

Title (en)
Hydraulic lift

Title (de)
Hydraulischer Aufzug

Title (fr)
Ascenseur hydraulique

Publication
EP 2199244 B1 20110803 (EN)

Application
EP 09179422 A 20091216

Priority
IT GE20080106 A 20081219

Abstract (en)
[origin: EP2199244A1] Hydraulic lift, comprising: a fixed tubular riser (17) which is mounted, at its ends, by means of suitable connections between the floor (4) of the lift cabin travel shaft and the ceiling (12) of said shaft and communicates at its ends with unions (18, 19) for supplying and discharging a hydraulic fluid; at least one fixed cylindrical piston (121) which is positioned halfway along the height concentrically with said tubular riser (17); at least one fixed diaphragm (221) which is situated at the height of said cylindrical piston (121) and which divides said tubular riser (17) into two chambers (26; 126) which are not interconnected; a cylinder (16) coaxial with said tubular riser (17) and defining a cylindrical cavity (20; 120) sealingly housing said fixed cylindrical piston (121); said cylinder (16) having a length equal to about half the length of said tubular riser (17) and said cylinder (16) being able to slide relative to said fixed piston (121) from one end to the other of said tubular riser (17); communication apertures (23; 24) on the two sides of said fixed piston (121) able to connect said two chambers (26, 126) of the tubular riser to said cylindrical cavity (20; 120) of the said movable cylinder (16); means for supplying alternately the pressurised fluid into said two chambers (26; 126) of the tubular riser (17) so as to cause said movable cylinder (16) to slide upwards or downwards; at least one first pair of idle pulleys (11) which are each fixed to an anchoring point situated on the ceiling (12) of the travel shaft of the lift cabin (1); at least one second pair of idle pulleys (13) mounted on said movable cylinder and fixed in diametrically opposite positions relative thereto; at least one pair of cables (2) for suspending a cabin (1), which are secured at one end to the ceiling (12) and driven around said second pair of idle pulleys (13) and from the latter pass around said first pair of idle pulleys (11) and are then secured to the structure of the cabin (1), and means (15) for counterbalancing the weight of the cabin, which are fixed to said movable cylinder.

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