

Title (en)  
PISTON

Title (de)  
KOLBEN

Title (fr)  
PISTON

Publication  
**EP 3452712 A1 20190313 (DE)**

Application  
**EP 17720814 A 20170503**

Priority  

- DE 102016108271 A 20160504
- EP 2017060534 W 20170503

Abstract (en)  
[origin: WO2017191189A1] A piston (1) of an internal combustion engine, formed by an upper part (3) which is joined together with a lower part (2), wherein the lower part (2) is formed by connecting walls (7) which lie opposite one another and are positioned obliquely and are set back with respect to the external diameter of the piston (1), wherein in each case one connecting wall (7) has a pin bore (4), and the respective end of each connecting wall (7) merges into a piston skirt (6), wherein the lower part (2) has at least one recess (12) which faces in the direction of the upper part (3), and the upper part (3) has at least one recess (5) which faces in the direction of the lower part (2), wherein the recesses (5, 12) overlap after being joined together, wherein, furthermore, a permanent connection between the lower part (2) and the upper part (3) is a positively locking connection, and the positively locking connection is formed by at least one tongue (16) and at least one groove (17) which can be brought into an operative connection with it.

IPC 8 full level  
**F02F 3/20** (2006.01); **F02F 3/00** (2006.01)

CPC (source: EP US)  
**F02F 3/0015** (2013.01 - EP US); **F02F 3/003** (2013.01 - EP US); **F02F 3/20** (2013.01 - EP US); **F02F 2003/0061** (2013.01 - EP US)

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 102017109471 A1 20171109**; CN 109312688 A 20190205; EP 3452712 A1 20190313; MX 2018013353 A 20190220;  
US 11162453 B2 20211102; US 2019145344 A1 20190516; WO 2017191189 A1 20171109

DOCDB simple family (application)  
**DE 102017109471 A 20170503**; CN 201780034777 A 20170503; EP 17720814 A 20170503; EP 2017060534 W 20170503;  
MX 2018013353 A 20170503; US 201716098503 A 20170503