

Title (en)  
Slip ring or commutator motor.

Title (de)  
Schleifring- bzw. Kommutatormotor.

Title (fr)  
Moteur à baque ou à collecteur.

Publication  
**EP 0651473 A3 19960710 (DE)**

Application  
**EP 94116339 A 19941017**

Priority  
DE 9316606 U 19931029

Abstract (en)  
[origin: EP0651473A2] Wollastonite (CaSiO<sub>3</sub>) with a structure in the form of needles is added as a filler to the phenol resin moulding compound for the supporting body of the sliprings and of the commutator laminates in order to produce an asbestos-free slipring arrangement and commutator arrangement.

IPC 1-7  
**H01R 43/06**; **H01R 39/16**

IPC 8 full level  
**H01R 43/08** (2006.01); **H01R 39/16** (2006.01)

CPC (source: EP)  
**H01R 43/08** (2013.01); **H01R 39/16** (2013.01)

Citation (search report)

- [Y] US 4963610 A 19901016 - SCHMID EDUARD [CH], et al
- [Y] EP 0131544 A1 19850116 - CIBA GEIGY AG [CH]
- [A] US 3652761 A 19720328 - WEETALL HOWARD H
- [X] PATENT ABSTRACTS OF JAPAN vol. 010, no. 350 (C - 387) 26 November 1986 (1986-11-26)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 011, no. 379 (C - 463) 10 December 1987 (1987-12-10)
- [Y] PATENT ABSTRACTS OF JAPAN vol. 012, no. 242 (C - 510) 8 July 1988 (1988-07-08)
- [A] PATENT ABSTRACTS OF JAPAN vol. 005, no. 067 (C - 053) 7 May 1981 (1981-05-07)
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 409 (C - 0876) 18 October 1991 (1991-10-18)
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 353 (C - 530) 21 September 1988 (1988-09-21)
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 162 (C - 235) 26 July 1984 (1984-07-26)

Designated contracting state (EPC)  
DE DK IT

DOCDB simple family (publication)  
**DE 9316606 U1 19941124**; EP 0651473 A2 19950503; EP 0651473 A3 19960710; SK 124594 A3 19950711; SK 283415 B6 20030701

DOCDB simple family (application)  
**DE 9316606 U 19931029**; EP 94116339 A 19941017; SK 124594 A 19941011