

Publication

EP 0581270 A3 19940831

Application

EP 93112071 A 19930728

Priority

DE 4225032 A 19920729

Abstract (en)

[origin: EP0581270A2] The telescopic system consisting of several plunger-type cylinders (1, 2, 3) is intended in particular for the actuation of a jib in cranes or the like. The plunger-type cylinders (1, 2, 3) are arranged to be longitudinally displaceable relative to one another and are guided one inside the other like a piston/cylinder arrangement in such a way as to be extendable by pressurising with a hydraulic medium. Each of the longitudinally displaceable plunger-type cylinders (1, 2, 3) is closed by a plunger head (5) at its rear end face in the extension direction. In this arrangement, an overflow passage (6) for the hydraulic medium is provided in the plunger head (5), which overflow passage (6) extends axially between its two sides and can be closed by a check valve (7), and an actuating member for the check valve (7) is provided in the area of the plunger head (5). The check valve (7) is opened only when the plunger-type cylinders (2, 3) are fully extended. Provided in the cylinder space of each of the longitudinally displaceable plunger-type cylinders (2, 3) is a locking ring (8) which can be adjusted axially by the plunger head (5) of the next plunger-type cylinder (3) arranged in the cylinder space against the force of a spring (9) towards the plunger head (5) and actuates at least one radially adjustable locking member (10). In the position of the locking ring (8) remote from the plunger head (5), the locking member (10) locks the displaceability of this plunger-type cylinder (3, 2) relative to the plunger-type cylinder (2, 1) enclosing it. The retraction of the individual plunger-type cylinders is achieved by the application of an external force to a rope held permanently tensioned by means of a travel motor. <IMAGE>

IPC 1-7

F15B 15/16

IPC 8 full level

B66C 23/70 (2006.01); **F15B 15/14** (2006.01); **F15B 15/16** (2006.01); **F15B 15/26** (2006.01)

CPC (source: EP)

B66C 23/701 (2013.01); **F15B 15/1476** (2013.01); **F15B 15/16** (2013.01); **F15B 15/261** (2013.01)

Citation (search report)

- [A] DE 3021633 A1 19811217 - SCHUETT FRIEDRICH [DE]
- [A] DE 2900015 A1 19800710 - BENTELER WERKE AG
- [A] GB 2206929 A 19890118 - OP PAGLIERO S P A
- [A] DE 1240743 B 19670518 - TOUSSAINT & HESS GMBH
- [A] DE 3835945 C1 19900201

Cited by

CN115507710A; EP1473466A1; AT512871A1; AT512871B1

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