

Title (en)

GAS EXCHANGE VALVE, AND METHOD FOR PRODUCING A GAS EXCHANGE VALVE

Title (de)

GASWECHSELVENTIL, SOWIE VERFAHREN ZUR HERSTELLUNG EINES GASWECHSELVENTILS

Title (fr)

SOUPAPE DE CHANGEMENT DE GAZ ET PROCÉDÉ DE FABRICATION D'UNE SOUPAPE DE CHANGEMENT DE GAZ

Publication

**EP 2743468 B1 20190904 (DE)**

Application

**EP 13195119 A 20131129**

Priority

- EP 12196566 A 20121211
- EP 13195119 A 20131129

Abstract (en)

[origin: EP2743468A1] The valve has a valve body including a valve shaft (2) extending along axial valve shaft axles (A). A valve disk (3) is connected to the valve shaft and moved in an axial direction away from the valve shaft. A base surface (31) is formed between the valve disk and valve shaft orthogonally to the valve shaft axles, and a valve seat surface (32) is formed at the valve disk. A recess (4) in the form of a coating trough (41) is formed in the base surface. An anti-corrosive coating (5) in the form of a corrosion protection layer (51) is provided on the recess. An independent claim is also included for a method for manufacturing a gas shuttle valve.

IPC 8 full level

**F01L 3/04** (2006.01); **F01L 9/10** (2021.01)

CPC (source: EP KR)

**F01L 3/00** (2013.01 - KR); **F01L 3/04** (2013.01 - EP KR)

Citation (examination)

JP 2002018594 A 20020122 - MITSUBISHI HEAVY IND LTD

Citation (opposition)

Opponent : MAHLE International GmbH,

- US 4867116 A 19890919 - DE FREITAS COUTO ROSA EDUARDO [US], et al
- DE 4024084 A1 19910606 - DAIMLER BENZ AG [DE]
- US 1628911 A 19270517 - RICH GEORGE R
- US 2662011 A 19531208 - PAUL GAGNEBIN ALBERT, et al
- DE 3125560 A1 19820527 - DANA CORP [US]
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- DE 8202802 U1 19830303
- EP 0049396 B1 19850206
- US 3408995 A 19681105 - JOHNSON THOMAS A
- US 4346870 A 19820831 - CHUTE RICHARD, et al
- FR 2666847 A1 19920320 - PEUGEOT [FR], et al
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- JP S6040709 A 19850304 - ISHIKAWAJIMA HARIMA HEAVY IND
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- EP 2743024 A1 20140618 - WÄRTSILÄ SCHWEIZ AG [CH]
- EP 2743468 A1 20140618 - WÄRTSILÄ SCHWEIZ AG [CH]
- WOLFGANG WEISSBACH: "Werkstoffkunde Strukturen, Eigenschaften , Prüfung 17. Auflage", 2010, VIEWEG + TEUBNER, pages: 2pp, 304 - 305, XP055702648

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DE102016207799A1; EP2743468B1

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 13195119 A 20131129; EP 13195119 A 20131129**; BR 102013021206 A 20130820; CN 201310683638 A 20131210; JP 2013255071 A 20131210; KR 20130106796 A 20130905; RU 2013154782 A 20131210