

Title (en)
PROTECTION DEVICE FOR USE IN CLIMBING

Title (de)
SCHUTZVORRICHTUNG ZUM KLETTERN

Title (fr)
DISPOSITIF DE PROTECTION DESTINÉ À ÊTRE UTILISÉ DANS L'ESCALADE

Publication
EP 4223374 A1 20230809 (EN)

Application
EP 23152531 A 20230119

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GB 202201549 A 20220207

Abstract (en)
A protection device for use in climbing of the type known as a "spring-loaded camming device" - abbreviated "SLCD" - is disclosed. The camming device comprises a shaft (10) and a head (14) mounted on the shaft. The head includes a plurality of cam lobes (20) carried on at least one cam axle (16), each cam lobe being capable of rotation about a pivot axis centred on the cam axle, with an increasing lobe angle ω between a retracted position and an expanded position. Each cam lobe has a cam surface (30) that extends about the axis with a working range of contact angles $\omega_{\text{min}} \leq \omega \leq \omega_{\text{max}}$. The cam surface (30) is at a radial distance r from the axis that continually increases with ω . In at least one of the cam lobes (20) the distance r of the cam surface from the axis is a modified logarithmic spiral that has a cam angle α that decreases with an increase in ω ; The head also has biasing means that operate to bias the cam lobes towards the expanded position.

IPC 8 full level
A63B 29/02 (2006.01)

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Citation (applicant)

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