

Title (en)

Throttle apparatus and motorcycle having the same

Title (de)

Drosselklappenvorrichtung und Motorrad mit dieser Vorrichtung

Title (fr)

Appareil de régulateur et motocyclette l'utilisant

Publication

**EP 2143914 A1 20100113 (EN)**

Application

**EP 09008872 A 20090707**

Priority

JP 2008178993 A 20080709

Abstract (en)

A throttle apparatus (60) includes: a throttle valve (66) disposed in an intake air passage (61) of an engine (3), a throttle shaft (65) connected to the throttle valve (66) and rotatable in a predetermined operational angle range, a motor (71) for rotating the throttle shaft (65), and a reduction mechanism (72) for transmitting, to the throttle shaft (65), the rotation of the motor (71) as reduced in rotational speed. The reduction mechanism (72) has a plurality of gears (76,77,78) including a first gear (77) rotatable in a rotational angle range greater than the operational angle range of the throttle shaft (65) and smaller than 360 degrees. The throttle apparatus (60) further includes a rotational angle sensor (82, 91, 92) for detecting the rotational angle of the first gear (77).

IPC 8 full level

**F02D 11/10** (2006.01); **F02D 9/02** (2006.01); **F02D 9/10** (2006.01)

CPC (source: EP)

**F02D 9/105** (2013.01); **F02D 9/1065** (2013.01); **F02D 11/106** (2013.01); **F02D 2009/0269** (2013.01); **F02D 2009/0284** (2013.01); **F02D 2009/0294** (2013.01); **F02D 2250/16** (2013.01)

Citation (applicant)

JP 2002256903 A 20020911 - YAMAHA MOTOR CO LTD

Citation (search report)

- [A] US 2004244772 A1 20041209 - IKEDA TSUTOMU [JP], et al
- [A] DE 19912231 A1 19991014 - AISAN IND [JP]
- [A] US 6189507 B1 20010220 - TSUCHIYA HIDEKI [JP], et al
- [PA] EP 2058489 A2 20090513 - KEIHIN CORP [JP]
- [A] EP 0572951 A2 19931208 - NIPPON DENSO CO [JP]
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