Title (en)

INTAKE SILENCER FOR MOTOR VEHICLE

Title (de)

ANSAUGSCHALLDÄMPFER UND KRAFTFAHRZEUG

Title (fr)

SILENCIEUX D'ASPIRATION POUR MOTEUR A COMBUSTION INTERNE

Publication

EP 0834011 B1 20000531 (DE)

Application

EP 97920737 A 19970422

Priority

- DE 19615917 A 19960422
- EP 9702038 W 19970422

Abstract (en)

[origin: DE19615917A1] An intake silencer is designed as a broadband silencer for noises caused by intake of combustion air into internal combustion engines. To achieve the broadband effect, an axial sequence of resonator chambers (9) with different volumes is formed by partitions which extend transversely to the intake pipe in a resonator that surrounds the intake pipe (2). Each resonator chamber (9) communicates through openings (7) in the wall of the intake pipe with the air sucked through the intake pipe (2). By matching the open surface area of the openings (7), the thickness of the wall of the intake pipe (2) in the area of the openings and the volume of the resonator chambers (9), a continuous broadband silencing may be set even over a wide frequency range, the range of practical interest in the present application extending combustion from to 1 to 10 kHz. In motor vehicles with an internal combustion engine, a supercharger and an air charge cooler, the intake silencer is advantageously arranged in the pressure pipe joint of the supercharger, directly behind it or integrated therein, but in any case at a certain distance upstream of the air charge cooler.

IPC 1-7

F02M 35/12

IPC 8 full level

F02M 35/12 (2006.01)

CPC (source: EP US)

F02M 35/1216 (2013.01 - EP US); **F02M 35/1266** (2013.01 - EP US)

Citation (examination)

- DE 4219249 A1 19931216 - KUEHNLE KOPP KAUSCH AG [DE]
- WO 9700286 A1 19970103 - EXXON CHEMICAL PATENTS INC [US]
- JP H0861173 A 19960305 - TOYODA GOSEI KK

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DE102013220686A1; WO02101227A1; DE202014007986U1; EP2161424A1; US6983820B2; US6802388B2

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DE ES FR

DOCDB simple family (publication)

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