

Title (en)

Open manifold back pressure valve exhaust gas recirculation system

Title (de)

Abgasrückführsystem mit Abgasgegendruckventil im Abgaskrümmer

Title (fr)

Système de recyclage de gaz d'échappement avec une vanne de contre-pression dans le collecteur d'échappement

Publication

EP 1213468 A2 20020612 (EN)

Application

EP 01125970 A 20011031

Priority

US 73388100 A 20001207

Abstract (en)

An internal combustion engine exhaust gas recirculation (EGR) system includes an exhaust gas manifold back pressure valve insert assembly which has an exhaust gas recirculation (EGR) conduit interposed exhaust manifold structure of the engine and atmospheric exhaust structure which includes a scroll element of the turbine stage of the engine turbocompressor, and a valve mechanism disposed within the scroll element and movable between a fully closed position at which all exhaust gases from all of the engine cylinders pass to atmospheric exhaust through the atmospheric exhaust structure, and a fully opened position at which the valve mechanism partially occludes an upstream portion of the scroll element such that a sufficiently large back pressure is developed with respect to the atmospheric exhaust structure such that exhaust gases are forced through the exhaust gas recirculation (EGR) conduit. <IMAGE>

IPC 1-7

F02M 25/07; **F02D 9/04**; **F02B 37/22**

IPC 8 full level

F02D 9/04 (2006.01); **F02M 25/07** (2006.01)

CPC (source: EP)

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Cited by

FR2873759A1; FR3012558A1; KR20130113098A; CN104204493A; FR2943722A1; CN104508287A; WO2011048540A1; WO2006056279A1; WO2010112689A1; WO2015063394A1; DE102010050256A1; ITMI20091799A1; EP2930326A1; CN104975925A; WO03089819A1; WO2011147513A1; EP1273775B1

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DE

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