

Title (en)

Hydraulic lifting device for a telescopically extendable fork lift truck mast

Title (de)

Hydraulische Hebevorrichtung für einen teleskopisch ausziehbaren Gabelstaplermast

Title (fr)

Appareil de levage hydraulique pour le mât télescopique d'un chariot élévateur à fourches

Publication

EP 1593645 A2 20051109 (EN)

Application

EP 05445026 A 20050501

Priority

SE 0401169 A 20040503

Abstract (en)

Device at fork truck where in a telescopically extendable mast in the outermost or uppermost mast section is arranged a movement journaling of movement of the forks over the major part of the height of the uppermost mast section, and where lifting movements are achieved hydraulically by means of one or several hydraulic pistons (4) for the lifting of the mast sections and one or several other hydraulic pistons (3) for the lifting of the forks (8) in relation to the uppermost mast section (5). In the feed conduits to the hydraulic cylinders proportional valves 1, 2 are arranged in order to, at the transition shift between low lift movement and high lift movement and vice versa successively control the oil flow to and from the cylinders of the different systems respectively so that an unnoticeable transition and constant speed is obtained.

IPC 1-7

B66F 9/22

IPC 8 full level

B66F 9/22 (2006.01); **F15B 11/048** (2006.01)

CPC (source: EP SE)

B66F 9/08 (2013.01 - SE); **B66F 9/22** (2013.01 - EP SE); **F15B 11/205** (2013.01 - SE)

Citation (applicant)

DE 19710556 A1 19980917 - JUNGHEINRICH AG [DE]

Cited by

EP2508465A1; EP3597588A1; DE102018117391A1; US8640830B2; EP3556722A1; US10604391B2; EP2123594A1; CN103303845A; EP3378826A1; CN108622805A; AU2018202033B2; WO2009141242A1; US9932213B2; US9975426B2; DE102009011865A1; DE102016124504A1; US10941027B2; DE102009011865B4; US11427451B2; US11905153B2; DE102011016542A1; EP3459904B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1593645 A2 20051109; **EP 1593645 A3 20070502**; **EP 1593645 B1 20120808**; SE 0401169 D0 20040503; SE 0401169 L 20051104; SE 529748 C2 20071113

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