

Title (en)

Control assembly and method for controlling multiple hydraulic consumers

Title (de)

Steueranordnung und Verfahren zum Ansteuern von mehreren hydraulischen Verbrauchern

Title (fr)

Agencement de commande et procédé de commande de plusieurs consommateurs hydrauliques

Publication

EP 2541072 A2 20130102 (DE)

Application

EP 12170158 A 20120531

Priority

DE 102011106307 A 20110701

Abstract (en)

The arrangement has a variable flow pump (20) that is in fluid communication with a bucket (12) and hydraulic cylinders (14-18) of an excavator (1) through individual pressure compensators associated with the bucket and the cylinders, and adjustable inlet orifice plates. The pump is electro-proportionally adjustable. The compensators are pressurized along opening direction by pressure downstream of the plates and acted upon by actuating pressure along closure direction, where the actuating pressure is adjustable by a central control unit (22). An independent claim is also included for a method for actuating hydraulic loads.

Abstract (de)

Offenbart sind eine Steueranordnung zur Druckmittelversorgung mehrerer Verbraucher (12, 14, 16, 18) und ein Verfahren zum Ansteuern von mehreren Verbrauchern, bei denen jeweils eine Zulaufmessblende (48, 50) und eine Individualdruckwaage (52, 54) zugeordnet ist. Die Individualdruckwaage wird über eine zentrale Steuereinheit (22) verstellt.

IPC 8 full level

F15B 11/16 (2006.01)

CPC (source: EP US)

E02F 9/2228 (2013.01 - EP US); **E02F 9/2235** (2013.01 - EP US); **E02F 9/2296** (2013.01 - EP US); **F04B 13/00** (2013.01 - EP US); **F15B 11/162** (2013.01 - EP US); **F15B 11/163** (2013.01 - EP US); **F15B 2211/20546** (2013.01 - EP US); **F15B 2211/3054** (2013.01 - EP US); **F15B 2211/634** (2013.01 - EP US); **F15B 2211/6346** (2013.01 - EP US); **F15B 2211/65** (2013.01 - EP US); **F15B 2211/7052** (2013.01 - EP US)

Citation (applicant)

- DE 10342037 A1 20050407 - BOSCH REXROTH AG [DE]
- DE 102005033222 A1 20070118 - BOSCH REXROTH AG [DE]
- DE 102007029358 A1 20090102 - BOSCH GMBH ROBERT [DE]

Cited by

EP3816455A1; US11268545B2; EP4056765A1; GB2604608A; EP2875268B1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2541072 A2 20130102; EP 2541072 A3 20161102; EP 2541072 B1 20180829; CN 102852872 A 20130102; CN 102852872 B 20160914; DE 102011106307 A1 20130103; US 2013167518 A1 20130704; US 9200646 B2 20151201

DOCDB simple family (application)

EP 12170158 A 20120531; CN 201210226802 A 20120629; DE 102011106307 A 20110701; US 201213539008 A 20120629