

Title (en)
ACTIVE VIBRATION CONTROL

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Application
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Abstract (en)
[origin: WO8802912A1] To reduce noise inside a motor car passenger compartment, two loudspeakers (371, 372) are driven by signals derived from a reference signal $x(n)$ by adaptive filtering carried out by a programmed microprocessor and memory unit (36) which adapts the filtering in dependence on error signals $e(n)$ from four microphones (421, 422, 423 and 424) distributed in the passenger compartment. Reference filtering coefficients are initially determined by analysis of finite impulse responses when white noise is acoustically coupled from the loudspeakers (37) to the microphones (42), a white noise generator (48) being coupled to the unit (36). The reference signal $x(n)$ is restricted to one or more selected harmonics or subharmonics of the fundamental noise frequency by a filter (34) which tracks the selected frequency. The selected frequency may be obtained from a coil (31) in the ignition circuit of the vehicle.

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IPC 8 full level
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Citation (examination)
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