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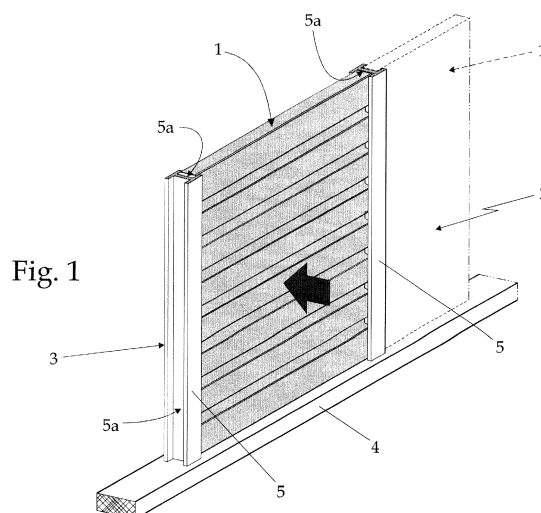
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(54) **Acoustic panel for noise barriers and noise barrier provided with such a panel**

(57) An acoustic panel (1) characterized by comprising: a reverberating plate (6) having, on one of the two faces, a stepped-profile surface (6a) which is dimensioned so as to reflect in a "diffused" manner at least one incident acoustic wave with a predetermined reference frequency; and a layer of sound-absorbent material (7)

which is coupled to the reverberating plate (6) so as to cover the stepped-profile surface (6a), and so as to be crossed in "diffused" manner by the acoustic wave reflected by said stepped-profile surface (6a); the profile of the stepped-profile surface (6a) being determined on the basis of the "Quadratic Residue" mathematical model.





EUROPEAN SEARCH REPORT

 Application Number
 EP 11 19 0856

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	CH 600 078 A5 (UNIBOARD AG) 15 June 1978 (1978-06-15)	1-8,11, 13-16	INV. E01F8/00
Y	* column 2, line 35 - line 41 * * column 3, line 17 - column 4, line 24; figures * * figure 2 *	9,10	
X	CH 652 432 A5 (FRANZI S A OFF) 15 November 1985 (1985-11-15)	1,2,5,7, 13-16	
	* abstract; figures * * see epodoc abstract *		
X	DE 76 28 651 U1 (HEIMSATH) 6 April 1978 (1978-04-06)	1-4,7,8, 13-16	
Y	* the whole document *	9,10	
X	DE 200 04 549 U1 (GROETZ GEORG [DE]) 18 May 2000 (2000-05-18)	1-4,7,8, 12	
Y	* page 3, line 9 - line 26 * * page 5, line 32 - page 6, line 23; figures *	9,10	
X	AT 400 961 B (VOELKL CHRISTIAN [AT]; OTTITZKY VOLKER [AT]) 28 May 1996 (1996-05-28)	1-8, 12-16	E01F G10K E01D
Y	* figure 1 *	9,10	
X	US 3 656 576 A (GUBELA GUNTER) 18 April 1972 (1972-04-18)	1-8, 13-16	
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 February 2014	Examiner Tran, Kim Lien
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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