

Title (en)  
Acoustic structural elements

Title (de)  
Tragende Schalldämmelemente

Title (fr)  
Éléments porteurs insonorisants

Publication  
**EP 1031671 A3 20021113 (EN)**

Application  
**EP 99305582 A 19990714**

Priority  
GB 9904253 A 19990224

Abstract (en)  
[origin: EP1031671A2] An acoustic structural element such as a block for use in constructing an acoustic structure such as a party wall. In preferred embodiments, the element contains at least two acoustic chambers that each communicate with the exterior of the element through at least one respective orifice positioned to be exposed in use to impinging sound. In the embodiments, the element has first and second opposed sides each of which contains at least one of said orifices. The respective chambers are tuned to resonate at substantially different frequencies of impinging sound by being of substantially different volumes, and are defined by walls that are integral with the element. The elements include integral spacer means for maintaining a cavity between the element and a cover sheet defining the cavity. The cavity communicates with the orifices of the elements. In some embodiments, end faces of the elements are shaped to fit one another in a manner that imposes a sequence upon the elements within a course, thus creating a desired mix of elements in an acoustic structure. <IMAGE>

IPC 1-7  
**E04B 1/84**; **E01F 8/00**; **E04B 2/18**

IPC 8 full level  
**E01F 8/00** (2006.01); **E04B 1/84** (2006.01); **E04B 2/04** (2006.01); **E04B 2/14** (2006.01)

CPC (source: EP)  
**E01F 8/0076** (2013.01); **E04B 1/8404** (2013.01); **E04B 2/04** (2013.01); **E04B 2/14** (2013.01); **E04B 2001/8485** (2013.01); **E04B 2001/849** (2013.01)

Citation (search report)  
• [X] US 5226267 A 19930713 - D ANTONIO PETER [US], et al  
• [A] DE 4101125 A1 19920723 - MANTEL JUVAL [DE]  
• [A] US 5551198 A 19960903 - SCHAAF CECIL F [US], et al  
• [A] US 4071989 A 19780207 - WARREN MILLARD R

Cited by  
FR3044812A1; RU2648087C1; RU2641330C1; RU2646256C1; US11081095B2; US8028800B2; US9637913B2; WO2017093693A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 1031671 A2 20000830; EP 1031671 A3 20021113**

DOCDB simple family (application)  
**EP 99305582 A 19990714**