

Title (en)
PULSATING COOLING SYSTEM

Title (de)
PULSIERENDES KÜHLUNGSSYSTEM

Title (fr)
SYSTÈME DE REFROIDISSEMENT À AIR PULSÉ

Publication
EP 2089902 A1 20090819 (EN)

Application
EP 07849261 A 20071127

Priority
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Abstract (en)
[origin: WO2008065602A1] A cooling device comprising at least one transducer (1) having a membrane adapted to generate pressure waves at a working frequency, characterized by a first and a second cavity (3, 4), said transducer being arranged between said first and second cavities, such that said membrane forms an fluid tight seal between said cavities, each cavity having at least one opening (7, 8) adapted to emit a pulsating net output fluid flow, wherein said cavities and openings are formed such that, at said working frequency, a first harmonic fluid flow emitted by said opening(s) (7) of a first one of said cavities is in anti-phase with a second harmonic fluid flow emitted by said opening(s) (8) of a second one of said cavities, so that a sum of harmonic fluid flow from said openings is essentially zero. With this design, sound reproduction at the working frequency is largely cancelled due to the counter phase of the outlets resulting in a close to zero far-field volume velocity.

IPC 8 full level
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CPC (source: EP KR US)
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Citation (search report)
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