

Title (en)
PNEUMATIC STRUCTURAL ELEMENT

Title (de)
PNEUMATISCHES BAUELEMENT

Title (fr)
ELEMENT CONSTITUTIF PNEUMATIQUE

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Application
EP 01903559 A 20010219

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Abstract (en)
[origin: WO0173245A1] The invention relates to a pneumatic structural element comprised of an essentially cylindrical air-tight hollow body (1) having a radius r_h and length L_h and two caps (5), which is manufactured from a preferably textile material that is flexible but has limited stretchability. The side of the hollow body placed under load is provided with a push rod (2) having a length L_h , which is prevented from laterally buckling on the hollow body (1), and both ends of the hollow body are provided with a knob (3). Inside the knobs (3), at least one pair of traction elements (4) is joined in a non-positive manner to the push rod (2). The traction elements (4) extend in a helicoidal and opposed manner while revolving around the hollow body (1) with a whole number of revolutions, and they intersect one another at points (8), which are located on a surface line (7) of the hollow body (1) opposite the push rod (2). The push rod (2), the surface line (7) and the longitudinal axis A of the hollow body (1) define a plane E in which the exerted loads and forces are located.

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Citation (search report)
See references of WO 0173245A1

Cited by
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