

Title (en)  
A STRUCTURAL MODULE FOR CONSTRUCTION OF BUILDINGS

Title (de)  
BAUMODUL ZUR KONSTRUKTION VON GEBÄUDEN

Title (fr)  
MODULE STRUCTURAL POUR CONSTRUCTION DE BÂTIMENTS

Publication  
**EP 2456928 A2 20120530 (EN)**

Application  
**EP 10739707 A 20100722**

Priority  
• IE 20090575 A 20090723  
• IE 2010000042 W 20100722

Abstract (en)  
[origin: WO2011010300A2] A structural module (1) comprising a structural floor (2), load bearing walls(3, 16), and a structural ceiling (5), arranged to support other structural modules (l) in a multi-storey building. The load-bearing walls comprise a structural frame (4) and lightweight concrete (20) between the frame members. The concrete has a density in the range of 400kg/m<sup>3</sup> and 600kg/m<sup>3</sup>, and is cellular, including air entrainment. The concrete is moulded between the frame members, completely filling voids between the frame members along the plane of the wall, and the structural walls are configured so that when two modules are juxtaposed there is a combined wall comprising a cavity between the structural modules. The structural walls (3) may lined on at least one side by MgO boards (21), the lightweight concrete and the boards providing at least two hours fire resistance. There may be a vertical socket (32) at a corner for engagement with a dowel pin (33) of an upper or lower adjoining module. The module may comprise a tie plate (30) configured to be secured to a plurality of other modules at a corner, the plate (30) comprising a through hole for receiving a dowel pin (33) of an adjoining module.

IPC 8 full level  
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CPC (source: CN EP GB)  
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Citation (search report)  
See references of WO 2011010300A2

Cited by  
WO2019219286A1; US11225789B2; EP4209639A1; US10759697B1; US11008252B2; US11655187B2

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EP 2456928 B8 20151007; GB 201201028 D0 20120307; GB 2485298 A 20120509; GB 2485298 B 20150902; GB 2485298 B8 20150923;  
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