Title (en)

Actively controlled induction noise using a quadrapole inlet

Title (de)

Aktiv gesteuertes Einlasslärm mir Quadripole-Einlassvorrichtung

Title (fr)

Bruit d'admission contrôlé activement utilisant une admission quadripôle

Publication

EP 1085199 A2 20010321 (EN)

Application

EP 00119167 A 20000905

Priority

US 15372199 P 19990914

Abstract (en)

An active noise attenuation assembly for an air induction system of an internal combustion engine is located in an air inlet duct leading to the engine. A fairing body is concentrically mounted within the duct and defines an annular space with the duct through which air travels. A loud speaker is mounted on the fairing body facing outwardly from the duct. A controller generates an electrical signal amplified and phase shifted from a noise field emanating from the engine. The signal is applied to the loudspeaker for broadcasting a sound field phase shifted from the noise field for attenuating the noise field. A transition housing having an outlet opening and an inlet opening forms a first pair of opposing channels and a second pair of opposing channels. The housing mates to the open end of the inlet duct. The first pair of opposing channels communicates with the speaker and the second pair of opposing channels communicates with the annular space. <IMAGE>

IPC 1-7

F02M 35/12

IPC 8 full level

F02M 35/12 (2006.01); F02B 27/00 (2006.01)

CPC (source: EP)

F02M 35/125 (2013.01); F02B 27/001 (2013.01)

Cited by

DE10226205B4

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1085199 A2 20010321; **EP 1085199 A3 20011107**; **EP 1085199 B1 20030312**; DE 60001610 D1 20030417; DE 60001610 T2 20031106

DOCDB simple family (application)

EP 00119167 A 20000905; DE 60001610 T 20000905