

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
15 May 2025 (15.05.2025)



(10) International Publication Number
WO 2025/101113 A1

(51) International Patent Classification:
A61G 7/10 (2006.01)

(21) International Application Number:
PCT/SE2024/050956

(22) International Filing Date:
07 November 2024 (07.11.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2330498-3 07 November 2023 (07.11.2023) SE

(71) Applicant: **ARJO IP HOLDING AKTIEBOLAG**
[SE/SE]; Hans Michelsensgatan 10, 211 20 Malmö (SE).

(72) Inventors: **BRULOTTE, Denis-Alexandre**; c/o ArjoHuntleigh Magog Inc, 2001 Rue Tanguay, Magog, Québec J1X 5Y5 (CA). **GIRARD, Alexandre**; c/o ArjoHuntleigh Magog Inc, 2001 Rue Tanguay, Magog, Québec J1X 5Y5

(CA). **LALONDE, Ian Emanuel**; c/o ArjoHuntleigh Magog Inc, 2001 Rue Tanguay, Magog, Québec J1X 5Y5 (CA). **DENIS, Jeff**; c/o ArjoHuntleigh Magog Inc, 2001 Rue Tanguay, Magog, Québec J1X 5Y5 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,

(54) Title: A LIFTING MODULE FOR A PATIENT LIFTING SYSTEM WITH HIGH FORCE AND HIGH-SPEED CAPABILITIES

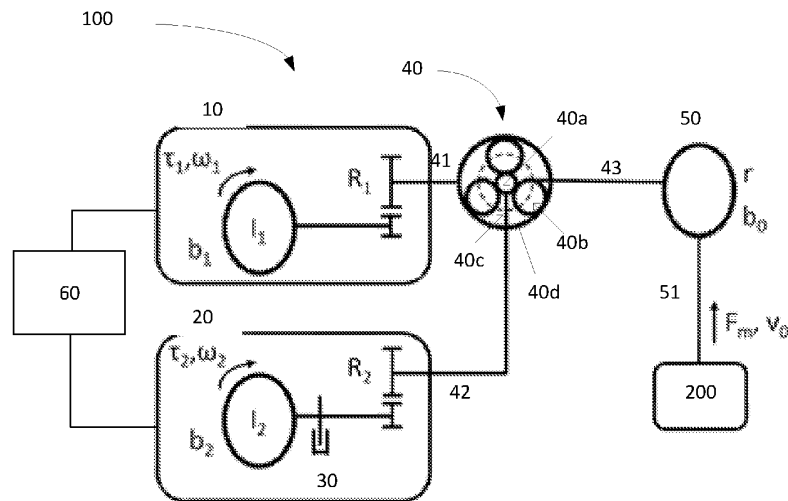


Fig 4

(57) Abstract: A lifting module 100 for a patient lifting system 300a, 300b is provided. The lifting module 100 being coupled to a drum 50 of the patient lifting system. The lifting module comprises a first electric motor 10 configured to drive the drum 50, a second electric motor 20 configured to drive the drum 50, a planetary gearbox 40 connecting the first 10 and second motor 20 to the drum 50, the planetary gearbox 40 being configured to transfer torque from the first 10 and/or second 20 motor to the drum 50 and a variable locking mechanism 30. The locking mechanism 30 is configured to be coupled to the second motor 20, wherein the variable locking mechanism 30 is configured to provide controlled deceleration of an output shaft 43 of the planetary gearbox 40 dependent on the movement of the patient 200.

[Continued on next page]

SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*