

Title (en)

An articulation with rotating hydraulic connection, in particular for mobile work machines.

Title (de)

Gelenk mit hydraulischer Drehkupplungsvorrichtung, insbesondere für mobile Arbeitsmaschinen.

Title (fr)

Articulation avec joint hydraulique tournant, en particulier pour machines mobiles de travaux publics.

Publication

EP 0429413 A1 19910529 (EN)

Application

EP 90830534 A 19901119

Priority

IT 4017589 A 19891120

Abstract (en)

The invention relates to an articulation with rotating hydraulic connection, in particular for mobile work machines. In a very compact structure a hollow internal body (4) and an external body (1) are rotatably coupled, with their respective cylindrical surfaces (3) and (5) placed in contact. The hydraulic rotating connection is realised by means of the coupling between the annular channels (2) envisaged in the external body (1) and the open ends (6) arranged in the hollow internal body (4). A motor (8), solidly mounted to the hollow internal body (4), activates a shaft (9), which is the drive shaft of an epicyclic reduction gear (16), (20), which latter is coaxial and reciprocally connects the hollow internal body (4) with the external body (1). A clutch (10) is interposed to operate between the shaft (9) and the hollow internal body (4). <IMAGE>

IPC 1-7

B66C 23/86; **E02F 9/12**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [Y] FR 1553597 A 19690110
- [Y] FR 2122294 A1 19720901 - POCLAIN SA
- [A] FR 2209017 A1 19740628 - CATERPILLAR TRACTOR CO [US]
- [A] US 4009643 A 19770301 - THUMM HEINZ
- [A] US 3877743 A 19750415 - JOHNSON NORMAN ALLEN
- [A] DE 1271941 B 19680704 - BERGENS MEK VERKSTED
- [A] US 4426110 A 19840117 - MITCHELL JOHNNY D [US], et al
- [A] DE 3135150 C1 19830113 - LIEBHERR HYDRAULIKBAGGER
- [A] FR 2104521 A5 19720414 - LORENCE MANUFACT CORP

Cited by

JP2014199107A; DE10025693A1; FR2869025A1; RU2468983C1; EP0663556A1; US5462083A; WO2004078631A1

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