

Title (en)

Magnetic circuit separation for magnetic valve

Title (de)

Magnetische Trennung für Magnetventil

Title (fr)

Séparation magnétique pour une soupape magnétique

Publication

**EP 2339596 B1 20130327 (DE)**

Application

**EP 10190687 A 20101110**

Priority

DE 102009055154 A 20091222

Abstract (en)

[origin: EP2339596A1] The valve (113) has a magnetic coil (103) arranged in a radial direction on an outer side of a sleeve (105), and a magnetic core (111) arranged in a radial direction in an inner side of the sleeve. An armature (106) is arranged axially opposite to the core and arranged in the radial direction within the sleeve. The armature is arranged on a valve needle, and sleeve includes a small wall thickness in a thin-wall portion (110) i.e. angular groove, that is arranged between the armature and magnetic coil. The thin-wall portion includes a reinforcing element (108) for receiving radial forces. An independent claim is also included for a method for manufacturing a magnetic valve. The reinforcing element includes a fibrous material, carbon fibrous material, glass-fiber material and aramid fibrous material.

IPC 8 full level

**H01F 7/08** (2006.01); **F02M 51/06** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP)

**F02M 51/0664** (2013.01); **F02M 51/0682** (2013.01); **H01F 7/081** (2013.01); **F02M 2200/9023** (2013.01); **H01F 2007/085** (2013.01)

Cited by

CN103890871A; EP2775132A1; CN104465012A; CN105008708A; US10024287B2; WO2013056958A1; WO2014135359A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 2339596 A1 20110629**; **EP 2339596 B1 20130327**; DE 102009055154 A1 20110630

DOCDB simple family (application)

**EP 10190687 A 20101110**; DE 102009055154 A 20091222