

Title (en)
PNEUMATIC SUPPORT STRUCTURE

Title (de)
PNEUMATISCHE TRAGSTRUKTUR

Title (fr)
STRUCTURE PORTEUSE PNEUMATIQUE

Publication
EP 2047047 A1 20090415 (DE)

Application
EP 07720133 A 20070511

Priority
• CH 2007000236 W 20070511
• CH 10132006 A 20060623

Abstract (en)
[origin: WO2007147270A1] Disclosed is a support structure comprising a tension-compression element (1) which is composed of tension-compression bars (2) that are connected in real joints (3) as well as tension straps (4) that extend from one joint (3) to another (3). The outermost tension-compression bars (2) are connected in one respective knot (9). Two pressurized hollow members that are surrounded by a cover (6) are arranged on both sides of a plane that extends through the tension-compression element (1) such that the linear tensions s generated in the cover (6) preload the tension straps (4) on the plane of the tension-compression element (1), secure the tension-compression bars (2) against bending, and stabilize the joints (3). The linear tensioning components that extend perpendicular to said plane of symmetry strut the tension-compression element (1) against lateral bending. Air-tight, optionally elastic pneumatic elements (7) can be inserted into the hollow members (5).

IPC 8 full level
E04H 15/20 (2006.01); **E04C 3/00** (2006.01)

CPC (source: EP US)
E04C 3/005 (2013.01 - EP US); **E04H 15/20** (2013.01 - EP US); **E04H 2015/204** (2013.01 - EP US)

Citation (search report)
See references of WO 2007147270A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
WO 2007147270 A1 20071227; **WO 2007147270 A9 20081127**; CH 705206 B1 20121130; EP 2047047 A1 20090415; US 2010011674 A1 20100121; US 8161687 B2 20120424

DOCDB simple family (application)
CH 2007000236 W 20070511; CH 10132006 A 20060623; EP 07720133 A 20070511; US 30841607 A 20070511