

Title (en)  
FOLDABLE LATTICE STRUCTURE, ESPECIALLY FOR A SOLAR TRACKER

Title (de)  
FALTBARE GITTERSTRUKTUR, INSBESONDERE FÜR EINEN SONNENFOLGER

Title (fr)  
STRUCTURE EN TREILLIS PLIABLE, NOTAMMENT POUR SUIVEUR SOLAIRE

Publication  
**EP 3999788 A1 20220525 (FR)**

Application  
**EP 20742346 A 20200616**

Priority  
• FR 1907918 A 20190715  
• FR 2020051032 W 20200616

Abstract (en)  
[origin: WO2021009424A1] The invention relates to a lattice structure comprising a plurality of longitudinal members extending parallel to one another along a main direction of extension and crossmembers (9) distributed along the main direction of extension for mechanically connecting the longitudinal members in pairs so as to form a plurality of polygons (11) each contained in a plane perpendicular to the main direction of extension. According to the invention, each crossmember (9) connecting two longitudinal members comprises a first half-crossmember (9a) with a first end connected to one of the two longitudinal members so as to be able to pivot about a first axis (X1-X'1) and a second half-crossmember (9b) with a first end connected to the other of the two longitudinal members so as to be able to pivot about a second axis (X2-X'2). The two half-crossmembers are connected to one another by an articulating hinge (13) allowing relative rotation of the two half-crossmembers (9a, 9b) about a third axis (X3-X'3). The first, second and third axes are parallel to one another and orthogonal to the main direction of extension, allowing the lattice structure and each crossmember (9) to move from an extended position to a folded position in which the first and second half-crossmembers (9a, 9b) of each crossmember (9) extend substantially parallel next to one another along said main direction of extension.

IPC 8 full level  
**F24S 25/13** (2018.01); **E04C 3/04** (2006.01); **F24S 25/70** (2018.01); **F24S 30/425** (2018.01)

CPC (source: EP US)  
**E04B 1/343** (2013.01 - US); **E04C 3/04** (2013.01 - EP); **E04C 3/08** (2013.01 - US); **F24S 25/13** (2018.04 - EP); **F24S 25/70** (2018.04 - EP); **F24S 30/40** (2018.04 - US); **F24S 30/425** (2018.04 - EP); **H02S 20/32** (2014.12 - US); **E04C 2003/0469** (2013.01 - US); **E04C 2003/0491** (2013.01 - EP US); **E04C 2003/0495** (2013.01 - EP); **F24S 2025/012** (2018.04 - EP); **Y02E 10/47** (2013.01 - EP)

Citation (search report)  
See references of WO 2021009424A1

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)  
**FR 3098889 A1 20210122**; **FR 3098889 B1 20230210**; EP 3999788 A1 20220525; US 2022259862 A1 20220818; WO 2021009424 A1 20210121

DOCDB simple family (application)  
**FR 1907918 A 20190715**; EP 20742346 A 20200616; FR 2020051032 W 20200616; US 202017625669 A 20200616