

Title (en)  
THROTTLE DEVICE

Title (de)  
DROSSELKLAPPENVORRICHTUNG

Title (fr)  
DISPOSITIF DE RÉGULATEUR

Publication  
**EP 3514369 A1 20190724 (EN)**

Application  
**EP 19152283 A 20190117**

Priority  
• JP 2018008806 A 20180123  
• JP 2018219634 A 20181122

Abstract (en)  
A throttle device, including: a throttle valve (13) disposed in a plurality of intake passages (12) of a throttle body (11); a throttle shaft (14) supporting the throttle valve (13); a motor (15) for driving the throttle valve (13) to open and close through the throttle shaft(14); a rotation transmission mechanism (20) interposed between the motor (15) and the throttle shaft (14); and a position sensor to detect a displacement in the rotation transmission mechanism (20). The rotation transmission mechanism (20) is disposed at a position where the first and the second throttle bodies (11f, 11s) are adjacent, the motor (15) is disposed within an installation width  $W_s$  of either one of the first and the second throttle bodies (11f, 11s), and the throttle opening degree sensor (30) is disposed within an installation width  $W_t$  of the other one of the first and the second throttle bodies (11f, 11s).

IPC 8 full level  
**F02M 35/16** (2006.01); **F02D 9/10** (2006.01)

CPC (source: CN EP)  
**F02D 9/02** (2013.01 - CN); **F02D 9/10** (2013.01 - CN); **F02D 9/105** (2013.01 - EP); **F02D 9/1095** (2013.01 - EP); **F02D 11/10** (2013.01 - CN); **F02M 35/162** (2013.01 - EP); **F02B 61/02** (2013.01 - EP); **F02D 2009/0294** (2013.01 - CN)

Citation (applicant)  
• JP S591255 B2 19840111  
• JP 2003201883 A 20030718 - KEIHIN CORP  
• JP 2010019137 A 20100128 - YAMAHA MOTOR CO LTD

Citation (search report)  
• [XYI] EP 2143914 A1 20100113 - YAMAHA MOTOR CO LTD [JP]  
• [XI] EP 2390487 A1 20111130 - MIKUNI KOGYO KK [JP]  
• [XI] EP 2599984 A2 20130605 - MIKUNI KOGYO KK [JP]  
• [Y] US 6202626 B1 20010320 - ITO TAKESHI [JP], et al  
• [Y] EP 1464811 A2 20041006 - HONDA MOTOR CO LTD [JP]  
• [XI] JP 2012159052 A 20120823 - MIKUNI KOGYO KK

Cited by  
US2019226408A1; US11181048B2

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)  
**EP 3514369 A1 20190724**; **EP 3514369 B1 20201223**; CN 110067654 A 20190730

DOCDB simple family (application)  
**EP 19152283 A 20190117**; CN 201910043829 A 20190117