EP 19744629 A 20190704

Priority
• DE 102018116187 A 20180704
• EP 2019068033 W 20190704

Abstract (en)
[origin: WO2020008002A1] A rotary damper (1) and method, having a housing (12), a damper shaft (3) which is held on said housing rotatably relative thereto, a damper volume (60) which is accommodated in the housing (12) and which has a magnetorheological fluid (6) as working fluid, and having at least one magnetic field source (8) in order to influence a degree of damping of the rotational movement of the damper shaft (3) relative to the housing (12). A separating unit (5) connected to the damper shaft (3) divides the damper volume (60). At least one gap portion (25, 27), which can be influenced by means of a magnetic field of the magnetic field source (8), is formed between the separating unit (5), which is connected to the damper shaft (3), and the housing (12). The housing (12), the separating unit (5) and the magnetic field source (8) are designed such that a flow cross section (21) for the magnetorheological fluid (6) from one side of the separating unit to the other side of the separating unit (5) changes in a manner dependent on a rotational angle.

IPC 8 full level
A63B 21/008 (2006.01); **B60G 21/055** (2006.01); **E05F 3/14** (2006.01); **F16F 9/14** (2006.01); **F16F 9/48** (2006.01); **F16F 9/53** (2006.01)

CPC (source: EP US)
A63B 21/0056 (2013.01 - EP); **A63B 21/00845** (2015.10 - EP); **B60G 17/08** (2013.01 - EP); **B60G 21/0555** (2013.01 - EP); **E05F 5/00** (2013.01 - EP); **F16F 9/145** (2013.01 - EP US); **F16F 9/48** (2013.01 - EP); **F16F 9/535** (2013.01 - EP US); **A63B 2208/0228** (2013.01 - EP); **A63B 2208/0233** (2013.01 - EP); **A63B 2209/08** (2013.01 - EP); **A63B 2220/16** (2013.01 - EP); **A63B 2220/20** (2013.01 - EP); **A63B 2220/54** (2013.01 - EP); **A63B 2220/72** (2013.01 - EP); **A63B 2220/80** (2013.01 - EP); **B60G 21/055** (2013.01 - US); **B60G 21/0558** (2013.01 - EP); **B60G 2202/22** (2013.01 - EP US); **B60G 2202/42** (2013.01 - EP); **B60G 2400/0516** (2013.01 - EP); **B60G 2400/71** (2013.01 - EP); **B60G 2400/7162** (2013.01 - EP); **B60G 2400/823** (2013.01 - EP); **E05F 3/14** (2013.01 - EP); **E05Y 2201/266** (2013.01 - EP); **E05Y 2201/486** (2013.01 - EP); **E05Y 2900/531** (2013.01 - EP)

Citation (search report)
See references of WO 2020008002A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2020008002 A1 20200109; DE 102018116187 A1 20200109; EP 3818282 A1 20210512; US 2021270343 A1 20210902

DOCDB simple family (application)
EP 2019068033 W 20190704; DE 102018116187 A 20180704; EP 19744629 A 20190704; US 201917255164 A 20190704