

Title (en)
SEMI-CYLINDRICAL FLEXIBLE JOINT FOR GEODOME STRUCTURES

Title (de)
BIEGSAME HALBZYLINDRISCHE VERBINDUNG FÜR GEODÄTISCHE KUPPELSTRUKTUR

Title (fr)
JOINT SEMI-CYLINDRIQUE FLEXIBLE POUR DÔME GÉODÉSIQUE

Publication
EP 2942445 A1 20151111 (EN)

Application
EP 15464005 A 20150408

Priority
RO 201400340 A 20140505

Abstract (en)
The invention refers to a geometrical profile and to a flexible assembling method for the module-elements of a geodome construction. The semi-cylindrical flexible joint between two module-elements of a geodome, according to the invention, consists of the processing, on the entire length of the joint, of a convex semi-cylindrical T profile, respectively of a concave M profile, in such a way that the convex profile of the side of a module should assemble with the pair concave profile of the adjacent module. Thus, a self-supporting construction can be created, without the necessary inner beams or additional strengthening veins. In the pre-assembling phase, the sides of the assembling-fastening elements in contact are fastened in an intermediate position so that after the installation of all modules, these should auto-position themselves on the sphere of radius R as a result of the natural tendency of the minimum effort, retrieving and equally redistributing the execution inaccuracies to all modules; then, all connections will stiffen at the final fastening of the elements. In this way, a self-supporting construction is built, without the necessary inner beams or additional strengthening veins.

IPC 8 full level
E04B 1/32 (2006.01)

CPC (source: EP)
E04B 1/3211 (2013.01); **E04B 2001/3276** (2013.01); **E04B 2001/3294** (2013.01)

Citation (applicant)
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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 2942445 A1 20151111; RO 129881 A0 20141128

DOCDB simple family (application)
EP 15464005 A 20150408; RO 201400340 A 20140505