

Title (en)

CONTROL AND ADJUSTMENT SYSTEM FOR A LIFTING AND TILTING MECHANISM OF A MACHINE TOOL IN A MOBILE WORKING MACHINE

Title (de)

STEUER- UND STELLSYSTEM FÜR EIN HUB- UND KIPPWERK EINES ARBEITSWERKZEUGS IN EINER MOBILEN ARBEITSMASCHINE

Title (fr)

SYSTEME DE COMMANDE ET DE REGLAGE POUR UN MECANISME DE LEVAGE ET D'INCLINAISON DE L'OUTIL D'UN ENGIN MOBILE

Publication

EP 1616103 B1 20060823 (DE)

Application

EP 04733802 A 20040519

Priority

- EP 2004005437 W 20040519
- DE 10331533 A 20030711

Abstract (en)

[origin: WO2005008075A1] The invention relates to a control and adjustment system for a lifting mechanism (100) of a loading blade (6) in a mobile machine tool. Said lifting mechanism is made up of at least one first and second blade cylinder (1, 2), at least one first and second lifting cylinder (61, 62) and one first and second hydropump (15, 75) which can be adjusted with regard to the pump volume. The adjusting pistons (3, 5) which can be displaced in the first and second blade cylinders (1, 2), respectively, separate both blade cylinders (1, 2) into two adjusting pressure chambers (7 and 8, 9 and 10). The adjusting pistons (63, 65) which can be displaced in the two lifting cylinders (61, 62) respectively separate the two lifting cylinders (61, 62) into the two adjusting pressure chambers (67 and 68, 69 and 70) in an analogous manner. In a first closed hydraulic circuit, a first and the second connection (14, 17) of the first hydropump (15) is, respectively made to the piston side of the piston pressure chamber (7, 9) of one blade cylinder (1, 2) and to the piston rod side of the adjusting pressure chamber (10, 8) of the other blade cylinder (2, 1). The first and second connection (74, 77) of the second hydropump (75) is respectively made in a second closed hydraulic circuit to a piston side adjusting pressure chamber (70, 67) of a lifting cylinder (62, 61) and to the piston rod side of the adjusting pressure chamber (68, 69) of the other lifting cylinder (61, 62).

IPC 8 full level

F15B 7/00 (2006.01); **E02F 3/42** (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP US)

E02F 3/42 (2013.01 - EP US); **E02F 9/2232** (2013.01 - EP US); **F15B 7/003** (2013.01 - EP US); **F15B 7/006** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 2005008075 A1 20050127; DE 10331533 A1 20050210; DE 10331533 B4 20051103; DE 502004001278 D1 20061005; EP 1616103 A1 20060118; EP 1616103 B1 20060823; JP 2007506916 A 20070322; US 2007175210 A1 20070802

DOCDB simple family (application)

EP 2004005437 W 20040519; DE 10331533 A 20030711; DE 502004001278 T 20040519; EP 04733802 A 20040519; JP 2006517986 A 20040519; US 56469004 A 20040519