

Title (en)  
REFLECTIVE ACOUSTIC METAMATERIAL

Title (de)  
AKUSTISCHES REFLEKTIERENDES METAMATERIAL

Title (fr)  
MÉTAMATÉRIAU ACOUSTIQUE RÉFLECTEUR

Publication  
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Application  
**EP 16819152 A 20161202**

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Abstract (en)  
[origin: WO2017093690A1] The invention relates to an elementary cell (1) of acoustic metamaterial comprising: a body made of solid material (2); at least one Fabry-Pérot cavity (3) in said body (2); and at least one lateral resonant cavity (4) communicating with said Fabry-Pérot cavity (3); wherein: the Fabry-Pérot cavity (3) is a channel passing through said body (2); the lateral resonant cavity (4) is a Helmholtz acoustic resonator, and the Helmholtz resonator is a cylindrical cavity (4) concentric with the through-channel (3) and communicating with said channel (3) via a neck (5). The invention also relates to an acoustic baffle comprising at least one basic cell, said Fabry-Pérot cell (3) is a channel passing through said body (2), the Helmholtz resonator being a cylindrical cavity (4) concentric with the through-channel (3) and communicating with said channel (3) via a neck (5).

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