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[Continued on next page]

(54) **Title:** THERMALLY INSULATING FENESTRATION DEVICES AND METHODS

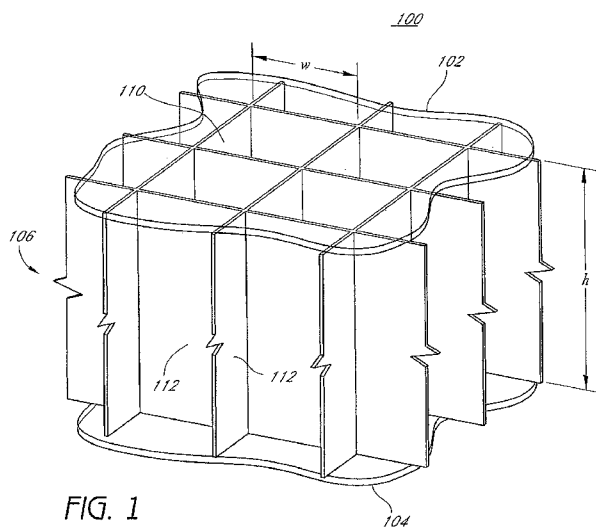


FIG. 1

(57) **Abstract:** Some embodiments provide a fenestration apparatus including at least one glazing pane capable of being installed in an opening of a building envelope and a tessellated structure disposed adjacent to the at least one glazing pane. The tessellated structure can include at least one partition having a first face and a second face. The at least one partition can define a plurality of spatially separated cells within a substantially contiguous region of the opening. Each of the plurality of spatially separated cells can have a cell width and a cell depth. Each of the plurality of spatially separated cells can be at least partially surrounded by the first face of the at least one partition, the second face of the at least one partition, or a combination of the first face and the second face of the at least one partition.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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 ADD.

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)
 E04C E04D E06B F24J

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 41 40 851 A1 (GARTNER & CO J [DE]) 24 June 1993 (1993-06-24)	1-15
Y	column 5, line 52 - column 6, line 14; claims 1-4,7,9-11,16; figures 1-5 -----	16-20
X	DE 40 12 333 C1 (FRAUNHOFER GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG) 20 June 1991 (1991-06-20)	1-15
Y	column 2, line 13 - column 3, line 16; claims 1,2,6,9; figures 2, 4 -----	16-20
A	GB 933 113 A (AFG ETABLISSEMENT [LI]) 8 August 1963 (1963-08-08) page 1, line 56 - page 2, line 10; figures 1-4 -----	1,12

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"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 documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 26 July 2012	Date of mailing of the international search report 02/08/2012
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer <p style="text-align: center; font-weight: bold;">Mysliwetz, Wolfgang</p>
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2011/036138

Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
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