

Title (en)

MULTISTRUCTURAL SHOCK ABSORBING SYSTEM FOR ANATOMICAL CUSHIONING

Title (de)

MULTISTRUKTURELLES STOSSDÄMPFUNGSSYSTEM FÜR ANATOMISCHE POLSTERUNG

Title (fr)

SYSTÈME D'AMORTISSEMENT DES CHOCS À STRUCTURES MULTIPLES POUR REMBOURRAGE ANATOMIQUE

Publication

EP 4077964 A4 20240124 (EN)

Application

EP 20903400 A 20201214

Priority

- US 201916716331 A 20191216
- US 2020064861 W 20201214

Abstract (en)

[origin: WO2021126768A1] A shock absorbing system (128) for force attenuation, impact modification or reduction, employs an envelope (140) having a chamber (145) containing a first working fluid, the envelope deformable in response to the impulse to attenuate impact force. A plurality of resilient supplemental absorber elements (136, 138) dispersed within the chamber. The plurality of resilient supplemental absorber elements are deformable in response to the force to assist in attenuating impact force and provide additional resilient restoring force to return the envelope to a pre-impact shape. In alternative implementations, a unitary cell (128) for energy dissipation employs an envelope (140) having a chamber (145) containing a first working fluid and an inner element (150) contained within the chamber and having an inner chamber (152) containing a second working fluid.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] US 10167922 B2 20190101 - MCDONNELL KEVIN [US]
- [XY] US 6971193 B1 20051206 - POTTER DANIEL R [US], et al
- [Y] US 2017232327 A1 20170817 - KUNTZ CARL [CA]
- See references of WO 2021126768A1

Designated contracting state (EPC)

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WO 2021126768 A1 20210624; **WO 2021126768 A8 20220721**; EP 4077964 A1 20221026; EP 4077964 A4 20240124

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