

Title (en)  
Engine System

Title (de)  
Motorsystem

Title (fr)  
Système motorisé

Publication  
**EP 2719883 B1 20141105 (EN)**

Application  
**EP 13188298 A 20131011**

Priority  
JP 2012226053 A 20121011

Abstract (en)  
[origin: EP2719883A1] An engine system includes a single-cylinder engine (10) and an ECU. A crankshaft (13) is rotated in a reverse direction by a starter/generator (14) at the start-up of the engine. A valve driver (17) drives an intake valve (15) such that fuel injected by an injector is led to a combustion chamber (31a) from an intake passage (22) through an intake port at a first time point in a period during which the crankshaft (13) is rotated in the reverse direction. Thereafter, a fuel-air mixture is ignited by an ignition plug at a second time point at which the fuel-air mixture is compressed in the combustion chamber (31a) by the rotation of the crankshaft (13) in the reverse direction and a piston does not reach a compression top dead center.

IPC 8 full level  
**F02D 41/06** (2006.01); **F02N 11/04** (2006.01); **F02N 19/00** (2010.01); **F02N 99/00** (2010.01); **F01L 1/047** (2006.01); **F01L 1/344** (2006.01)

CPC (source: EP)  
**F02D 41/062** (2013.01); **F02N 11/04** (2013.01); **F02N 19/005** (2013.01); **F02N 99/008** (2013.01); **F01L 1/34413** (2013.01); **F01L 2001/0473** (2013.01); **F02D 2250/06** (2013.01); **F02N 19/004** (2013.01); **F02N 99/004** (2013.01); **F02N 2019/007** (2013.01)

Cited by  
EP3309376A4; EP3173605A4; EP2881566A1; EP3309375A4; EP2952731A1; EP2881565A1; EP3147495A1; EP2998546A4; EP3002450A1; EP3173606A4; TWI596274B

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)  
**EP 2719883 A1 20140416**; **EP 2719883 B1 20141105**; ES 2527207 T3 20150121; JP 2014077405 A 20140501; TW 201414918 A 20140416; TW I487834 B 20150611

DOCDB simple family (application)  
**EP 13188298 A 20131011**; ES 13188298 T 20131011; JP 2012226053 A 20121011; TW 102123709 A 20130702