

Title (en)
Lightweight construction structure

Title (de)
Leichtbaustruktur

Title (fr)
Structure de construction légère

Publication
EP 2716828 A1 20140409 (DE)

Application
EP 12006857 A 20121002

Priority
EP 12006857 A 20121002

Abstract (en)
The structure (11) has a structure unit (12) comprising a circular beam (16) with star-shaped, radially outwardly-running supporting rods (13) that are connected with one another in a steady manner such that a framework is formed, where the rods run in an axial direction. The rods are connected to supporting structures that are designed as supporting polygons or supporting triangles. The rods comprise upper and lower covering plates, where the structure unit is designed with hexagonal outer contour. Spherical nodes are formed at connection points between the rods.

Abstract (de)
Die Erfindung betrifft eine Leichtbaustruktur (11), mit wenigstens einer Struktureinheit (12), die aus mehreren miteinander zu einem Fachwerk verbundenen Stützstäben (13) aufgebaut ist, wobei die Stützstäbe (13) stetig miteinander verbunden sind.

IPC 8 full level
E04B 1/19 (2006.01); **E04C 1/00** (2006.01); **E04C 2/34** (2006.01)

CPC (source: EP)
E04B 1/19 (2013.01); **E04B 1/1906** (2013.01); **E04B 2001/1978** (2013.01); **E04C 2002/3488** (2013.01)

Citation (search report)

- [X] DE 10163759 C1 20030522 - ECKERLE EBERHARD [DE]
- [XA] US 5623790 A 19970429 - LALVANI HARESH [US]
- [X] US 3417533 A 19681224 - JACK SPARLING
- [X] US 2008078138 A1 20080403 - BAKER CHRISTOPHER [US]
- [X] US 6931812 B1 20050823 - LIPSCOMB STEPHEN LEON [US]
- [X] WO 9615333 A1 19960523 - OWENS CHARLES R [US]
- [X] WO 9316259 A1 19930819 - ASSMANN ALLO [DE], et al

Cited by
EP3808907A4; WO2021140339A1; WO2017152238A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2716828 A1 20140409; EP 2716828 B1 20170823

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EP 12006857 A 20121002