

Title (en)

Method of controlling a cyclically commutated hydraulic pump

Title (de)

Verfahren zur Steuerung einer zyklisch kommutierten hydraulischen Pumpe

Title (fr)

Procédé de contrôle de pompe hydraulique commutée cycliquement

Publication

EP 2055947 B1 20100721 (EN)

Application

EP 08016530 A 20080919

Priority

- EP 07254332 A 20071101
- EP 07254337 A 20071101
- EP 07254331 A 20071101
- EP 07254333 A 20071101
- EP 08016530 A 20080919

Abstract (en)

[origin: EP2055947A1] When employing synthetically commutated hydraulic pumps (1), a time delay between a change in fluid flow demand (15) and the resulting fluid low output (13) can be observed. It is suggested to use a time evolvment function, taking into account the time evolvment of the fluid flow demand and/or the time evolvment of the pumping strokes, to modify the actuation of the electrically commutated valves. The said time evolvment function comprises a variable being indicative of a fluid flow demand, wherein a threshold level of said variable is chosen in a way that a pumping/motoring stroke is initiated in advance of the actual demand.

IPC 8 full level

F04B 7/00 (2006.01); **F01B 25/02** (2006.01); **F01B 25/10** (2006.01); **F04B 49/06** (2006.01); **F04B 49/22** (2006.01)

CPC (source: EP)

F01B 25/02 (2013.01); **F01B 25/10** (2013.01); **F04B 7/0076** (2013.01); **F04B 11/005** (2013.01); **F04B 49/06** (2013.01); **F04B 49/243** (2013.01); **F04B 2201/0601** (2013.01); **F04B 2205/09** (2013.01); **F04B 2205/13** (2013.01)

Cited by

GB2477997A; JP2012523515A; GB2477997B; AU2018204487B1; US9739266B2; US9133838B2; US9133839B2; US9010104B2; US9797393B2; US9828986B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 2055947 A1 20090506; **EP 2055947 B1 20100721**; AT E475013 T1 20100815; AT E475014 T1 20100815; DE 602008001854 D1 20100902; DE 602008001855 D1 20100902; EP 2055948 A1 20090506; EP 2055948 B1 20100721; EP 2055949 A1 20090506; EP 2055950 A1 20090506; EP 2055950 B1 20170412

DOCDB simple family (application)

EP 08016530 A 20080919; AT 08016530 T 20080919; AT 08016531 T 20080919; DE 602008001854 T 20080919; DE 602008001855 T 20080919; EP 08016531 A 20080919; EP 08016532 A 20080919; EP 08016533 A 20080919