

Title (en)  
Magnetic switch

Title (de)  
Magnetschalter

Title (fr)  
Interrupteur magnétique

Publication  
**EP 1137032 A3 20030716 (EN)**

Application  
**EP 01106190 A 20010314**

Priority  
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• EP 00105436 A 20000315

Abstract (en)  
[origin: EP1137032A2] The invention relates to a magnetic switch having a yoke (1) which has the shape of a rotationally symmetrical cup (3) on the base (4) of which is arranged a permanent magnet (5). The flux of the permanent magnet (5) is conducted via a core (6), which has a radial core flange (8), to the plate-shaped armature (11). For the operational air gap effective between the armature (11) and the core (6) and the yoke (1) and the magnetic resistance WA thereof, the following relation applies in relation to the marginal air gap (10) formed between the core flange (8) and the yoke (1):  $WA < WR$ . As a result of the rotational symmetry with a yoke (1) having the shape of a cup (3), it is possible to generate a high holding force for the armature (11) with a small structural volume. <IMAGE>

IPC 1-7  
**H01H 51/22**

IPC 8 full level  
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CPC (source: EP)  
**H01H 51/2209** (2013.01); **H01H 50/163** (2013.01); **H01H 50/326** (2013.01)

Citation (search report)  
• [A] US 5883557 A 19990316 - PAWLAK ANDRZEJ MARIAN [US], et al  
• [DA] EP 0442311 A2 19910821 - KLOECKNER MOELLER GMBH [DE]  
• [A] JP H01168011 A 19890703 - MATSUSHITA ELECTRIC WORKS LTD

Cited by  
CN103311047A; CN106655705A; EP3018677A1; CN105589348A; US9806641B2; US10141143B2; US10074497B2; US10361051B2; US9748873B2; US9722513B2; US9726726B2; US9746521B2; US9766291B2; US9772381B2; US9806642B2; US10018676B2; US10101393B2; US10175298B2; US10393809B2

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