

Title (en)
DEFORMABLE SUPPORT STRUCTURE

Title (de)
VERFORMBARE STÜTZSTRUKTUR

Title (fr)
STRUCTURE DE SOUTIEN DÉFORMABLE

Publication
EP 3694364 A1 20200819 (EN)

Application
EP 18795722 A 20181012

Priority
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Abstract (en)
[origin: GB2567461A] A support structure for a human or animal body comprises a support layer (14, fig.2) and an array of resilient upstanding members 12 arranged over an area of the support layer. The resilient members are formed such that they resist an applied load by reversibly collapsing in a direction towards the support layer. Each member may resist a load by first being compressed up to a first loading threshold, and then undergoing reversible collapse. Each member may be in the form of a hollow tube. A feature such as a notch or groove may be formed part way along the length of the resilient member in order to promote collapse at that point. The resilient members soften upon repeated collapsing in response to cyclic loading. Each resilient member may collapse independently of other resilient members in the array. A method of customising a user support by repeatedly loading the support structure is also disclosed. The support structure may be used as a mechanical sensor to record a loading profile.

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