

Title (en)

Exhaust gas recirculation system for internal combustion engine

Title (de)

Abgasrückführungssystem für eine Brennkraftmaschine

Title (fr)

Système de recirculation de gaz d'échappement pour un moteur à combustion interne

Publication

**EP 1186767 A3 20030423 (EN)**

Application

**EP 01121561 A 20010910**

Priority

JP 2000275428 A 20000911

Abstract (en)

[origin: EP1186767A2] An EGR system for an internal combustion engine includes a cooling means (44) disposed in an EGR passage (40) for cooling an EGR gas, an EGR-gas compressor (46) disposed in the EGR passage (40) upstream of the cooling means (44) for compressing the EGR gas, an EGR-gas turbine (48) disposed in the EGR passage (40) downstream of the cooling means (44) for expanding the EGR gas, and driving means (50) for driving the EGR-gas compressor and turbine (46),(48). The EGR passage (40) extends in communication between the exhaust passage (30) downstream of a turbine (34) of a supercharger for the engine and the intake air passage (20) upstream of a compressor (24) of the supercharger. When the EGR system is equipped with a diesel particulate filter (36), the EGR passage (40) is connected to a portion of the exhaust passage (30) downstream of the particulate filter (36). <IMAGE>

IPC 1-7

**F02M 25/07**

IPC 8 full level

**F02B 37/00** (2006.01); **F02D 21/08** (2006.01); **F02M 25/07** (2006.01)

CPC (source: EP)

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Citation (search report)

- [A] US 5794445 A 19980818 - DUNGNER STEFAN [SE]
- [A] DE 19603591 C1 19970306 - DAIMLER BENZ AG [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 392 (M - 1450) 22 July 1993 (1993-07-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06 30 June 1997 (1997-06-30)

Cited by

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