

Title (en)

Hydraulic drive system for hydraulic excavator

Title (de)

Hydraulisches Antriebssystem für einen hydraulischen Bagger

Title (fr)

Système de commande hydraulique pour une excavatrice hydraulique

Publication

EP 0849406 A1 19980624 (EN)

Application

EP 97120554 A 19971124

Priority

JP 34127096 A 19961220

Abstract (en)

When a changeover switch (45) is turned to a "front side" position, upstream portions of pilot lines are connected to boom-up/down lines, arm dumping/crowding lines, and bucket crowding/dumping lines, respectively, causing pilot pressures to control valves for driving hydraulic actuators of a work front (5). When the changeover switch is turned to a "blade side" position, the upstream portions of the pilot lines are connected to blade-up/down lines, blade left/right-angling lines, and blade right/left-rising tilt pilot lines, respectively, causing pilot pressures to control valves for driving hydraulic actuators of a blade (3). The blade can be operated in various behaviors without narrowing a space in a cab and deteriorating operability of the blade. <IMAGE>

IPC 1-7

E02F 9/20; **E02F 3/84**; **E02F 9/22**

IPC 8 full level

E02F 3/85 (2006.01); **E02F 3/84** (2006.01); **E02F 9/20** (2006.01); **E02F 9/22** (2006.01); **E02F 3/34** (2006.01)

CPC (source: EP KR)

E02F 3/325 (2013.01 - EP); **E02F 3/84** (2013.01 - KR); **E02F 3/844** (2013.01 - EP); **E02F 9/2025** (2013.01 - EP); **E02F 9/2221** (2013.01 - EP)

Citation (search report)

- [AD] PATENT ABSTRACTS OF JAPAN vol. 096, no. 001 31 January 1996 (1996-01-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 208 (M - 1117) 28 May 1991 (1991-05-28)

Cited by

GB2392147B; EP1236834A1; EP1365076A1; DE102016105909A1; DE102016105909B4; EP1367182A1; FR2840368A1; GB2412362A; US7942208B2; US6598394B2; US9840283B2; WO2010054152A3; WO2010054155A3; WO2010054155A2; US8453441B2; US10087600B2

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

EP 0849406 A1 19980624; **EP 0849406 B1 20020605**; CN 1074807 C 20011114; CN 1185507 A 19980624; DE 69713043 D1 20020711; DE 69713043 T2 20030206; JP H10183676 A 19980714; KR 100221808 B1 19990915; KR 19980063464 A 19981007

DOCDB simple family (application)

EP 97120554 A 19971124; CN 97108722 A 19971218; DE 69713043 T 19971124; JP 34127096 A 19961220; KR 19970046708 A 19970911