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(54) **Metal composite sound absorbent structural panel**

(57) A metal composite sound absorbent structural panel, characterized in that said panel has a high flexural thickness and comprises two flat plates coupled by glueing a fret element, made of aluminium, steel or other metals or alloys and comprising a first and second plate elements adapted to be coupled to one another thereby being substantially parallel, through an interposition of a

corrugated coupling element comprising a fretted element; on one or both said plate elements being formed a double hole series: a series of vertical holes and a series of horizontal holes; the hole pattern geometry of one of said plate elements or both said plate elements, independent from one another, being made based on a Hemholtz resonance principle.

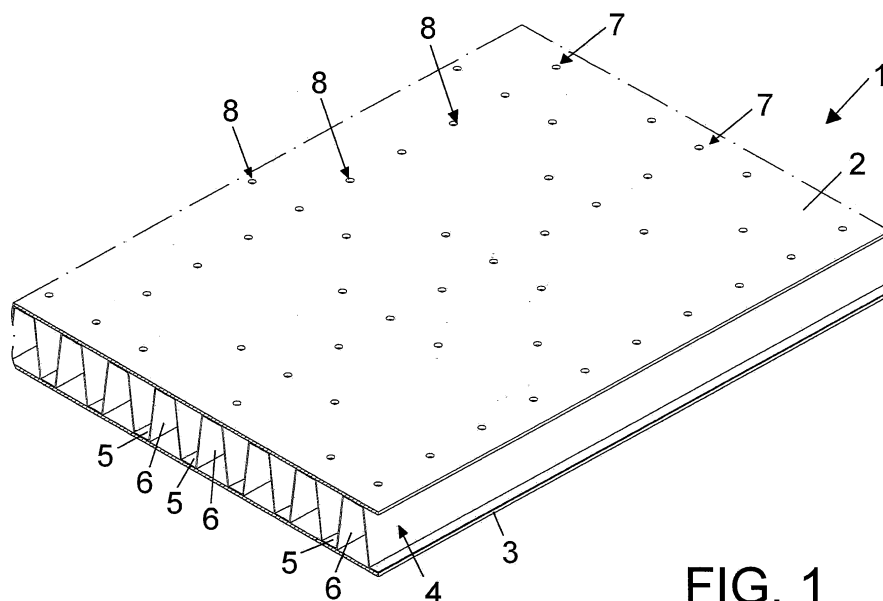


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
EP 11 18 2174

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 August 2014	Examiner Stern, Claudio
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
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