

Title (en)  
BYPASS VALVE FOR VEHICLES

Title (de)  
BYPASSVENTIL FÜR FAHRZEUGE

Title (fr)  
SOUPAPE DE CONTOURNEMENT DESTINÉ À DES VÉHICULES

Publication  
**EP 2516834 A4 20140122 (EN)**

Application  
**EP 10757146 A 20100908**

Priority  
• KR 20100065930 A 20100708  
• KR 2010005674 W 20100908

Abstract (en)  
[origin: WO2012005406A1] Disclosed is a bypass valve for vehicles, which provides effective control of exhaust gas, permits effective use of an internal space of the bypass valve, and guarantees good durability of flaps and a shaft. The bypass valve includes a valve-housing coupled to an outlet of an EGR cooler, a first intake port formed on one side of the valve-housing and connected to a cooling passage of the EGR cooler, a second intake port on the one side of the valve-housing and connected to a bypass passage of the EGR cooler, an exhaust port on the other side of the valve-housing, a first transfer channel in the valve-housing to connect the first intake port to the exhaust port, a second transfer channel in the valve-housing to connect the second intake port to the exhaust port, a first flap rotatably disposed in the first transfer channel, and a second flap rotatably disposed in the second transfer channel. The first and second flaps selectively open or close the first and second transfer channels to allow some of exhaust gas from an exhaust manifold to be directly recirculated to an intake manifold or to be recirculated thereto after being cooled.

IPC 8 full level  
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CPC (source: EP)  
**F02M 26/26** (2016.02); **F02M 26/30** (2016.02); **F02M 26/32** (2016.02); **F02M 26/70** (2016.02); **F16K 1/221** (2013.01); **F16K 1/223** (2013.01)

Citation (search report)  
• [X] EP 1801407 A1 20070627 - T RAD CO LTD [JP]  
• [X] EP 2053232 A1 20090429 - AISAN IND [JP]  
• [X] US 2007261401 A1 20071115 - NYDAM KENNETH P [CA]  
• [A] DE 202008005508 U1 20080717 - WAHLER GMBH & CO KG GUSTAV [DE]  
• See references of WO 2012005406A1

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**WO 2012005406 A1 20120112**; CN 102667128 A 20120912; EP 2516834 A1 20121031; EP 2516834 A4 20140122; KR 101016191 B1 20110224

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