

Title (en)
EXHAUST MANIFOLD

Publication
EP 0192995 B1 19890301 (DE)

Application
EP 86101304 A 19860131

Priority
DE 3506183 A 19850222

Abstract (en)
[origin: EP0192995A1] 1. Exhaust manifold for a least four cylinder combustion engines with internal combustion comprising outlet pipes (1 to 6) each associated with one cylinder which are brought together groupwise into associated further exhaust pipes (7, 8), which in turn open into a common exhaust pipe (9) leading to an exhaust silencer (10 to 12), wherein all outlet pipes (1 to 6) and likewise the further exhaust pipes (7, 8) respectively each have the same length, characterized in that the total cross-sectional area of the outlet pipes (1 to 6) is larger than the total cross-sectional area of the further exhaust pipes (7, 8), the total cross-sectional area of which is in turn larger than that of the common exhaust pipe (9) ; and in that the outlet pipes (1 to 6) are brought together with nozzle-like narrowed openings into the further exhaust pipes (7, 8) which in turn open with nozzle-like narrowed openings into the common exhaust pipe (9).

IPC 1-7
F01N 7/08; **F01N 3/20**

IPC 8 full level
F01N 3/20 (2006.01); **F01N 13/00** (2010.01); **F01N 13/08** (2010.01)

CPC (source: EP)
F01N 13/00 (2013.01); **F01N 13/08** (2013.01)

Cited by
EP0733788A3; EP0355729A1; DE4218834A1; DE4228372A1; WO9854446A1; DE112016005393B4; EP0759120B1

Designated contracting state (EPC)
AT CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0192995 A1 19860903; **EP 0192995 B1 19890301**; AT E41041 T1 19890315; DE 3506183 A1 19860828; DE 3662213 D1 19890406

DOCDB simple family (application)
EP 86101304 A 19860131; AT 86101304 T 19860131; DE 3506183 A 19850222; DE 3662213 T 19860131