

Title (en)
Device and method for movement of a load carrier at an industrial truck

Title (de)
Vorrichtung und Verfahren zum Bewegen des Lastträgers eines Förderfahrzeuges

Title (fr)
Dispositif et procédé pour le mouvement du porte-charge d' un chariot élévateur

Publication
EP 1046610 A2 20001025 (EN)

Application
EP 00850068 A 20000418

Priority
SE 9901408 A 19990420

Abstract (en)
Device and method for movement of load carrying means of an industrial truck, in particular the pivot and lateral movement of a swing reach fork means. Hydraulic consumers (30, 32) provide the movements. A proportional valve (38, 40) is arranged in front each hydraulic consumer. The proportional flow valve (40) of the pivot movement has its inlet (58) connected to the outlet (56) of the other. At lateral movement the motor speed is controlled and the proportional flow valve (38) is held open. At pivot movement or simultaneous movement of both the motor speed is set so that the total flow somewhat surpasses a maximum value at the same time as the proportional flow valves (38, 40) are controlled to desired primary flow.
<IMAGE>
A proportional flow valve (38, 40) is coupled to the downstream side of each hydraulic motor (32) used to move the fork, the inlet (56) of one valve being connected to the exit (56) of the other. During sideways movement the first valve is kept open while during rotational movement or simultaneous rotational and sideways movement the valves are controlled to give the desired primary flow. During sideways movement the motor rpm is regulated while during rotational movement or simultaneous rotational and sideways movement the motor rpm is set so that the total flow does not exceed a given maximum. An independent claim is also included for the control apparatus.

IPC 1-7
B66F 9/22

IPC 8 full level
B66F 9/22 (2006.01)

CPC (source: EP)
B66F 9/22 (2013.01); **F15B 11/003** (2013.01); **F15B 2211/50545** (2013.01)

Cited by
EP2799389A4; EP1632453A3; EP2829504A1; US9771250B2; US9975426B2; EP2984350B1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1046610 A2 20001025; **EP 1046610 A3 20051130**; SE 512652 C2 20000417; SE 9901408 D0 19990420; SE 9901408 L 20000417

DOCDB simple family (application)
EP 00850068 A 20000418; SE 9901408 A 19990420