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(54) **Title:** MULTIPLE LINE POWERED ROPE ASCENDER AND PORTABLE HOIST

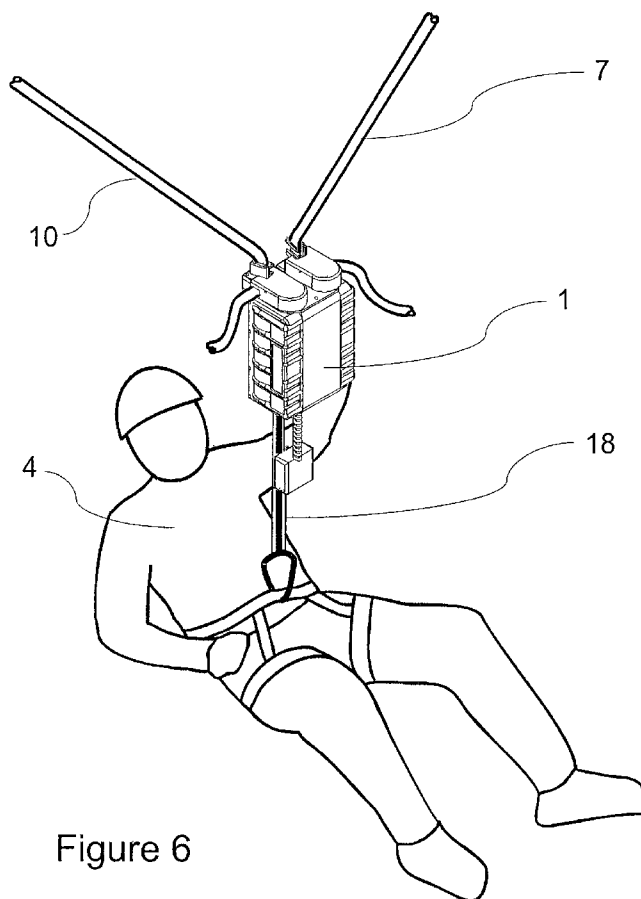


Figure 6

(57) **Abstract:** A multiple-rope or multiple-cable pulling device is provided for positioning a load. The device can include an electronic controller that interprets a user's input from an interface such as a trigger or a joystick, and activates electronically controlled motors that drive one or more rope pulling mechanisms, such as winches. When the winches pull in or pay out cable in accordance with the controller's demand, the load is moved along the desired trajectory as specified by the user through the device interface.



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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, **IS**, **IT**, LT, LU, LV, MC, MT, NL, PL,
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USPC - 254/325

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)

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USPC - 104/178; 254/325

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

PatBase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/0160936 A1 (MACDONALD et al) 28 July 2005 (28.07.2005) entire document	1-2, 4-5, 8, 12
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Y		3, 6-7, 9-11
Y	WO 2006/113844 A1 (BALL et al) 26 October 2006 (26.10.2006) entire document	3, 6-7, 9-11
A	US 2004/0206715 A1 (RODNUNSKY) 21 October 2004 (21.10.2004) entire document	1-12
A	US 6,382,437 B1 (OKADA et al) 07 May 2002 (07.05.2002) entire document	1-12

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