

Title (en)

Arrangement for active silencing

Title (de)

Anordnung zur aktiven Schalldämpfung

Title (fr)

Arrangement d'atténuation active de son

Publication

EP 0657630 B1 19961002 (DE)

Application

EP 94118621 A 19941126

Priority

DE 4342133 A 19931210

Abstract (en)

[origin: EP0657630A1] According to the prior art, it is known to damp noise emissions by means of "antisound". In exhaust gas systems of internal combustion engines this is mostly implemented by subjecting the exhaust gas stream flowing past in the exhaust gas system with "antisound" emitted by loudspeakers (12). However, arrangements of this type have the disadvantage that the hot exhaust gases flowing past reduce the lifetime of the loudspeakers, or measures of this type for active silencing operate only inadequately. According to the invention, an arrangement is therefore described which avoids the disadvantages arising from the prior art. According to the invention, this is realised in that the exhaust gas pipe (10) opens into one of the two chambers of a double-chamber box (17) and a bass reflex pipe (21) projects into this chamber of the double-chamber box (17). The outstanding cancellation of sound at low loudspeaker power is effected by the cancellation of sound being carried out in the chamber of the box (17) into which the ends of the bass reflex pipe (21) and of the exhaust gas pipe (10) open, and by the beam axis S intersecting the centre line M at a distance A between the two pipes (10, 21) or in the pipe (21), and the length of separation L between partition (18) and centre line M being a maximum of 75% of the greatest diametral extent of the loudspeaker (12). <IMAGE>

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IPC 8 full level

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