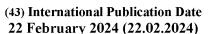
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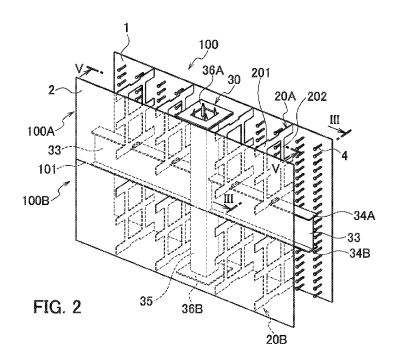
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(54) Title: STEEL PLATE COMPOSITE WALL PANEL STRUCTURES, SUCH AS FOR USE IN NUCLEAR REACTOR BUILDINGS, AND ASSOCIATED SYSTEMS AND METHODS



(57) Abstract: Structures for forming a module, such as a module for use in a nuclear reactor building, and associated systems and methods are described herein. A representative structure can include a first plate, a second plate spaced apart from and positioned parallel to the first plate, and a support assembly positioned between the first and second plates. The support assembly can include a column, a first beam extending from the column parallel to the first and second plates, and a second beam extending from the column parallel to the first and second plates. The panel structure can further include a plurality of spaced apart joint plates extending between and connecting the first and second plates. The joint plates can support the first beam and the second beam. The panel structure can further include a fill material between the first and second plates and surrounding the support assembly and the joint plates.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC - INV. E04B 2/00, E04B 2/56, E04B 2/58, E04B 2/60, E04B 2/84, E04B 2/86 (2023.01)
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched See Search History document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
A .	CN 102,359,204 A (Chongqing Xanest) 22 February 2012 (22.02.2012), entire document, especially fig. 1, 7	1-20		
А	WO 10,013,858 A1 (Lee et al.) 04 February 2010 (04.02.2010), entire document	1-20		
А	US 2008/0083181 A1 (Ospina) 10 April 2008 (10.04.2008), entire document	1-20		
А	US 2019/136521 A1 (Kach Inc.) 09 May 2019 (09.05.2019), entire document	1-20		
<u> </u>				
Further	Further documents are listed in the continuation of Box C. See patent family annex.			

"D" document cited by the applicant in the international application "E" earlier application or patent but published on or after the international filing date		"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	
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"O"	,,		being obvious to a person skilled in the art	
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family	
Date of the actual completion of the international search		Date of mailing of the international search report		
23 October 2023			FEB 05 2024	
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Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450			Kari Rodriquez	
Facsimile No. 571-273-8300		Telephone No. PCT Helpdesk: 571-272-4300		
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Special categories of cited documents:

document defining the general state of the art which is not considered to be of particular relevance

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 23/72410

-*- Classification of Subject Matter -*-					
IPC ADD - E04C 2/00, E04C 2/02, E04C 2/26, E04C 2/28, E04H 9/00, E04H 9/02 (2023.01)					
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