

Title (en)

Torque transmission apparatus for transmitting driving torque from starter motor to internal combustion engine

Title (de)

Drehmomentübertragungsvorrichtung zur Übertragung des Antriebsdrehmoments vom Anlasser auf den Verbrennungsmotor

Title (fr)

Appareil de transmission de couple pour transmettre un couple de commande depuis un démarreur de moteur vers un moteur à combustion interne

Publication

**EP 2093415 A2 20090826 (EN)**

Application

**EP 09001110 A 20090127**

Priority

JP 2008039194 A 20080220

Abstract (en)

In a torque transmission apparatus 1, an oil seal 7 is placed at an outer periphery of a clutch 6 in its diameter direction. The clutch 6 has an outer 6a, an inner 6b, and a link member 6c. A lip part 7a of the oil seal 7 slides on the outer periphery of the outer 6a fixed to a primary rotary body 3. A bearing 4 placed at the inner periphery of the clutch 6 in the diameter direction is a ball bearing with a seal. In particular, a filling ratio of a lubricant with which a filling space formed between the bearing 4 and the oil seal 7 is filled is not more than 60 %. When an engine rotates, this structure suppresses the inner pressure of the oil seal 7 from increasing and a torque loss from increasing. The above structure decreases the fuel consumption of the engine.

IPC 8 full level

**F02N 15/02** (2006.01)

CPC (source: EP)

**F02N 15/006** (2013.01); **F02N 15/022** (2013.01); **F02N 2250/08** (2013.01)

Citation (applicant)

JP 2006312891 A 20061116 - DENSO CORP

Citation (examination)

- JP 2007120474 A 20070517 - DENSO CORP
- JP 2003021172 A 20030124 - KOYO SEIKO CO

Cited by

EP2031239A3; CN102220928A; WO2013079047A1

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DE FR

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AL BA RS

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