

Title (en)

NODE ELEMENT FOR PNEUMATIC COMPONENTS

Title (de)

KNOTENELEMENT FÜR PNEUMATISCHE BAUELEMENTE

Title (fr)

ELEMENT NODAL DESTINE A DES COMPOSANTS PNEUMATIQUES

Publication

EP 1513997 A1 20050316 (DE)

Application

EP 03760541 A 20030331

Priority

- CH 0300207 W 20030331
- CH 10422002 A 20020619

Abstract (en)

[origin: WO2004001162A1] The invention relates to a node element for a pneumatic component (1) consisting of a casing (2), a compression member (3) and two tractive elements (4), in addition to two swivel joints (5). Each node element is applied to the swivel joints (5) in such a way that an opening (10) accommodates the swivel joint (5). The node elements permit the introduction of tractive and compression forces into the pneumatic component (1) without a moment of flexion, the compression forces being absorbed by the compression member (3) and the tractive forces being absorbed by the tractive cables (4). The node element has holes (12) for fixing the compression member (3) with a screw (15) and holes (11) for receiving the tractive cables (4). The symmetrical arrangement of the holes (11, 12) guarantees that the load forces, in addition to the tractive and compression forces in the node element have a vectorial sum of zero and also that the moments of flexion occur symmetrically in relation to the compression members (3).

IPC 1-7

E04H 15/20

IPC 8 full level

E04H 15/20 (2006.01)

CPC (source: EP US)

E04H 15/20 (2013.01 - EP US); **F16B 2200/503** (2018.07 - EP US); **F16B 2200/506** (2018.07 - EP US); **Y10T 403/342** (2015.01 - EP US); **Y10T 403/347** (2015.01 - EP US)

Citation (search report)

See references of WO 2004001162A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004001162 A1 20031231; AU 2003215481 A1 20040106; CH 705207 B1 20121130; EP 1513997 A1 20050316; US 2006033335 A1 20060216; US 2011209416 A1 20110901; US 7926225 B2 20110419

DOCDB simple family (application)

CH 0300207 W 20030331; AU 2003215481 A 20030331; CH 10422002 A 20020619; EP 03760541 A 20030331; US 201113014574 A 20110126; US 51778705 A 20050725