

Title (en)
Idle speed control apparatus for engine

Title (de)
Leerlaufdrehzahlsteuergerät für einen Verbrennungsmotor

Title (fr)
Appareil de régulation de la vitesse de ralenti pour un moteur à combustion

Publication
EP 0915245 B1 20030507 (EN)

Application
EP 98121045 A 19981105

Priority
JP 30430897 A 19971106

Abstract (en)
[origin: EP0915245A2] An apparatus for controlling the idle speed of an engine (2) is disclosed. The apparatus includes an electric control unit (ECU) (71) for controlling the engine speed, an air conditioner switch (65) for detecting application and removal of an external engine load, or air conditioner (37), and sensors (36, 66, 77) for detecting that the engine (2) is idling when the vehicle is stationary and when the vehicle is moving. The ECU (71) gradually increases the engine speed by a predetermined amount to shift the engine (2) to a raised idle state when the external engine load (37) is applied and gradually decreases the engine speed by the predetermined amount when the external engine load (37) is removed. The ECU (71) adjusts the engine speed at a certain rate when the vehicle is stationary and at a different rate when the vehicle is traveling. <IMAGE>

IPC 1-7
F02D 41/16; F02D 41/08; F02D 41/38; F02D 31/00

IPC 8 full level
F02D 29/04 (2006.01); **F02D 41/08** (2006.01); **F02D 41/14** (2006.01); **F02D 41/16** (2006.01)

CPC (source: EP)
F02D 41/083 (2013.01); **F02D 41/408** (2013.01)

Cited by
EP1234969A3; CN109519287A; DE102010028286A1; DE102010028286B4; GB2434657A; GB2434657B; FR3043047A1; US7335131B2

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0915245 A2 19990512; **EP 0915245 A3 20000329**; **EP 0915245 B1 20030507**; DE 69814303 D1 20030612; DE 69814303 T2 20040408; JP 3617281 B2 20050202; JP H11141380 A 19990525

DOCDB simple family (application)
EP 98121045 A 19981105; DE 69814303 T 19981105; JP 30430897 A 19971106