

Title (en)
ROTATING DEVICE

Title (de)
DREHVORRICHTUNG

Title (fr)
DISPOSITIF DE MISE EN ROTATION

Publication
EP 0907804 B1 20030507 (EN)

Application
EP 97924057 A 19970602

Priority
• FI 9700342 W 19970602
• FI 962313 A 19960603

Abstract (en)
[origin: WO9746762A1] The object of the invention is a rotating device for rotating the extension arm of an excavator or a similar machine, the device comprising fastening plates (1 and 2) for the extension arm and bucket with fastening elements, a body (3), clutch shoes (4), friction material (5), a fastening plate (6) for the body, slide bearing plates (7, 8) with lubrication channels, a locking cylinder (14), a rotary cylinder (12), a hydraulic accumulator, a lock valve, direction valves, limit switches, and a control arrangement, and the necessary electric and hydraulic conductors. The rotating device is attached between two extension arms or similar elements, such as a bucket and extension arm of an excavator, thus making it possible to continuously change the position of the bucket in a desired way and as is advantageous for the working phase in question. With the present invention, it is possible to fast rotate the extension arms of an excavator, rock drilling machine, forest tractor, passenger hoist, truck crane, etc. to an advantageous working position. For example, when working with an excavator in close places, near walls, or on roadwork sites in busy street areas, the invention makes it possible to rotate the bucket to an arbitrary angular position, thus substantially improving the range and the driver's eye contact to the machine. The invention also provides a circular or arcuate working movement. The rotation of the bucket and the working movements may also be carried out semi-automatically or fully automatically by controlling the hydraulic system with a suitable control arrangement. The excavation costs will be reduced, as the amount of earth masses to be moved will be smaller, and as the location of the excavator need not be changed so often.

IPC 1-7
E02F 3/36; **E02F 3/42**

IPC 8 full level
E02F 3/36 (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP)
E02F 3/3677 (2013.01); **E02F 9/2275** (2013.01)

Designated contracting state (EPC)
DE DK ES FR GB IT SE

DOCDB simple family (publication)
WO 9746762 A1 19971211; AU 2965397 A 19980105; DE 69721769 D1 20030612; DE 69721769 T2 20040422; EP 0907804 A1 19990414; EP 0907804 B1 20030507; FI 100902 B 19980313; FI 962313 A0 19960603; FI 962313 A 19971204

DOCDB simple family (application)
FI 9700342 W 19970602; AU 2965397 A 19970602; DE 69721769 T 19970602; EP 97924057 A 19970602; FI 962313 A 19960603