

Title (en)

PARTIALLY ROTATED ECCENTRIC DRIVE FOR VALVE PIN

Title (de)

TEILWEISE GEDREHTER EXZENTERANTRIEB FÜR EINEN VENTILSTIFT

Title (fr)

ENTRAÎNEMENT EXCENTRIQUE PARTIELLEMENT ENTRAÎNÉ EN ROTATION POUR TIGE DE SOUPAPE

Publication

**EP 3959059 A1 20220302 (EN)**

Application

**EP 19759219 A 20190812**

Priority

- US 201962853414 P 20190528
- US 2019046139 W 20190812

Abstract (en)

[origin: WO2020242510A1] An injection molding apparatus (5) comprising an injection molding machine (IMM), a heated manifold (60) that receives injection fluid (9) and distributes the injection fluid through a fluid distribution channel (120), a mold (70) having a cavity (80) and one or more valves (50) having a valve pin (100) the one or more valves (50) being comprised of: an electrically driven actuator (200), a controller including an algorithm that controllably limits rotation of a shaft (12) or output rotation device (16, 430, 500) during the course of an entire injection cycle to selectable angular positions that create a moment arm that extends between selected a minimum moment arm and a selected maximum moment arm, the selectable angular positions being between 70 degrees above and 70 degrees below an angular position that corresponds to the selected maximum moment arm.

IPC 8 full level

**B29C 45/28** (2006.01)

CPC (source: EP)

**B29C 45/281** (2013.01); **B29C 2045/2824** (2013.01); **B29C 2045/2848** (2013.01)

Citation (search report)

See references of WO 2020242510A1

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 2020242510 A1 20201203**; CN 114025936 A 20220208; CN 114025936 B 20221129; EP 3959059 A1 20220302

DOCDB simple family (application)

**US 2019046139 W 20190812**; CN 201980096986 A 20190812; EP 19759219 A 20190812