

Title (en)

BREAKER WITH OPTIMIZED HYDRAULIC CIRCUIT

Title (de)

SCHALTER MIT OPTIMIERTEM HYDRAULIKKREISLAUF

Title (fr)

DISJONCTEUR À CIRCUIT HYDRAULIQUE OPTIMISÉ

Publication

EP 4345216 A1 20240403 (EN)

Application

EP 23196588 A 20230911

Priority

IT 202200019767 A 20220927

Abstract (en)

Breaker configured to be used with an excavator provided with a hydraulic circuit, said hydraulic circuit being provided with a delivery circuit for oil under pressure and a return circuit, said breaker comprising:- a piston (22A) configured to be moved with a reciprocating motion between a Top Dead Point and a Bottom Dead Point;- an inlet (2) for oil under pressure, connected to an active thrust chamber (21) where oil pressure pushes said piston (22A) towards the Bottom Dead Point and to a passive thrust chamber (13) where oil pressure pushes said piston (22A) towards the Top Dead Point;- a distributor (24), positioned around said piston (22A) and configured to be moved with a reciprocating motion between its own Top Dead Point and its own Bottom Dead Point, putting the active thrust chamber (21) alternately in communication with the inlet for oil (2) under pressure and with the annular discharge chamber (5), wherein said annular discharge chamber (5) is connected to at least two outlet holes (19, 20), configured to be connected, alternatively to each other, to said return circuit, said at least two outlet holes (19, 20) having different diameters.

IPC 8 full level

E02F 3/96 (2006.01); **B25D 9/12** (2006.01); **B25D 9/20** (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP)

B25D 9/12 (2013.01); **B25D 9/20** (2013.01); **E02F 3/966** (2013.01); **E02F 9/2271** (2013.01); **B25D 17/06** (2013.01); **B25D 2217/0023** (2013.01)

Citation (search report)

- [A] US 2014262407 A1 20140918 - MOORE CODY [US]
- [A] WO 2014045264 A1 20140327 - TECNA GROUP SRL [IT]
- [A] EP 1603711 B1 20121114 - SANDVIK MINING & CONSTR OY [FI]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4345216 A1 20240403

DOCDB simple family (application)

EP 23196588 A 20230911