

Title (en)

VARIABLE FIELD MAGNETIC COUPLERS AND METHODS FOR ENGAGING A FERROMAGNETIC WORKPIECE

Title (de)

MAGNETKOPPLER MIT VARIABLEM FELD UND VERFAHREN ZUM EINGREIFEN EINES FERROMAGNETISCHEN WERKSTÜCKES

Title (fr)

COUPLEURS MAGNÉTIQUES À CHAMP VARIABLE ET PROCÉDÉS DE MISE EN PRISE D'UNE PIÈCE FERROMAGNÉTIQUE

Publication

**EP 3755498 A4 20211103 (EN)**

Application

**EP 19757223 A 20190222**

Priority

- US 201862634783 P 20180223
- US 201815965582 A 20180427
- US 2019019179 W 20190222

Abstract (en)

[origin: WO2019165228A1] Magnetic coupling devices are disclosed which may be configured in at least three states. The various states may be provided through one or more of altering a position of a permanent magnet relative to another permanent magnet and altering a current level in a coil surrounding a permanent magnet.

IPC 8 full level

**H01F 7/02** (2006.01); **B23Q 7/04** (2006.01); **B25J 15/06** (2006.01); **B65G 47/92** (2006.01); **B66C 1/04** (2006.01)

CPC (source: AU EP)

**B25J 15/0608** (2013.01 - EP); **B65H 3/16** (2013.01 - EP); **B66C 1/04** (2013.01 - EP); **H01F 7/0226** (2013.01 - AU EP); **H01F 7/0236** (2013.01 - AU); **H01F 7/0242** (2013.01 - AU EP); **H01F 7/0257** (2013.01 - EP); **B23Q 3/15** (2013.01 - AU); **B25B 11/002** (2013.01 - AU); **B25J 9/16** (2013.01 - AU); **B25J 11/005** (2013.01 - AU); **B25J 15/0019** (2013.01 - AU); **B25J 15/0608** (2013.01 - AU); **B65H 2555/30** (2013.01 - EP); **B65H 2555/41** (2013.01 - EP); **B65H 2701/173** (2013.01 - EP)

Citation (search report)

- [YA] DE 202016006696 U1 20161201 - MAGSWITCH TECHNOLOGY WORLD WIDE PTY LTD [US]
- [Y] GB 1471025 A 19770421 - INST MANIPULACNICH DOPRAVNICH
- See references of WO 2019165228A1

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)

**WO 2019165228 A1 20190829**; CN 112154044 A 20201229; EP 3755498 A1 20201230; EP 3755498 A4 20211103; JP 2021515391 A 20210617; JP 2024001042 A 20240109; JP 7354126 B2 20231002

DOCDB simple family (application)

**US 2019019179 W 20190222**; CN 201980027302 A 20190222; EP 19757223 A 20190222; JP 2020544417 A 20190222; JP 2023152131 A 20230920