

Title (en)  
COMPONENT THAT ABSORBS AIRBORNE SOUND

Title (de)  
LUFTSCHALLABSORBIERENDES BAUTEIL

Title (fr)  
COMPOSANT ABSORBANT LES BRUITS AERIENS

Publication  
**EP 1697923 B1 20071212 (DE)**

Application  
**EP 04790706 A 20041021**

Priority  
• EP 2004011899 W 20041021  
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Abstract (en)  
[origin: US2006169531A1] The invention relates to an airborne-sound absorbing component, in particular for motor vehicles, comprising a resonance absorber ( 1 ) with a plurality of differently sized hollow chambers ( 2 ) spaced apart from each other, and comprising a porous sound-absorbing layer ( 8 ) made of an air-permeable material, which layer faces the incoming sound, wherein in each instance the hollow chambers comprise a wall section ( 5 ) which faces the incoming sound. The wall sections ( 5 ), which face the incoming sound and which are able to oscillate, are closed off so as to be airtight, wherein the resonance absorber ( 1 ) comprises one or several spacers ( 10 ) such that at least the majority of the wall sections ( 5 ) of the hollow chambers ( 2 ), which wall sections face the incoming sound, do not establish contact with the porous layer ( 8 ) and are able to oscillate independently of said porous layer ( 8 ). As a result of these features improved sound absorption capability across a broad frequency range is achieved.

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