

Title (en)

ACOUSTIC POWER TRANSMITTING UNIT FOR THERMOACOUSTIC SYSTEMS

Title (de)

SCHALLLEISTUNGSÜBERTRAGUNGSEINHEIT FÜR THERMOAKUSTISCHE SYSTEME

Title (fr)

UNITE DE TRANSMISSION DE PUISSANCE ACOUSTIQUE POUR SYSTEMES THERMOACOUSTIQUES

Publication

EP 1745206 B1 20100818 (FR)

Application

EP 05759766 A 20050503

Priority

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- FR 0404773 A 20040504

Abstract (en)

[origin: US8640467B2] An acoustic power transmitting unit for thermoacoustic systems includes at least one stage provided with at least two thermoacoustic units each of which includes a regenerator or a stack and two heat exchangers, an acoustic resonator including a tube and containing a fluid and in which a magnetic field having high impedance and low-impedance areas is arranged, wherein certain thermoacoustic units are placed in high dimensionless impedance areas. Each high dimensionless impedance area also includes a thermoacoustic unit, wherein two successive thermoacoustic units are always separated by low dimensionless impedance. The resonator includes a reduced diameter section between each couple of successive thermoacoustic units and each cross-sectional narrowing is associated with at least one by-pass which includes a deviation cavity and makes it possible to deviate the major part of a volume flow rate.

IPC 8 full level

F02G 1/043 (2006.01); **F25B 9/14** (2006.01)

CPC (source: EP US)

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