

Title (en)

CYLINDER BORE FOR A CYLINDER HOUSING OF AN INTERNAL COMBUSTION ENGINE, AND ARRANGEMENT CONSISTING OF SUCH A CYLINDER BORE AND A PISTON

Title (de)

ZYLINDERBOHRUNG FÜR EIN ZYLINDERGEHÄUSE EINES VERBRENNUNGSMOTORS SOWIE ANORDNUNG AUS EINER DERARTIGEN ZYLINDERBOHRUNG UND EINEM KOLBEN

Title (fr)

ALÉSAGE DE CYLINDRE POUR UN BOÎTIER DE CYLINDRE D'UN MOTEUR À COMBUSTION INTERNE AINSI QU'ENSEMBLE COMPOSÉ D'UN ALÉSAGE DE CYLINDRE DE CE TYPE ET D'UN PISTON

Publication

**EP 3298261 A1 20180328 (DE)**

Application

**EP 16724044 A 20160520**

Priority

- DE 102015006498 A 20150522
- EP 2016061468 W 20160520

Abstract (en)

[origin: WO2016188916A1] The invention relates to a cylinder bore (10, 110) with a cylinder running surface (14, 114) for a cylinder housing of an internal combustion engine. An upper reversal point (OS) and a lower reversal point (US) are defined in the cylinder bore (10, 110). A piston (20) which is moved up and down in the cylinder bore (10, 110) and has piston rings (21) and a piston shaft (22) reaches a speed (V0) which is almost zero at the reversal points when the motor is being operated, and the piston (20) reaches a maximum speed (Vmax) in a region (15, 115) between the upper reversal point (OS) and the lower reversal point (US) when the motor is being operated. The invention is characterized in that at least two circumferential depressions (18a, 18b; 118a, 118b, 118c) are formed within the region (15, 115), and the diameter (D2a, D2b, D2c) of the depressions is greater than the diameter (D1) of the cylinder bore (10, 110) above the region (15, 115) and greater than the diameter (D3) below the region (15, 115).

IPC 8 full level

**F02F 1/00** (2006.01); **F02F 1/18** (2006.01)

CPC (source: EP US)

**F02F 1/004** (2013.01 - EP US); **F02F 1/18** (2013.01 - EP US); **F02F 1/20** (2013.01 - US); **F02F 3/0084** (2013.01 - US)

Citation (examination)

JP H1193761 A 19990406 - ISHIKAWAJIMA HARIMA HEAVY IND

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)

**DE 102015006498 A1 20161124**; CN 107636286 A 20180126; EP 3298261 A1 20180328; JP 2018515714 A 20180614; US 11022063 B2 20210601; US 2018149109 A1 20180531; WO 2016188916 A1 20161201

DOCDB simple family (application)

**DE 102015006498 A 20150522**; CN 201680028968 A 20160520; EP 16724044 A 20160520; EP 2016061468 W 20160520; JP 2017559520 A 20160520; US 201615576274 A 20160520