

Title (en)  
POPPET VALVE

Title (de)  
KEGELVENTIL

Title (fr)  
SOUPAPE À CLAPET

Publication  
**EP 3106634 A4 20171129 (EN)**

Application  
**EP 14882206 A 20140212**

Priority  
JP 2014053156 W 20140212

Abstract (en)  
[origin: EP3106634A1] Provided is a poppet valve capable of realizing maximum combustion efficiency by insulating all of three heat transfer forms. In a poppet valve including a head portion (14) formed integrally with one end side of a stem portion (12), in the head portion (14), a hollow portion (19) extending along a head surface (24) is formed, a metal layer (17) that insulates radiation heat is formed on a upper end surface (25) of the hollow portion (19), and a heat insulating portion is formed between the metal layer (17) and a bottom surface of the hollow portion (19). Among the heat transfer forms, conduction and convection are insulated by the heat insulating portion, and radiation is insulated by the metal layer (17).

IPC 8 full level  
**F01L 3/02** (2006.01); **F01L 3/04** (2006.01); **F01L 3/20** (2006.01)

CPC (source: EP KR US)  
**F01L 3/02** (2013.01 - EP US); **F01L 3/04** (2013.01 - EP KR US); **F01L 3/12** (2013.01 - EP KR US); **F01L 3/20** (2013.01 - EP KR US)

Citation (search report)

- [XY] EP 0049396 A1 19820414 - EATON CORP [US]
- [X] US 4346870 A 19820831 - CHUTE RICHARD, et al
- [Y] EP 1353045 A2 20031015 - FUJI VALVE [JP]
- [A] GB 2238349 A 19910529 - T & N TECHNOLOGY LTD [GB]
- See references of WO 2015121920A1

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)  
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DOCDB simple family (application)  
**EP 14882206 A 20140212**; CN 201480036387 A 20140212; JP 2014053156 W 20140212; JP 2015562583 A 20140212; KR 20157035623 A 20140212; TW 104104363 A 20150210; US 201415117344 A 20140212