Title (en)
  Telescoping system for a crane boom

Title (de)
  Telekopiersystem eines Kranauslegers

Title (fr)
  Système de télescopage d'une flèche de grue

Publication
  EP 1201594 B1 20051026 (FR)

Application
  EP 00420221 A 20001026

Priority
  • EP 00420221 A 20001026
  • FR 9911102 A 19990901
  • US 70973600 A 20001113

Abstract (en)
  [origin: FR2797862A1] The jib (7) has typically 4 telescoping sections (9-12) e.g. U-shaped in cross-section. When its length is at a minimum these nest inside one another. A hydraulic actuator (19), lying along the jib center line (y-y') extends the jib by moving the sections out telescopically. Optimally, the actuator is of the worm and nut, or chain loop type. The outermost section (9) is pivoted on the chassis, and the innermost (12) carries the hoist cable pulleys (13). The actuator's piston rod (22) rests on a bearing pad (20) at the winch end; its cylinder (19) on rollers (24,25) within the innermost section. Where the rod enters the cylinder the latter is fitted with a cross-head (21) carrying a lateral thruster (50) whose ram (51) can engage in any one of three immobilizing latches (30) fixed to the ends of the inner three jib sections. The cross-head is aligned with the selected latch using a position sensor (60,61). The ram, expelled into a socket on the latch housing, separates a wedge-shaped nose two spring-loaded latch-bolts, freeing them from a notched locking bar (40) fixed on the next outermost section. Bars are fixed at each end of each section and at intermediate points. After the actuator repositions the jib the ram retracts and the latch re-locks to the new bar.

IPC 1-7
  B66C 23/70; B66C 23/693

IPC 8 full level
  B66C 23/687 (2006.01); **B66C 23/693** (2006.01); **B66C 23/70** (2006.01)

CPC (source: EP US)
  B66C 23/705 (2013.01 - EP US); **B66C 23/708** (2013.01 - EP US)

Cited by
  CN104528541A; CN113682983A; CN109879183A; CN106185653A

Designated contracting state (EPC)
  DE ES IT

DOCDB simple family (publication)
  FR 2797862 A1 20010302; **FR 2797862 B1 20011116**; EP 1201594 A1 20020502; EP 1201594 B1 20051026; US 6474486 B1 20021105

DOCDB simple family (application)
  FR 9911102 A 19990901; EP 00420221 A 20001026; US 70973600 A 20001113