

Title (en)

RETAINING DEVICE AND WEAR ELEMENT FOR EXCAVATORS AND THE LIKE

Title (de)

HALTEVORRICHTUNG UND VERSCHLEISSELEMENT FÜR BAGGER UND DERGLEICHEN

Title (fr)

DISPOSITIF DE RETENUE ET ÉLÉMENT D'USURE POUR EXCAVATEURS ET ANALOGUE

Publication

EP 4116507 A1 20230111 (EN)

Application

EP 21382611 A 20210707

Priority

EP 21382611 A 20210707

Abstract (en)

The present invention relates to a retaining device and a wear element, preferably a female part, for ensuring the retention between the female part and a male part, used in excavators and the like. The female part has a cavity and the male part has a projection which is inserted into the cavity of the female part, both parts being coupled to each other due to the use of a retaining device together with at least one pin which at least partially crosses through the female part, the retaining device and the male part.

IPC 8 full level

E02F 9/28 (2006.01)

CPC (source: EP)

E02F 9/2841 (2013.01); **E02F 9/26** (2013.01)

Citation (applicant)

WO 2017137619 A1 20170817 - METALOGENIA RES & TECH S L [ES]

Citation (search report)

- [XAYI] US 3952433 A 19760427 - HEINOLD LLOYD K, et al
- [XY] US 11015324 B2 20210525 - CLARKE ROD [AU], et al
- [YDA] WO 2017137619 A1 20170817 - METALOGENIA RES & TECH S L [ES]
- [YA] WO 2016131015 A2 20160818 - ESCO CORP [US]
- [YA] US 2017372534 A1 20171228 - STEKETEE BRIAN B [US], et al
- [A] WO 2015126923 A1 20150827 - VERMEER MFG CO [US]
- [A] US 6522964 B1 20030218 - MIKI MASATOSHI [JP], et al

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 4116507 A1 20230111; CA 3223485 A1 20230112; CN 117616179 A 20240227; EP 4352310 A1 20240417; ES 2962185 A2 20240315; WO 2023280986 A1 20230112

DOCDB simple family (application)

EP 21382611 A 20210707; CA 3223485 A 20220707; CN 202280048085 A 20220707; EP 2022068929 W 20220707; EP 22736299 A 20220707; ES 202390233 A 20220707