

Title (en)
Actively controlled induction noise using a multipole inlet

Title (de)
Aktiv gesteuerter Einlasslärm mit Multipole-Einlassvorrichtung

Title (fr)
Bruit d'admission contrôlé activement utilisant une admission multipôle

Publication
EP 1085198 A2 20010321 (EN)

Application
EP 00119166 A 20000905

Priority
US 15372299 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 loudspeaker 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 forms a first plurality of channels and a second plurality of channels. The housing mates to the outlet opening of the inlet duct. The first plurality of channels communicates with the loudspeaker and the second plurality of channels communicates with the annular space. The channels terminate at an end opposite the duct in a checkered pattern. <IMAGE>

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F02M 35/12

IPC 8 full level
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CPC (source: EP)
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