

Title (en)

Control apparatus for engine, power unit of saddle-riding type vehicle, saddle-riding type vehicle and method for controlling an engine

Title (de)

Steuerungsvorrichtung für einen Motor, Antriebsaggregat eines Sattelfahrzeugs, Sattelfahrzeug und Verfahren zur Steuerung eines Motors

Title (fr)

Appareil de commande de moteur, unité motrice de véhicule de type à selle, véhicule de type à selle et procédé de commande d'unité de moteur

Publication

**EP 2884079 B1 20170308 (EN)**

Application

**EP 14189563 A 20141020**

Priority

JP 2013222129 A 20131025

Abstract (en)

[origin: EP2884079A2] Knocking can be favorably handled in a saddle-riding type vehicle even if exogenous noise is mixed in the output of a knock sensor due to collision of a small stone or the like. The saddle-riding type vehicle includes: a first acquisition section that acquires a signal output from the knock sensor during a first period during which there is a possibility of occurrence of knocking; a second acquisition section that acquires a signal output from the knock sensor during a second period which is at least part of a period of the engine excluding the first period and excluding a period during which noise caused by mechanical vibration of the engine is generated; a first control section that determines occurrence of knocking based on the signal acquired by the first acquisition section and that controls the engine to suppress the knocking when knocking occurs; and a second control section that determines generating of exogenous noise caused by an external situation of the saddle-riding type vehicle based on the signal acquired by the second acquisition section and that changes the control of the engine by the first control section based on the determination result.

IPC 8 full level

**F02D 35/02** (2006.01)

CPC (source: EP)

**F02D 35/027** (2013.01); **F02D 35/028** (2013.01)

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 2884079 A2 20150617**; **EP 2884079 A3 20151216**; **EP 2884079 B1 20170308**; BR 102014026682 A2 20150922;  
BR 102014026682 B1 20210810; CN 104564397 A 20150429; CN 104564397 B 20170412; ES 2620682 T3 20170629;  
IN 3226MU2014 A 20151009; JP 2015083793 A 20150430; MY 167989 A 20181010; TW 201537022 A 20151001; TW I510706 B 20151201

DOCDB simple family (application)

**EP 14189563 A 20141020**; BR 102014026682 A 20141024; CN 201410584701 A 20141027; ES 14189563 T 20141020;  
IN 3226MU2014 A 20141010; JP 2013222129 A 20131025; MY PI2014702977 A 20141010; TW 103133776 A 20140929