

Title (en)

METHOD FOR STARTING AN INTERNAL COMBUSTION ENGINE, DEVICE AND CONTROLLER

Title (de)

VERFAHREN ZUM STARTEN EINER BRENNKRAFTMASCHINE, VORRICHTUNG UND STEUERGERÄT

Title (fr)

PROCÉDÉ POUR DÉMARRER UN MOTEUR À COMBUSTION INTERNE, DISPOSITIF ET APPAREIL DE COMMANDE

Publication

**EP 2240683 A1 20101020 (DE)**

Application

**EP 08869263 A 20081027**

Priority

- EP 2008064527 W 20081027
- DE 102008003540 A 20080108

Abstract (en)

[origin: WO2009086957A1] The invention relates to a method for starting an internal combustion engine having at least one cylinder, an inlet and an outlet valve, and having a piston interacting with a crankshaft, and the crankshaft moving in a predetermined rotational direction during normal operation of the internal combustion engine, wherein the piston is located in an initial position, wherein the piston is moved into a defined starting position against a normal rotational direction of the crankshaft by means of a drive, wherein fuel is injected, and the fuel is ignited.

IPC 1-7

**F02N 17/00**

IPC 8 full level

**F02N 19/00** (2010.01); **F02N 11/08** (2006.01); **F02N 99/00** (2010.01)

CPC (source: EP US)

**F02N 19/005** (2013.01 - EP US); **F02N 99/004** (2013.01 - EP US); **F02N 99/006** (2013.01 - EP US); **F02N 11/0814** (2013.01 - EP US); **F02N 2019/007** (2013.01 - EP US); **F02N 2019/008** (2013.01 - EP US)

Citation (search report)

See references of WO 2009086957A1

Citation (examination)

- DE 10345153 A1 20040527 - TOYOTA MOTOR CO LTD [JP]
- DE 10328123 A1 20040115 - DENSO CORP [JP]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**WO 2009086957 A1 20090716**; EP 2240683 A1 20101020; KR 20100096282 A 20100901; US 2010275872 A1 20101104; US 8763580 B2 20140701

DOCDB simple family (application)

**EP 2008064527 W 20081027**; EP 08869263 A 20081027; KR 20107017641 A 20081027; US 81207008 A 20081027