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(54) Title: METHODS AND APPARATUSES FOR EXOSKELETON ATTACHMENT

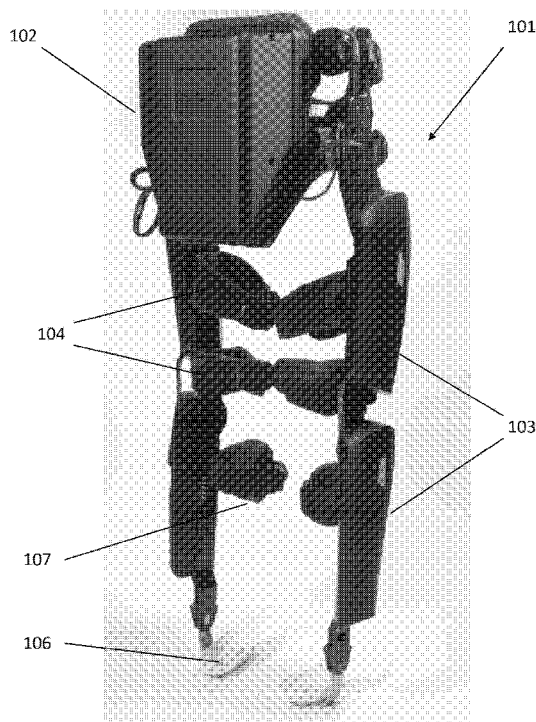


FIG. 1

(57) Abstract: Embodiments of the methods and apparatus for attaching exoskeleton devices to a body include a harness apparatus for attaching an exoskeleton device to a limb. The harness apparatus may comprise a limb support, a support locking element, a support holder configured to define a space for receiving and securing the support locking element at least partially within the space, a connection element configured for connection to the exoskeleton device; and an articulation member configured to articulate with the connection element. Further, the apparatus may include a retaining element configured to retain the support locking element at least partially within the space. At least a portion of the limb support can include a curved portion configured to correspond to a curvature of a limb when adjacent the limb.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61H 1/00, A61H 1/02, A61H 5/00 (2016.01)

CPC - A61H 1/0244, A61H 1/024, A61H 3/008, A61H 1/0237, A61H 1/0266

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

CPC: A61H 1/0244, A61H 1/024, A61H 3/008, A61H 1/0237, A61H 1/0266

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 601/33, 34, 35; 602/16, 23, 26; 623/27, 28, 30, 31, 32, 36, 38, 39 (keyword limited; terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase; Google Patents; Google

Search Terms Used: exoskeleton, mount*, strap*, attach*, harness, brace, limb\$, translat*, slid*, pad, cushion, leg, arm, shin, forearm, lock*, support

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,665,058 A (YOUNG) 09 September 1997 (09.09.1997) fig 1, 3, col 8, ln 43 to col 9, ln 29	1-4, 7, 13
Y		5
A		6, 9-10
X	US 2014/0174453 A1 (PANZICA) 26 June 2014 (26.06.2014) fig 6, 7, para [0015], [0020]-[0022], [0034]	1, 8, 11-12, 14-15
A		6, 9-10
Y	US 3,707,963 A (KEROPIAN) 02 January 1973 (02.01.1973) col 4, ln 60-63	5
A	WO 2015/095211 A2 (MASSACHUSETTS INSTITUTE OF TECHNOLOGY) 25 June 2015 (25.06.2015) entire document	1-15
A	WO 2014/093470 A1 (EKSO BIONICS INC.) 19 June 2014 (19.06.2014) entire document	1-15
A	US 2003/0115954 A1 (ZEMLYAKOV et al) 26 June 2003 (26.06.2003) entire document	1-15

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