

Title (en)
Muscle-like actuating device.

Title (de)
Muskelartiges Kraftelement.

Title (fr)
Dispositif d'actionnement sous forme de muscle.

Publication
EP 0677662 A1 19951018 (DE)

Application
EP 95105461 A 19950411

Priority
DE 4412422 A 19940411

Abstract (en)
A force generating element which operates in a similar way to the muscular tissue of the body is made up from a fluidtight inner envelope of elastic material surrounded by an outer sheath which is inelastic in the direction in which it is required to work against a load. By injecting a fluid under pressure eg water or air into the inner envelope the resulting change of shape causes a contraction (delta L) along a central axis which includes the point of application (alpha) of the load. <IMAGE>

Abstract (de)
Das Kraftelement besteht aus einer ersten ballonartigen, durch ein Fluid aufblasbaren inneren Hülle (2) aus elastischem Material und einer diese innere Hülle umgebenden zweiten äußeren Hülle (3) aus einem in Krafrichtung unelastischen Material. Mit der äußeren Hülle sind die Befestigungspunkte (4) verbunden. Beim Aufblasen der inneren Hülle verringert sich der Abstand zwischen den beiden Befestigungspunkten. <IMAGE>

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F15B 15/10; B66F 3/35

IPC 8 full level
B66F 3/35 (2006.01); **F15B 15/10** (2006.01)

CPC (source: EP)
B66F 3/35 (2013.01); **F15B 15/103** (2013.01)

Citation (search report)

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- [X] PATENT ABSTRACTS OF JAPAN vol. 7, no. 177 (M - 233)<1322> 5 August 1983 (1983-08-05)

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