Title (en)

HYDRAULIC TUBING MACHINE FOR FOUNDATION PILES AND CONTROL DEVICE THEREFOR

Publication

EP 0058222 B1 19841003 (DE)

Application

EP 81105270 A 19810708

Priority

DE 3105707 A 19810217

Abstract (en)

[origin: EP0058222A1] 1. A hydraulic tubing machine for the rotational oscillation of casings for foundation piles, adapted to be attached to a crane type scooping apparatus and comprising a base frame (2) for sliding movement of the machine over the ground, a gripping collar (5) for gripping the casing (1) and mounted on the base frame for rotational and vertical movement of the collar, a steering link (10) engaging with and following the movements of the gripping collar, and a pair of hydraulic rotary cylinders (11, 12) connected to the circumferentially distributed links (13, 14) of the gripping collar (5), characterized in that the gripping collar (5) may be radially positioned relative to the base frame (2) by means of a shifting cylinder (20) via the steering link (10) and that the control system of the shifting cylinder (20) includes a preloaded float position at its valve end, in which the piston of the shifting cylinder (20) is pressurized on both sides by opposedly acting hydraulic forces from each pressure accumulator (24, 25), in such a manner that the quantities of pressure fluid displaced by the stroke of the cylinder piston due to the longitudinal movements of the steering link (10) and the movements of the gripping collar (5) (raising, lowering, oscillating movements) are alternately fed to the pressure accumulators (24, 25).

IPC 1-7

E21B 7/22

IPC 8 full level

E02F 5/20 (2006.01); E21B 3/025 (2006.01)

CPC (source: EP)

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Cited by

CN110130435A; KR101034623B1; EP1118718A3; US6796390B1; WO2005054587A1

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