

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
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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.

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Citation (applicant)
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