

Title (en)
IMPACT ABSORBING STRUCTURE

Title (de)
STOSSDÄMPFENDE STRUKTUR

Title (fr)
STRUCTURE D'ABSORPTION D'IMPACT

Publication
EP 4329552 A1 20240306 (EN)

Application
EP 22721832 A 20220427

Priority
• GB 202106056 A 20210428
• GB 2022051064 W 20220427

Abstract (en)
[origin: GB2606179A] A protective helmet impact absorbing structure comprising at least one elongate tapering member 10 formed unitarily from foam, each member having a base portion (12, fig. 1), a top portion (11, fig. 1) and at least one side portion extending in a tapering manner therebetween; the at least one tapering member is arranged to be located between an inner shell 20 and an outer surface 21 of a helmet. The tapering members may be attached to the inner shell at their base or top portions, or to the outer surface via their base or top portions. The base portion of the tapering members may be the widest part, and preferably comprise a recess in the form of a blind bore. The tapering member may be formed in a frustroconical or pyramidal shape and be formed from memory foam having a slow spring back rate. Spacing between the tapering members may be varied to increase or decrease local resistance to deformation in response to an incident force.

IPC 8 full level
A42B 3/12 (2006.01)

CPC (source: EP GB US)
A42B 3/064 (2013.01 - GB US); **A42B 3/124** (2013.01 - EP)

Citation (search report)
See references of WO 2022229630A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
GB 202106056 D0 20210609; GB 2606179 A 20221102; AR 125463 A1 20230719; CN 117529251 A 20240206; EP 4329552 A1 20240306; US 2024206582 A1 20240627; WO 2022229630 A1 20221103

DOCDB simple family (application)
GB 202106056 A 20210428; AR P220101098 A 20220427; CN 202280043581 A 20220427; EP 22721832 A 20220427; GB 2022051064 W 20220427; US 202218557751 A 20220427