

Title (en)
VALVE ROTATING ARRANGEMENT

Title (de)
VENTILDREHVORRICHTUNG

Title (fr)
DISPOSITIF ASSURANT LA ROTATION D'UNE SOUPAPE

Publication
EP 3887655 B1 20230104 (DE)

Application
EP 19809051 A 20191122

Priority
• DE 102018130098 A 20181128
• EP 2019082237 W 20191122

Abstract (en)
[origin: WO2020109164A1] The invention relates to a valve rotating device (24) for a valve (10), preferably an intake valve or exhaust valve, of an internal combustion engine. The valve rotating device (24) has a valve restoring spring (22) for preloading the valve (10) toward a closed position of the valve (10) and a Belleville spring (40), which is arranged in operative connection between the valve restoring spring (22) and a support surface (44), which is lubricated with a lubricating fluid. An at least partially, preferably completely, peripherally extending collar portion (46) is arranged on a periphery, preferably inner periphery, of the Belleville spring (40). The collar portion (46) can have a wear-reducing effect and/or can make the valve rotating device (24) easier to install.

IPC 8 full level
F01L 1/32 (2006.01)

CPC (source: EP US)
F01L 1/32 (2013.01 - EP US); **F01L 1/462** (2013.01 - US); **F01L 3/08** (2013.01 - US); **F01L 2303/00** (2020.05 - EP); **F01L 2810/02** (2013.01 - EP)

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)
DE 102018130098 A1 20200528; BR 112021006304 A2 20210706; CN 112771251 A 20210507; CN 112771251 B 20240514; EP 3887655 A1 20211006; EP 3887655 B1 20230104; US 11486276 B2 20221101; US 2021388742 A1 20211216; WO 2020109164 A1 20200604

DOCDB simple family (application)
DE 102018130098 A 20181128; BR 112021006304 A 20191122; CN 201980062373 A 20191122; EP 19809051 A 20191122; EP 2019082237 W 20191122; US 201917298302 A 20191122