

Title (en)
STARTER FOR COMBUSTION ENGINE

Publication
EP 0069125 B1 19840905 (DE)

Application
EP 81903113 A 19811031

Priority
DE 3100869 A 19810114

Abstract (en)
[origin: WO8202419A1] A speed reduction unit (16, 17) is arranged between the driving shaft (4) of a starting motor (1) and a transmission shaft (20) which carries a moving transmission (39 to 42, 29) provided with a starting pinion (31). The crown (17) of the reduction unit is of a one piece type with the bearing sleeve (18) provided with a quick pitch threading (19), and is mounted on the shaft (20). The driving lug (26) of the free wheel (31) is mounted on the quick pitch threading (19) so as to reduce the overall size. A casing (51) surrounding the crown (17) is arranged between the intermediary bearing (20, 53) and the driving bearing (10, 54) and forms a lubricant-tight barrier between the reduction unit (16, 17) and the inside of the driving bearing (10).

IPC 1-7
F02N 15/06; **F02N 15/04**

IPC 8 full level
F02N 15/02 (2006.01); **F02N 15/04** (2006.01); **F02N 15/06** (2006.01); **F02N 11/00** (2006.01)

CPC (source: EP US)
F02N 15/043 (2013.01 - EP US); **F02N 15/06** (2013.01 - EP US); **Y10T 74/132** (2015.01 - EP US); **Y10T 74/137** (2015.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
WO 8202419 A1 19820722; DE 3100869 A1 19820812; DE 3165866 D1 19841011; EP 0069125 A1 19830112; EP 0069125 B1 19840905; ES 508688 A0 19821201; ES 8302856 A1 19821201; IT 1149402 B 19861203; IT 8219002 A0 19820105; JP H0119067 B2 19890410; JP S57502178 A 19821209; US 4495825 A 19850129

DOCDB simple family (application)
DE 8100184 W 19811031; DE 3100869 A 19810114; DE 3165866 T 19811031; EP 81903113 A 19811031; ES 508688 A 19820113; IT 1900282 A 19820105; JP 50352481 A 19811031; US 41334382 A 19820811