

Title (en)  
ELECTRIC MACHINE HAVING A COMMUTATOR

Title (de)  
ELEKTRISCHE MASCHINE MIT KOMMUTATOR

Title (fr)  
MACHINE ELECTRIQUE A COMMUTATEUR

Publication  
**EP 0996994 B1 20090708 (DE)**

Application  
**EP 99927703 A 19990422**

Priority  
• DE 9901206 W 19990422  
• DE 19818113 A 19980423

Abstract (en)  
[origin: DE19818113A1] Lubricating oil is stocked in at least one carbon brush (19,20) at or in one collector facing front side (29,30), or one partial length (19a,20a) starting at this front side. In the manufacturing process of the machine with the commutator (8) and brushes, the lubricating oil is at least partly applied to at least one brush to the region intended for contact with the collector, prior to incorporation of the brush into the machine, with the lubricating oil applied as a spray as a mixture with a solvent. An Independent claim is included for the brush.

IPC 8 full level  
**H01R 39/22** (2006.01); **H02K 13/00** (2006.01)

CPC (source: EP)  
**H01R 39/22** (2013.01)

Designated contracting state (EPC)  
DE ES FR IT

DOCDB simple family (publication)  
**DE 19818113 A1 19991028**; BR 9906393 A 20000926; DE 59915049 D1 20090820; EP 0996994 A1 20000503; EP 0996994 B1 20090708; ES 2326604 T3 20091015; JP 2002506608 A 20020226; WO 9956355 A1 19991104

DOCDB simple family (application)  
**DE 19818113 A 19980423**; BR 9906393 A 19990422; DE 59915049 T 19990422; DE 9901206 W 19990422; EP 99927703 A 19990422; ES 99927703 T 19990422; JP 55350999 A 19990422