

Title (en)
Control device

Title (de)
Steuereinrichtung

Title (fr)
Dispositif de commande

Publication
EP 1650442 A1 20060426 (DE)

Application
EP 05022317 A 20051013

Priority
DE 102004051213 A 20041020

Abstract (en)
Lifting cylinders (2,3) connect the control device (1) to at least two tools. When an operator lets go of a changeover valve (5), which is operable by hand, then the changeover valve is automatically brought into a basic position in which no pressure build-up in the region of the tools is possible. A control valve (7) is provided between the changeover valve and the tools, and can also be operated by hand by the operator.

IPC 8 full level
F15B 11/16 (2006.01); **A62B 3/00** (2006.01); **A62B 99/00** (2009.01); **B25F 3/00** (2006.01); **B25F 5/00** (2006.01); **F15B 20/00** (2006.01)

CPC (source: EP US)
F15B 11/16 (2013.01 - EP US); **F15B 20/001** (2013.01 - EP US); **F15B 2211/30525** (2013.01 - EP US); **F15B 2211/3059** (2013.01 - EP US); **F15B 2211/3144** (2013.01 - EP US); **F15B 2211/7128** (2013.01 - EP US); **F15B 2211/78** (2013.01 - EP US)

Citation (search report)

- [X] GB 2340486 A 20000223 - TRANS NORDIC HYDRAULICS LIMITE [GB]
- [X] DE 2263772 A1 19740704 - ZOELLER KIPPER
- [X] US 5727442 A 19980317 - WIMMER ALOIS [AT]
- [A] EP 0473827 A1 19920311 - KUGELFISCHER G SCHAEFER & CO [DE]
- [A] FR 2630944 A1 19891110 - EDME MARCEL [FR]

Cited by
DE102009024886B3; EP2261512A2; EP2268069A2

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1650442 A1 20060426; EP 1650442 B1 20080806; AT E403806 T1 20080815; AU 2005225054 A1 20060504; AU 2005225054 B2 20081120; CN 100478573 C 20090415; CN 1779277 A 20060531; DE 102004051213 B3 20060601; DE 502005004933 D1 20080918; ES 2309636 T3 20081216; JP 2006118707 A 20060511; PT 1650442 E 20081010; US 2006081120 A1 20060420; US 7409828 B2 20080812

DOCDB simple family (application)
EP 05022317 A 20051013; AT 05022317 T 20051013; AU 2005225054 A 20051019; CN 200510118404 A 20051020; DE 102004051213 A 20041020; DE 502005004933 T 20051013; ES 05022317 T 20051013; JP 2005303327 A 20051018; PT 05022317 T 20051013; US 25109805 A 20051014