

Title (en)
A RAIL-GUIDED CLIMBING SYSTEM

Title (de)
SCHIENENGEFÜHRTES KLETTERSISTEM

Title (fr)
UN SYSTÈME D'ESCALADE GUIDÉ SUR RAILS

Publication
EP 4267815 B1 20240828 (DE)

Application
EP 21843982 A 20211222

Priority
• DE 102020134812 A 20201223
• EP 2021087273 W 20211222

Abstract (en)
[origin: WO2022136539A1] The invention relates to a climbing shoe device (1) for a rail-guided climbing system (11) which can be used, in particular, as a climbing formwork, a climbing frame, a climbing protective wall, and/or a climbing working platform. The climbing shoe device (1), which can be arranged on a structure in a stationary manner, comprises a shoe main part (2), at least one rail-guiding element (3a, 3b, 3a', 3b') which is coupled to the shoe main part (2) and which is designed such that in a guiding position of the rail-guiding element (3a, 3b, 3a', 3b') relative to the shoe main part (2), a first climbing shoe rail (9, 9a', 9a'') and a second climbing shoe rail (9b, 9b', 9b'') that are connected together by a lifting device (14, 15; 16, 17; 18; 19) and can be moved relative to each other can be directly or indirectly guided by the climbing shoe device (1), and first (10, 101, 102, 10a) and second latching/snapping elements (10', 10'', 10b). Each of the latching/snapping elements is designed such that in a hooked position, which is pivoted outwards and/or extended with respect to the shoe main part (2), opposite one direction, the first climbing shoe rail (9, 9a', 9a'') can be hooked into the climbing shoe device (1) by means of the first latching/snapping element (10, 101, 102, 10a) and the second climbing shoe rail (9b, 9b', 9b'') can be hooked into the climbing shoe device by means of the second latching/snapping element (10', 10'', 10b), and in a cross-over position, which is pivoted inwards and/or retracted with respect to the shoe main part (2), in said direction, the first climbing shoe rail (9, 9a', 9a'') can cross over the first latching/snapping element (10, 101, 102, 10a) and the second climbing shoe rail (9b, 9b', 9b'') can cross over the second latching/snapping element (10, 101, 102, 10'', 10b). Each of the first and second latching/snapping elements (10, 101, 102, 10a, 10', 10'', 10b) is coupled to the shoe main part (2) so as to be movable between the hooked position and the cross-over position such that when the first (10, 101, 102, 10a) or second latching/snapping element (10', 10'', 10b) is located in the hooked position, the other of the first and second latching/snapping elements (10, 101, 102, 10a, 10', 10'', 10b) is located in the cross-over position, the hooked position, or a position therebetween.

IPC 8 full level
E04G 11/28 (2006.01); **E04G 21/32** (2006.01)

CPC (source: EP KR US)
E04G 3/28 (2013.01 - US); **E04G 11/28** (2013.01 - EP KR US); **E04G 21/3247** (2013.01 - EP KR); **E04G 2003/286** (2013.01 - EP US)

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

DOCDB simple family (publication)
WO 2022136539 A1 20220630; AU 2021405639 A1 20230629; AU 2021405639 A9 20240711; CA 3205424 A1 20220630; CN 116685751 A 20230901; DE 102020134812 A1 20220623; EP 4267815 A1 20231101; EP 4267815 B1 20240828; KR 20230118892 A 20230814; US 2024084608 A1 20240314

DOCDB simple family (application)
EP 2021087273 W 20211222; AU 2021405639 A 20211222; CA 3205424 A 20211222; CN 202180087152 A 20211222; DE 102020134812 A 20201223; EP 21843982 A 20211222; KR 20237022630 A 20211222; US 202118259107 A 20211222