

Title (en)
Hydraulic servo device

Title (de)
Hydraulische Servoeinrichtung

Title (fr)
Dispositif asservi hydraulique

Publication
EP 0894982 A3 20000524 (EN)

Application
EP 98114115 A 19980728

Priority
JP 21800397 A 19970729

Abstract (en)
[origin: EP0894982A2] A cylinder houses an angularly movable pilot shaft and a piston axially movably mounted on the pilot shaft. When the pilot shaft is angularly moved, a communication passage defined in an outer circumferential surface of the pilot shaft is brought into communication with an oil supply passage or an oil drain passage for axially moving the piston. The pilot shaft has a pair of communication passages defined in the outer circumferential surface thereof, and the piston has a pair of oil passages defined therein. <IMAGE>

IPC 1-7
F15B 9/10; **F15B 21/04**; **F15B 11/12**

IPC 8 full level
F15B 15/14 (2006.01); **F15B 21/044** (2019.01); **F15B 9/10** (2006.01); **F15B 11/12** (2006.01); **F16D 33/14** (2006.01)

CPC (source: EP)
F15B 9/10 (2013.01); **F15B 11/121** (2013.01); **F15B 21/044** (2013.01)

Citation (search report)
• [X] US 4245547 A 19810120 - REYNOLDS RONALD W
• [A] GB 693504 A 19530701 - BOULTON AIRCRAFT LTD, et al
• [A] US 2926635 A 19600301 - LEONARD WILLIAM F, et al
• [A] US 3757640 A 19730911 - KAROL J
• [A] US 5207741 A 19930504 - ABE MINORU [JP]
• [A] EP 0767310 A2 19970409 - EUROCOPTER DEUTSCHLAND [DE]
• [A] US 2874542 A 19590224 - TEAR JAMES D
• [A] EP 0088017 A2 19830907 - PARISIENNE OUTILLAGE [FR]
• [A] PATENT ABSTRACTS OF JAPAN vol. 010, no. 130 (M - 478) 14 May 1986 (1986-05-14)

Cited by
EP2853754A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0894982 A2 19990203; **EP 0894982 A3 20000524**; **EP 0894982 B1 20040107**; CN 1124418 C 20031015; CN 1210208 A 19990310; DE 69820934 D1 20040212; DE 69820934 T2 20041104; JP 3494858 B2 20040209; JP H1144303 A 19990216

DOCDB simple family (application)
EP 98114115 A 19980728; CN 98103096 A 19980729; DE 69820934 T 19980728; JP 21800397 A 19970729