Title (en)

IMPROVED EXOSKELETON DEVICE FOR ASSISTING VERTICAL FORCES

Title (de

VERBESSERTE EXOSKELETTVORRICHTUNG ZUR UNTERSTÜTZUNG VERTIKALER KRÄFTE

Title (fr)

EXOSQUELETTE AMELIORE POUR ASSISTANCE AUX EFFORTS VERTICAUX

Publication

EP 4153385 A1 20230329 (FR)

Application

EP 21727138 A 20210519

Priority

- FR 2005402 A 20200521
- EP 2021063395 W 20210519

Abstract (en)

[origin: WO2021234061A1] The invention relates to an exoskeleton device (1) and a method for using an exoskeleton comprising an axial back frame (2) which is removably attachable to the shoulders (3) of an operator (4) and is provided with an actuator (6) for vertically pulling a cable (9) for connecting and differentially tensioning two lateral pieces of equipment (10, 11) which are symmetrical with respect to the back frame (2) and each respectively provided with means (12) for removably attaching the device to the thighs (13) of the operator. The back frame (2) and the lateral pieces of equipment (10, 11) are interconnected by a connecting belt (17) arranged to be kept completely separate from the lumbar region of the user and comprise means (19) for deflecting by rollers the tensile force of the cable between a system of rollers (21) rigidly connected to the back frame (2) and the lateral pieces of equipment for transmitting the differential tension via the cable to the lateral pieces of equipment to ensure a balanced pull or release movement on the thighs of the user via the means (12) for attaching the device to the thighs.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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