

Title (en)  
ENGINE SYSTEM AND STRADDLED VEHICLE

Title (de)  
VERBRENNUNGSMOTORSYSTEM UND GRÄTSCHSITZFAHRZEUG

Title (fr)  
SYSTÈME DU MOTEUR ET VÉHICULE À SELLE

Publication  
**EP 3002450 A1 20160406 (EN)**

Application  
**EP 15185919 A 20150918**

Priority  
JP 2014203734 A 20141002

Abstract (en)  
During start-up of an engine, an engine unit is controlled to perform a reverse rotation start-up operation. In the reverse rotation start-up operation, a fuel-air mixture is introduced into a combustion chamber while a crankshaft is rotated in a reverse direction, and the fuel-air mixture is ignited such that the crankshaft is driven in a forward direction. In the reverse rotation start-up operation, an ignition threshold value is set based on a first parameter corresponding to friction of the engine, and the fuel-air mixture in the combustion chamber is ignited when a second parameter corresponding to pressure in the combustion chamber reaches the set ignition threshold value.

IPC 8 full level  
**F02N 19/00** (2010.01)

CPC (source: EP)  
**F02N 19/005** (2013.01); **F02N 2019/007** (2013.01); **F02N 2200/02** (2013.01); **F02N 2200/021** (2013.01); **F02N 2200/023** (2013.01); **F02N 2200/044** (2013.01)

Citation (applicant)  
JP 2014077405 A 20140501 - YAMAHA MOTOR CO LTD

Citation (search report)  
• [Y] EP 2719883 A1 20140416 - YAMAHA MOTOR CO LTD [JP]  
• [Y] US 2004060530 A1 20040401 - MITANI SHINICHI [JP], et al  
• [Y] JP 2013189867 A 20130926 - DENSO CORP

Cited by  
PH12017050058A1; WO2017188144A1; CN112805465A; EP3825539A4

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)  
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DOCDB simple family (application)  
**EP 15185919 A 20150918**; JP 2014203734 A 20141002; TW 104130668 A 20150916