

Title (en)
Ram cylinder control system for wheel type excavator

Title (de)
Steuersystem eines Stempels eines Radladers

Title (fr)
Système de commande pour vérins des chargeurs à roues

Publication
EP 1550774 A3 20050810 (EN)

Application
EP 04030864 A 20041228

Priority
KR 20030098611 A 20031229

Abstract (en)
[origin: EP1550774A2] A ram cylinder control system for a wheel type hydraulic comprises a pilot hydraulic pump 20, pilot-opened check valves 24b for normally prohibiting discharge of working fluid from the ram cylinders 24 to lock the ram cylinders 24, a ram cylinder control valve 29 adapted to shift from a home position to an operating position 29a in response to a valve control signal for allowing the hydraulic oil from the pilot hydraulic pump 20 to open the check valves so that the hydraulic oil can be discharged from the ram cylinders 24, brake pressure sensor for detecting hydraulic oil pressure supplied to the brakes, joystick position detector for detecting position of the joystick to generate one of a forward position signal, a backward position signal and a neutral signal, and a controller 19 for applying the valve control signal to the ram cylinder control valve 29 if the forward position signal or the backward position signal is received and if the brake pressure is no greater than a set pressure, and for cutting off the valve control signal applied to the ram cylinder control valve 26 if the neutral signal is received and if the brake pressure exceeds the set pressure. <IMAGE>

IPC 1-7
E02F 9/22; F15B 21/08; F15B 11/20

IPC 8 full level
E02F 3/43 (2006.01); **E02F 9/20** (2006.01); **E02F 9/22** (2006.01); **F15B 11/20** (2006.01); **F15B 21/08** (2006.01)

CPC (source: EP KR)
E02F 9/20 (2013.01 - KR); **E02F 9/2207** (2013.01 - EP); **E02F 9/2217** (2013.01 - EP); **E02F 9/226** (2013.01 - EP); **E02F 9/2292** (2013.01 - EP); **E02F 9/2296** (2013.01 - EP)

Citation (search report)
• [A] US 5919243 A 19990706 - HUH TAE KYU [KR]
• [A] US 4835970 A 19890606 - SHIMAMURA MORIHIKO [JP], et al
• [A] US 2003011240 A1 20030116 - DUNBAR SCOTT DAVID [US], et al

Cited by
CN102338134A; DE102007018405A1; US9663335B2; WO2016032811A1

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)
EP 1550774 A2 20050706; **EP 1550774 A3 20050810**; **EP 1550774 B1 20080326**; CN 100591871 C 20100224; CN 1637211 A 20050713; DE 602004012700 D1 20080508; DE 602004012700 T2 20090416; JP 2005194870 A 20050721; KR 100988420 B1 20101018; KR 20050067620 A 20050705

DOCDB simple family (application)
EP 04030864 A 20041228; CN 200410104956 A 20041229; DE 602004012700 T 20041228; JP 2004380109 A 20041228; KR 20030098611 A 20031229