

Title (en)  
RESIDUAL AIR GAP DISK FOR A SOLENOID VALVE AND FUEL INJECTOR HAVING A RESIDUAL AIR GAP DISK

Title (de)  
RESTLUFTSPALTSCHIEIBE FÜR EIN MAGNETVENTIL UND KRAFTSTOFFINJEKTOR MIT EINER RESTLUFTSPALTSCHIEIBE

Title (fr)  
DISQUE D'ENTREFER RÉSIDUEL POUR UNE ÉLECTROVANNE ET INJECTEUR DE CARBURANT COMPRENANT UNE PLAQUE D'ENTREFER RÉSIDUEL

Publication  
**EP 3469207 A1 20190417 (DE)**

Application  
**EP 17725915 A 20170516**

Priority  
• DE 102016210393 A 20160613  
• EP 2017061653 W 20170516

Abstract (en)  
[origin: WO2017215861A1] The invention relates to a residual air gap disk (30) for a solenoid valve (10), wherein the solenoid valve (10) serves to control a liquid flow in a fuel injector (100), comprising a first end face (35) associated with an electromagnet (15) and a second end face (36) associated with a magnet armature (25), wherein the first end face (35) is designed to lie against the electromagnet (15) and the second end face (36) is designed either to be in contact with the magnet armature (25) or to be spaced apart therefrom in accordance with the energization of the electromagnet (15). According to the invention, the first end face (35) of the residual air gap disk (30) is preferably flat and the second end face (36) of the residual air gap disk (30) is provided with a structure (38).

IPC 8 full level  
**F02M 51/06** (2006.01); **F02M 63/00** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP)  
**F02M 51/061** (2013.01); **F02M 63/0075** (2013.01); **H01F 7/1638** (2013.01); **F02M 2200/07** (2013.01); **F02M 2200/9069** (2013.01);  
**H01F 2007/1661** (2013.01)

Citation (search report)  
See references of WO 2017215861A1

Cited by  
WO2023144362A1; DE102022200978A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**DE 102016210393 A1 20171214**; EP 3469207 A1 20190417; EP 3469207 B1 20201014; WO 2017215861 A1 20171221

DOCDB simple family (application)  
**DE 102016210393 A 20160613**; EP 17725915 A 20170516; EP 2017061653 W 20170516