

Title (en)

AXIAL PISTON MACHINE OF THE SLANT AXIS TYPE

Title (de)

SCHRÄGACHSENMASCHINE

Title (fr)

MACHINE À PISTON DU TYPE À AXE INCLINÉ

Publication

EP 2935883 A1 20151028 (DE)

Application

EP 13823917 A 20131217

Priority

- AT 505972012 A 20121218
- AT 2013050254 W 20131217

Abstract (en)

[origin: WO2014094024A1] The invention relates to a bent-axis machine (1), comprising a housing (2) having a control cover (9) and a piston drum (4) which is rotatably mounted in the housing (2) on a valve plate (3) and which has axial cylinders (5), of which each cylinder (5) receives a piston (6). Said bent-axis machine also comprises a drive flange (8) which is associated with a drive shaft (7) and on which the free ends of the pistons (6) projecting out of the cylinders (5) are supported, and having an adjustment system comprising a pivot cradle for adjusting the displacement volume and having an actuating drive (10), by means of which the piston drum (10) together with the valve plate (3) can be pivoted relative to the drive axis (T) about a maximum working range which is delimited by a minimum pivot angle (α_{min}) and a maximum pivot angle (α_{max}). A hydraulic fluid flows over the pivot cradle through the valve plate (3). The invention is characterised in that the minimum pivot angle (α_{min}) of the working range is shifted out of its zero position by at least 5°, preferably by at least 7°, wherein the maximum pivot angle (α_{max}) is extended in the same way by at least 5°, preferably by at least 7°, in order to retain the entire working range about the region recessed in the lower region.

IPC 8 full level

F04B 1/24 (2006.01); **F03C 1/06** (2006.01); **F03C 1/40** (2006.01); **F04B 1/32** (2006.01); **F16H 47/02** (2006.01)

CPC (source: AT EP US)

F03C 1/0642 (2013.01 - EP US); **F03C 1/0694** (2013.01 - EP US); **F04B 1/2064** (2013.01 - US); **F04B 1/24** (2013.01 - AT EP US);
F04B 1/328 (2013.01 - EP US)

Citation (search report)

See references of WO 2014094024A1

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)

WO 2014094024 A1 20140626; AT 513773 A1 20140715; AT 513773 B1 20150315; CN 204900172 U 20151223; EP 2935883 A1 20151028;
EP 2935883 B1 20170301; US 10151305 B2 20181211; US 2015345483 A1 20151203

DOCDB simple family (application)

AT 2013050254 W 20131217; AT 505972012 A 20121218; CN 201390000982 U 20131217; EP 13823917 A 20131217;
US 201314652504 A 20131217