

Title (en)

STRUCTURAL MEMBER USED FOR RAINWATER STORAGE LAMINATED STRUCTURE

Title (de)

BAUTEIL FÜR SCHICHTSTRUKTUR EINES REGENWASSERSPEICHERS

Title (fr)

ÉLÉMENT STRUCTUREL UTILISÉ POUR UNE STRUCTURE STRATIFIÉE DE STOCKAGE D'EAU DE PLUIE

Publication

EP 2896755 A4 20160629 (EN)

Application

EP 13771903 A 20130401

Priority

- JP 2012086822 A 20120405
- JP 2013059991 W 20130401

Abstract (en)

[origin: EP2896755A1] A structural member for building a rainwater storage stack structure by being stacked up vertically in alternating orthogonal directions inside a water storage tank provided underground is provided, which enables precise and stable stacking, and formation of a rainwater storage stack structure with a small number of stacking and with a larger capacity for rainwater. The structural member 1 has hollow rectangular frusta 2 arranged front and back and right and left and coupled at lower ends thereof with a bottom plate part 3a of a constant width, each frustum having a rectangular top wall 2a and slanted peripheral wall plates 2b extending from four side edges of the top wall 2a. Protrusions 4 and 4 are protruded at both ends of the top walls 2a, so that the lower ends of the slanted walls on both sides of the rectangular frusta 2 of upper structural members 1 are supported on the top walls 2a of the lower structural members 1. The lower ends engage with the opposite inner faces at the lower ends of the protrusions 4 and 4 so as to support load from above. The bottom plate parts 3a are provided with engaging recesses 5 that are placed over the protrusions 4 and 4 of the structural members 1 arranged below to prevent unwanted forward, backward, leftward, or rightward displacement of the structural members 1.

IPC 8 full level

E03B 3/03 (2006.01); **E03B 11/14** (2006.01); **E03F 1/00** (2006.01)

CPC (source: EP)

E03F 1/002 (2013.01)

Citation (search report)

- [I] JP 2001040719 A 20010213 - MITSUBOSHI BELTING LTD
- [ID] JP 2009024447 A 20090205 - SEKISUI PLASTICS, et al
- [I] WO 2011037002 A1 20110331 - SEKISUI PLASTICS [JP], et al
- [A] JP 2009114784 A 20090528 - SEKISUI PLASTICS
- See references of WO 2013151020A1

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

DOCDB simple family (publication)

EP 2896755 A1 20150722; EP 2896755 A4 20160629; AU 2013244451 A1 20141120; AU 2013244451 A2 20141204; AU 2013244451 B2 20170427; CN 104220679 A 20141217; CN 104220679 B 20160203; JP 5392940 B1 20140122; JP WO2013151020 A1 20151217; KR 102044178 B1 20191113; KR 20150053875 A 20150519; WO 2013151020 A1 20131010

DOCDB simple family (application)

EP 13771903 A 20130401; AU 2013244451 A 20130401; CN 201380017583 A 20130401; JP 2013059991 W 20130401; JP 2013528874 A 20130401; KR 20147030685 A 20130401