

Title (en)

A METHOD FOR REDUCING NOISE OF A HIGH POWER COMBUSTION ENGINE

Title (de)

VERFAHREN ZUR REDUZIERUNG VON LÄRM EINES HOCHLEISTUNGS-VERBRENNUNGSMOTORS

Title (fr)

PROCEDE PERMETTANT DE REDUIRE LE BRUIT D'UN MOTEUR A COMBUSTION DE GRANDE PUISSANCE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2005064127A1] A sound reduction system for reducing noise from a high power combustion engine is supplied by means of a method. The sound reduction system comprises a plurality of elements and attenuating devices placed in an elongated channel. During design of the sound reduction system one makes use of a particular suitable attenuating element with a first reactive part, a second reactive part and a third reactive part. Such a module, which is less sensitive to position in the channel, cost effective to manufacture and cost effective to model, is combined with single attenuating devices. The method enables a user to meet the requirements on sound reduction and keeping construction costs down, by using an iterative step-by-step approach. Such an approach is unknown according to traditional methods. An advantage of the method is that it enables an accurate acoustic model of the complete exhaust system, not only in the low frequency area and in the upper frequency area, but also in the intermediate frequency area. The method provides efficient modeling of an exhaust system and enables that a desired noise level close to the outlet of the exhaust system is met.

IPC 8 full level

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