

Title (en)  
STARTING MECHANISM FOR AN INTERNAL COMBUSTION ENGINE FEATURING A SEPARATE INSERTION PROCESS AND STARTING PROCESS

Title (de)  
STARTVORRICHTUNG FÜR EINEN VERBRENNUNGSMOTOR MIT SEPARATEM EINRÜCK- UND STARTVORGANG

Title (fr)  
DISPOSITIF DE DEMARRAGE POUR UN MOTEUR A COMBUSTION INTERNE AVEC UN PROCESSUS D'EMBRAYAGE ET UN PROCESSUS DE DEMARRAGE DISTINCTS

Publication  
**EP 1800000 A2 20070627 (DE)**

Application  
**EP 05773934 A 20050705**

Priority

- EP 2005053186 W 20050705
- DE 102004039757 A 20040817
- DE 102005004326 A 20050131

Abstract (en)  
[origin: WO2006018350A2] The invention relates to a mechanism for starting an internal combustion engine of a motor vehicle. Said mechanism comprises a starter motor (1) with an actuator (2) for engaging a pinion (10) that is driven by the starter motor (1) into a gear rim (11) as well as a control unit (6) which triggers a final shifting stage (7) assigned to the actuator (2) and a final shifting stage (8) allocated to the starter motor (7). The starting time of the internal combustion engine can be substantially reduced if the starter mechanism is provided with a control unit (6).

IPC 8 full level  
**F02N 11/08** (2006.01); **F02N 15/06** (2006.01)

CPC (source: EP US)  
**F02N 11/0855** (2013.01 - EP US); **F02N 11/087** (2013.01 - EP US); **F02N 15/06** (2013.01 - EP US); **F02N 15/067** (2013.01 - EP US); **F02N 19/005** (2013.01 - EP US)

Citation (search report)  
See references of WO 2006018350A2

Citation (examination)  
JP 2002070699 A 20020308 - TOYOTA MOTOR CORP

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 102005004326 A1 20060223**; EP 1800000 A2 20070627; JP 2008510099 A 20080403; JP 4608549 B2 20110112; US 2008127927 A1 20080605; US 7665438 B2 20100223; WO 2006018350 A2 20060223; WO 2006018350 A3 20060608

DOCDB simple family (application)  
**DE 102005004326 A 20050131**; EP 05773934 A 20050705; EP 2005053186 W 20050705; JP 2007526442 A 20050705; US 65986805 A 20050705