

Title (en)
PNEUMATIC STRUCTURE

Title (de)
PNEUMATISCHE STRUKTUR

Title (fr)
STRUCTURE PNEUMATIQUE

Publication
EP 1750554 B1 20080319 (DE)

Application
EP 05737519 A 20050519

Priority
• CH 2005000282 W 20050519
• CH 9622004 A 20040604

Abstract (en)
[origin: WO2005117659A1] A pneumatic structure, which enables a good deformability while also meeting high demands with regard to sitting comfort, is comprised, in contrast to single-layer structures like those commonly found in air mattresses and pneumatic seat cushions, of at least three layers (3) in gas-filled tubular cells (2) arranged in a row. The structure (1) is made from a flexible expandable gas-tight membrane (5). This membrane (5) is comprised, for example, of a suitable plastic film. The cells (2) are joined to the adjacent cells (2) over a portion of their periphery whereby forming portions of transversal webs (7) and longitudinal webs (8). Communicating cells (2), which are under the same pressure, form one or more combinations of cells (2) and each have at least one valve (4) that serves to pressurize the individual cell (2) or a combination of cells (2) with a compressed gas. In the first embodiment, four cells (2) meet along a line (6) extending in a longitudinal direction.

IPC 8 full level
A47C 27/08 (2006.01); **A47C 4/54** (2006.01); **A47C 27/10** (2006.01)

CPC (source: EP US)
A47C 4/54 (2013.01 - EP US)

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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005117659 A1 20051215; AT E389341 T1 20080415; DE 502005003341 D1 20080430; EP 1750554 A1 20070214;
EP 1750554 B1 20080319; US 2007256245 A1 20071108

DOCDB simple family (application)
CH 2005000282 W 20050519; AT 05737519 T 20050519; DE 502005003341 T 20050519; EP 05737519 A 20050519; US 62812105 A 20050519