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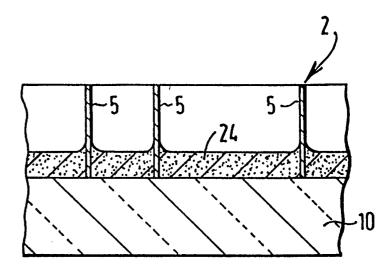
(88) Date of publication of the international search report:

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(54) Title: STRUCTURE COMPRISING HONEYCOMB CORE AND OUTER SKIN AND METHOD FOR ITS FABRICATION

(57) Abstract

A honeycomb core (2) is bonded to a planar outer skin (10) by forming a pool of adhesive (24) on a surface of the outer skin and placing the honeycomb core (2) within the adhesive pool (24). In the resulting structure, a continuous layer of adhesive of substantially uniform depth is formed within the cells (8) of the honeycomb core (2). The depth of the adhesive and the size of the cells may be chosen so that the adhesive provides a lens effect on light passing through. The structures may be used for light, heat or sound transmission/retardation. In particular, a transparent structure can be provided with optical consistency between the cells of the honeycomb core. This can be used to provide large panels of glass, with the honeycomb core increasing the panels' strength and hence



allowing the panels to be made in sizes larger than previously possible and to be used for new applications.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 6 B32B3/12 R32F F24J2/00 E04B1/74 B32B31/12 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 6 B32B B29D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Category ° Citation of document, with indication, where appropriate, of the relevant passages 1-3, 9-12,17, Χ US 4 294 055 A (ANDRESEN DONALD D) 13 October 1981 18, 34-37, 40-43, 49-51, 53-57, 60-64, 67-69 see column 6, line 9 - line 66 see figures Υ 52,65,66 52,65,66 γ DE 41 04 556 A (ETERNIT WERKE HATSCHEK L ; POSCHACHER NATURSTEINWERKE AG (AT)) 12 September 1991 see abstract -/--Patent family members are listed in annex. Χ Further documents are listed in the continuation of box C. Х ° Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the invention *E* earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. "P" document published prior to the international filing date but "&" document member of the same patent family later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the international search 0 7. 04. 98 4 December 1997 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, LANASPEZE J.P.Y.

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		PC1/GB 9//02315		
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT				
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X	US 4 478 662 A (CANELLOS DEMITRIOUS) 23 October 1984 see column 6, line 54 - column 7, line 43	1-3,11, 12,40, 41,43, 53-55,57		
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A	US 4 465 725 A (RIEL FRANK J) 14 August 1984 			

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Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Inter	mational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)
This Inter	mational Searching Authority found multiple inventions in this international application, as follows:
2.	Claims 1-28, 34-69 Claims 29 and 30 Claims 31-33
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-28, 34-69
Remark c	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

Information on patent family members

International Application No PCT/GB 97/02315

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