

Title (en)
MULTI-AIR GAP MAGNETIC ACTUATOR

Title (de)
MAGNETISCHER BETÄTIGER MIT MEHRFACH LUFTSPALTEN

Title (fr)
ACTIONNEUR MAGNETIQUE A ENTREFERS MULTIPLES

Publication
EP 0752152 A1 19970108 (FR)

Application
EP 95943267 A 19951222

Priority
• FR 9501723 W 19951222
• FR 9415694 A 19941227

Abstract (en)
[origin: WO9620488A1] A magnetic actuator for adhering a moving piece (36) to a pole piece (38) separated therefrom by an air gap when an electrical circuit (34) is excited, at least one intermediate piece (42) being movably arranged in said air gap between the moving piece and the pole piece, and defining, in the absence of excitation (inoperative state), gaps (e1, e2) between the intermediate piece(s) and the moving piece and the pole piece respectively, these gaps being air gaps for the magnetic flux. Means (44, 64, 74) for limiting the travel of the intermediate piece (42) are provided for holding said intermediate piece in the inoperative position in which this piece (42), the pole piece (38) and the moving piece (36) are fixed and separated by said air gaps. Said means for limiting the travel of the intermediate piece preferably consist of a piece made of non-magnetic material.

IPC 1-7
H01F 7/13; H01F 7/16; H01F 7/14; H01H 50/42

IPC 8 full level
H01F 7/13 (2006.01); **H01F 7/14** (2006.01); **H01F 7/16** (2006.01); **H01H 50/42** (2006.01)

CPC (source: EP)
H01F 7/13 (2013.01); **H01F 7/14** (2013.01); **H01F 7/1607** (2013.01); **H01H 50/42** (2013.01); **H01F 2007/085** (2013.01)

Citation (search report)
See references of WO 9620488A1

Cited by
DE10244527A1; DE10244527B4; US6837477B2

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
WO 9620488 A1 19960704; DE 69517308 D1 20000706; DE 69517308 T2 20001130; EP 0752152 A1 19970108; EP 0752152 B1 20000531; FR 2728721 A1 19960628; FR 2728721 B1 19970314

DOCDB simple family (application)
FR 9501723 W 19951222; DE 69517308 T 19951222; EP 95943267 A 19951222; FR 9415694 A 19941227