

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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