

Title (en)
LOAD-BEARING SPACE LATTICE STRUCTURE, LIGHTWEIGHT CONSTRUCTION ELEMENT, AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
LASTAUFNEHMENDE RAUMGITTERSTRUKTUR, LEICHTBAUELEMENT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
STRUCTURE DE RÉSEAU SPATIAL PORTEUSE DE CHARGE, ÉLÉMENT DE CONSTRUCTION LÉGÈRE ET SON PROCÉDÉ DE FABRICATION

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Application
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Abstract (en)
[origin: WO2008046392A1] The invention relates to a novel load-bearing space lattice structure, lightweight construction elements comprising this lattice, and a method for the production of such lightweight construction elements. The structure is characterized in that it comprises surfaces or edges of octahedral stubs disposed in a space-filling manner. Such structures have an optimal surface-to-volume ratio and can therefore be implemented with minimal material expense. Lightweight construction elements comprising such structures, for example, as a sandwich core, are superior to conventional elements having honeycomb cores in terms of stability. In order to produce such structures, it is proposed to assemble them from molded parts, which are implemented by the surfaces of octahedral stubs cut in half in a space-filling arrangement.

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