

Title (en)

FLUID FEED DUCT FOR A HOT FLUID IN A HOLLOW STRUCTURE

Title (de)

FLUIDEINLEITUNG FÜR EIN HEISSES FLUID IN EINER HOHLRAUMSTRUKTUR

Title (fr)

CONDUITE FLUIDIQUE DESTINEE A UN FLUIDE A HAUTE TEMPERATURE DANS UNE STRUCTURE CREUSE

Publication

EP 1196687 B1 20050907 (DE)

Application

EP 00945834 A 20000628

Priority

- DE 19933030 A 19990715
- EP 0005984 W 20000628

Abstract (en)

[origin: US2002112708A1] A fluid feed duct, which may be used for feeding a stream of recirculated exhaust gas into a stream of intake air for an internal combustion engine. The feed duct includes a hollow structure (10) into which a feed connection (12) is introduced via a joint structure (34). A ceramic pipe (16) is used to prevent heat from the exhaust gas stream from being conducted to mounts in the hollow structure (10) which represents the intake duct of the engine. Consequently, the intake duct can be manufactured of a thermoplastic synthetic resin material, since the risk of thermal overstressing is avoided. The feed connection also has a deflecting segment (19) which is provided in its sides with outlet openings (20). This enables the exhaust gas to be introduced in the direction of flow of the intake air, so that optimal mixing is assured and the hot exhaust gas stream is prevented from passing directly to the wall of the thermoplastic intake duct, thereby preventing the intake duct from being melted.

IPC 1-7

F02M 25/07; F02M 35/104

IPC 8 full level

F02M 26/12 (2016.01); **F02M 26/18** (2016.01); **F28F 27/02** (2006.01); **F02M 35/10** (2006.01)

CPC (source: EP US)

F02M 26/12 (2016.02 - EP US); **F02M 26/18** (2016.02 - EP US); **F02M 35/10118** (2013.01 - EP US); **F02M 35/10144** (2013.01 - EP US);
F02M 35/10222 (2013.01 - EP US); **F02M 35/10268** (2013.01 - EP US); **F02M 35/10321** (2013.01 - EP US); **F28C 3/02** (2013.01 - EP US);
F28F 9/0273 (2013.01 - EP US); **F02M 26/11** (2016.02 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 2002112708 A1 20020822; US 6513508 B2 20030204; AT E304120 T1 20050915; BR 0012988 A 20020423; DE 19933030 A1 20010118;
DE 50011124 D1 20051013; EP 1196687 A1 20020417; EP 1196687 B1 20050907; ES 2248093 T3 20060316; JP 2003504555 A 20030204;
JP 4498651 B2 20100707; WO 0106109 A1 20010125

DOCDB simple family (application)

US 4503102 A 20020115; AT 00945834 T 20000628; BR 0012988 A 20000628; DE 19933030 A 19990715; DE 50011124 T 20000628;
EP 0005984 W 20000628; EP 00945834 A 20000628; ES 00945834 T 20000628; JP 2001510716 A 20000628