

Title (en)
ENGINE

Title (de)
MOTOR

Title (fr)
MOTEUR

Publication
EP 3779165 A4 20210310 (EN)

Application
EP 18912666 A 20180330

Priority
JP 2018013837 W 20180330

Abstract (en)
[origin: EP3779165A1] An engine (E) is provided with: a crank case (1a) that has a first crank shaft insertion hole (19d) and a second crank shaft insertion hole (20a) along the vertical direction; a crank shaft (2) that is inserted into the first and second shaft insertion holes (19d, 20a); and a cylinder unit (21) that extends in the front-rear direction from the crank case (1a). The cylinder unit (21) is provided with a cylinder base (21a) that is positioned inside the crank case (1a), and a cylinder block (21b) that is positioned outside the crank case (1a). The cylinder unit (21) is detachably attached to the crank case (1a).

IPC 8 full level
F02F 7/00 (2006.01); **F01L 1/047** (2006.01); **F01L 1/14** (2006.01); **F01L 1/18** (2006.01); **F02F 1/00** (2006.01)

CPC (source: EP)
F01L 1/047 (2013.01); **F01L 1/14** (2013.01); **F01L 1/18** (2013.01); **F02F 1/002** (2013.01); **F02F 7/0004** (2013.01)

Citation (search report)

- [XY] JP 2004278453 A 20041007 - HONDA MOTOR CO LTD
- [Y] JP 2006138226 A 20060601 - TOYOTA MOTOR CORP
- [X] US 2007119404 A1 20070531 - YUASA TSUNEYOSHI [JP], et al
- [X] CN 201963396 U 20110907 - NINGBO YINENG POWER TECHNOLOGY CO LTD
- [XY] EP 1098076 A2 20010509 - HONDA MOTOR CO LTD [JP]
- [A] DE 19549188 A1 19961114 - ISHIKAWAJIMA SHIBAURA MACH [JP]
- See references of WO 2019187081A1

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

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EP 3779165 A1 20210217; EP 3779165 A4 20210310; EP 3779165 B1 20221221; CN 111819353 A 20201023; CN 111819353 B 20220422; JP 7047067 B2 20220404; JP WO2019187081 A1 20210325; WO 2019187081 A1 20191003

DOCDB simple family (application)
EP 18912666 A 20180330; CN 201880091026 A 20180330; JP 2018013837 W 20180330; JP 2020508853 A 20180330