

Title (en)

DEVICE COMPONENT HAVING A MAGNETORHEOLOGICAL BRAKE DEVICE

Title (de)

GERÄTEKOMPONENTE MIT EINER MAGNETORHEOLOGISCHEN BREMSEINRICHTUNG

Title (fr)

COMPOSANT D'APPAREIL POURVU D'UN DISPOSITIF DE FREINAGE MAGNÉTORHÉOLOGIQUE

Publication

EP 4078330 A1 20221026 (DE)

Application

EP 20839294 A 20201218

Priority

- DE 102019135026 A 20191218
- EP 2020087179 W 20201218

Abstract (en)

[origin: WO2021123278A1] A device component (200) having a magnetorheological brake device (1) with a static holder (4) and with two brake components (2, 3), wherein a first brake component (2) is connected rotationally fixedly to the holder (4) and extends in an axial direction (20), and wherein the second brake component (3) comprises a rotary part (13) of hollow form which is rotatable about the first brake component (2). An encircling gap (5) is formed between the first and the second brake component (2, 3), wherein the gap (5) is filled with a magnetorheological medium (6). The first brake component (2) comprises a core (21), which extends in the axial direction (20) and which is composed of a magnetically conductive material, and an electrical coil (26), which is wound in the axial direction (20) around the core (21) and which spans a coil plane (26c) such that a magnetic field (8) of the electrical coil (26) extends transversely through the first brake component (2). A maximum outer diameter (26a) of the electrical coil (26) in a radial direction (26d) within the coil plane (26c) is greater than a minimum outer diameter (21b) of the core (21) in a radial direction (25) transversely with respect to the coil plane (26c).

IPC 8 full level

G05G 5/03 (2008.04); **F16F 9/53** (2006.01); **G05G 1/08** (2006.01)

CPC (source: EP US)

F16F 9/006 (2013.01 - US); **F16F 9/535** (2013.01 - EP US); **G05G 5/03** (2013.01 - EP); **F16F 2222/06** (2013.01 - US); **F16F 2230/08** (2013.01 - US); **G01R 33/0076** (2013.01 - US); **G01R 33/072** (2013.01 - US); **G05G 1/08** (2013.01 - EP); **G05G 5/03** (2013.01 - US)

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

DE 102019135026 A 20191218; CN 202080092645 A 20201218; EP 2020087179 W 20201218; EP 20839294 A 20201218; US 202017784739 A 20201218