

Title (en)
CIRCUIT ARRANGEMENT

Title (de)
SCHALTUNGSANORDNUNG

Title (fr)
ENSEMBLE CIRCUIT

Publication
EP 1711714 B1 20080611 (DE)

Application
EP 04801211 A 20041208

Priority
• EP 2004013927 W 20041208
• DE 102004005606 A 20040205

Abstract (en)
[origin: WO2005075833A1] The invention relates to a circuit arrangement comprising a load sensing system (LS) wherein individual loads (10,14) are arranged in series, forming a series section, and in parallel, forming a parallel section, in a hydraulic supply circuit (12) comprising at least one supply pump (P) and a runback (16) for fluid, the load sensing system (LS) determining the highest load pressure in both the series section and parallel section. The loads of the parallel section can be actuated independently from the pressure level of the loads of the series section due to the fact that the respectively highest load pressure is transferred as a control pressure to a valve unit (18) in such a way that, as long as the load pressure of the parallel section is higher than the load pressure of the series section, the valve unit restricts the runback (16) for fluid so much that the pressure of the supply pump (P) matches or exceeds the pressure required in the parallel section. In this way, a sufficient fluid pressure for the respective load in the parallel section is ensured independently of the number of loads in the series section.

IPC 8 full level
F15B 11/044 (2006.01); **F15B 11/16** (2006.01); **F15B 11/20** (2006.01)

CPC (source: EP US)
F15B 11/0445 (2013.01 - EP US); **F15B 11/162** (2013.01 - EP US); **F15B 11/20** (2013.01 - EP US); **F15B 2211/30505** (2013.01 - EP US); **F15B 2211/3051** (2013.01 - EP US); **F15B 2211/30525** (2013.01 - EP US); **F15B 2211/3055** (2013.01 - EP US); **F15B 2211/327** (2013.01 - EP US); **F15B 2211/40515** (2013.01 - EP US); **F15B 2211/426** (2013.01 - EP US); **F15B 2211/455** (2013.01 - EP US); **F15B 2211/50518** (2013.01 - EP US); **F15B 2211/50536** (2013.01 - EP US); **F15B 2211/5151** (2013.01 - EP US); **F15B 2211/55** (2013.01 - EP US); **F15B 2211/575** (2013.01 - EP US); **F15B 2211/6055** (2013.01 - EP US); **F15B 2211/7053** (2013.01 - EP US); **F15B 2211/7058** (2013.01 - EP US); **F15B 2211/71** (2013.01 - EP US); **F15B 2211/781** (2013.01 - EP US)

Cited by
EP2927371A1

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

DOCDB simple family (publication)
WO 2005075833 A1 20050818; **WO 2005075833 A8 20051117**; AT E398240 T1 20080715; DE 102004005606 B3 20051006; DE 502004007371 D1 20080724; EP 1711714 A1 20061018; EP 1711714 B1 20080611; JP 2007520674 A 20070726; JP 4777910 B2 20110921; US 2007137192 A1 20070621; US 7426884 B2 20080923

DOCDB simple family (application)
EP 2004013927 W 20041208; AT 04801211 T 20041208; DE 102004005606 A 20040205; DE 502004007371 T 20041208; EP 04801211 A 20041208; JP 2006551735 A 20041208; US 58019704 A 20041208