

Title (en)
CASCADING ELECTROMAGNETIC ARMATURE

Title (de)
GESTUFTER ELEKTROMAGNETANKER

Title (fr)
INDUIT ELECTROMAGNETIQUE EN CASCADE

Publication
EP 1029332 A4 20010124 (EN)

Application
EP 98956490 A 19981103

Priority

- US 9823342 W 19981103
- US 6403597 P 19971103

Abstract (en)
[origin: WO9923674A1] The present invention is a two or more-piece cascading armature for use in a solenoid. The cascading armature comprises a core (174) of conductive material slidably disposed within at least one conductive sleeve (176), which, in turn, is disposed in the solenoid housing. The core and sleeve are operably linked. In various embodiments, the cascading armature may contain multiple conductive sleeves in varying sizes and proportions to the core. When the cascading armature is installed in the conductive housing, both the sleeve rim (179) and the core face (172) are presented to the pole member face across the working air gap. In the deactivated position the working air gap is different for the core and the sleeve because the rim of the sleeve extends beyond the core and is accordingly closer to the pole member face than the core.

IPC 1-7
H01F 3/00; H01F 7/00; H01F 7/08; H01F 7/16

IPC 8 full level
H01F 7/16 (2006.01); **H01F 3/00** (2006.01); **H01F 7/08** (2006.01)

CPC (source: EP KR)
H01F 3/00 (2013.01 - KR); **H01F 7/081** (2013.01 - EP)

Citation (search report)

- [X] WO 9702425 A1 19970123 - ORBITAL ENG PTY [AU], et al
- [A] US 4327345 A 19820427 - KELSO CHARLES R, et al
- [A] US 3961298 A 19760601 - JAFFE WOLFGANG, et al
- [A] DE 447310 C 19270722 - FERDINAND STEINERT FA
- See references of WO 9923674A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9923674 A1 19990514; EP 1029332 A1 20000823; EP 1029332 A4 20010124; JP 2001522140 A 20011113; KR 20010031761 A 20010416

DOCDB simple family (application)
US 9823342 W 19981103; EP 98956490 A 19981103; JP 2000519446 A 19981103; KR 20007004826 A 20000503