

Title (en)
Intake manifold for internal combustion engine

Title (de)
Saugrohr für Verbrennungsmotoren

Title (fr)
Collecteur d'admission pour moteur à combustion interne

Publication
EP 2009272 A2 20081231 (EN)

Application
EP 08009736 A 20080528

Priority
JP 2007169867 A 20070628

Abstract (en)
An intake manifold including an intake manifold body (15) including a collector (5) and a plurality of branches (2, 3, 4) joined with each other through a connecting wall (7, 8), and a resonator (6) including a resonator body member (14) fixed onto an outer surface of the intake manifold body. Each of the branches has a thickness larger than that of the connecting wall. The resonator includes a resonator neck (30) and a resonator volume chamber (31) communicated with the collector through the resonator neck. The resonator neck has a resonator neck passage (29) formed between a pair of opposed resonator neck walls connected with the resonator body member and the outer surface of the intake manifold body. The resonator neck is disposed above one of the branches and extends along the one of the branches.

IPC 8 full level
F02M 35/104 (2006.01)

CPC (source: EP)
F02M 35/10295 (2013.01); **F02M 35/10321** (2013.01); **F02M 35/10354** (2013.01); **F02M 35/112** (2013.01)

Citation (applicant)
• JP 2003139001 A 20030514 - PORSCHE AG
• JP 2007169867 A 20070705 - HIRAMATSU SANGYO KK, et al

Cited by
FR2941272A1; DE102017012012A1; DE102017130661A1; CN110005554A; US11434855B2; US11578687B1

Designated contracting state (EPC)
DE FR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2009272 A2 20081231; **EP 2009272 A3 20090805**; **EP 2009272 B1 20100804**; DE 602008002018 D1 20100916;
JP 2009008004 A 20090115; JP 4960775 B2 20120627

DOCDB simple family (application)
EP 08009736 A 20080528; DE 602008002018 T 20080528; JP 2007169867 A 20070628