

Title (en)  
COMMUTATOR FOR ELECTRIC MOTORS

Title (de)  
KOMMUTATOR FÜR ELEKTROMOTOREN

Title (fr)  
COMMUTATEUR POUR MOTEURS ELECTRIQUES

Publication  
**EP 1512200 A1 20050309 (DE)**

Application  
**EP 03717114 A 20030227**

Priority  
• DE 0300625 W 20030227  
• DE 10223361 A 20020525

Abstract (en)  
[origin: WO03100919A1] The invention relates to a commutator comprising a cylindrical collector (1) arranged on a motor-rotor shaft and contacting means (4, 5) which come into contact with at least two out of several contact blades (3) which are predisposed on the collector (1) during rotation of the collector (1) such that an electrical connection is established between the respective contact blades (3) and external power supply points (21, 22). The commutator is especially resistant to wear and tear such that the contacting means are made of at least two electrically conductive cylinders (4, 5) which are arranged behind each other in an axial direction of the collector (1). The longitudinal axes thereof (6, 7) are arranged parallel to the longitudinal axis (2) of the collector (1) and the at least two cylinders (4, 5) are placed relative to the collector (1) and have a diameter such that the collector (1) rolls off the at least two cylinders (4, 5) during the rotation thereof via the internal surfaces (8) or the external surfaces and each of the provided cylinders (4, 5) exclusively comes into contact with a blade (3) of the collector (3).

IPC 1-7  
**H01R 39/28**; **H01R 39/64**

IPC 8 full level  
**H01R 39/28** (2006.01); **H01R 39/64** (2006.01); **H02K 13/00** (2006.01)

CPC (source: EP US)  
**H01R 39/28** (2013.01 - EP US); **H01R 39/643** (2013.01 - EP US); **Y10T 29/49011** (2015.01 - EP US)

Citation (search report)  
See references of WO 03100919A1

Cited by  
WO2011073120A1

Designated contracting state (EPC)  
DE ES FR GB

DOCDB simple family (publication)  
**WO 03100919 A1 20031204**; CN 100342598 C 20071010; CN 1537348 A 20041013; DE 10223361 C1 20031224; EP 1512200 A1 20050309; JP 2005528072 A 20050915; US 2004239205 A1 20041202; US 6903481 B2 20050607

DOCDB simple family (application)  
**DE 0300625 W 20030227**; CN 03800735 A 20030227; DE 10223361 A 20020525; EP 03717114 A 20030227; JP 2004508460 A 20030227; US 47124903 A 20031204