

Title (en)

A COMPACT ARTICULATED BACKHOE LOADER WITH 270 DEGREE EXCAVATION ADVANTAGE

Title (de)

KOMPAKTER GELENKIGER HECKBAGGER MIT EINEM AUSHUBVORTEIL VON 1000 GRAD

Title (fr)

CHARGEUR DE PELLE ARTICULE COMPACT AVEC UN AVANTAGE D'EXCAVATION DE 270 DEGRÉS

Publication

**EP 4357537 A1 20240424 (EN)**

Application

**EP 23205225 A 20231023**

Priority

IN 202211060334 A 20221021

Abstract (en)

A backhoe loader comprises a front chassis, a rear chassis, a rotatable operator workstation, and a chassis lock mechanism. The front chassis comprises the loading assembly and the rear chassis is connected to the front chassis along a vertical axis joint by a pin lock assembly. The rotatable operator workstation is positioned in the rear chassis, which is positioned inside a bearing mounted cabin which is slewable in clockwise and counterclockwise directions. The operator workstation enables manoeuvring of the front chassis with respect to the rear chassis using the pin lock assembly. The chassis lock mechanism is achieved using two single acting hydraulic cylinders that are mounted horizontally on rear chassis. These hydraulic cylinders are actuated during the excavation operation which in turns locks the oscillation of vehicle and front and rear chassis acts rigidly like a single body. This rigidity of the vehicle provides the required stability during excavation.

IPC 8 full level

**E02F 3/32** (2006.01); **E02F 9/08** (2006.01); **E02F 9/16** (2006.01)

CPC (source: EP US)

**E02F 3/325** (2013.01 - EP); **E02F 3/964** (2013.01 - US); **E02F 9/0841** (2013.01 - EP US); **E02F 9/085** (2013.01 - US); **E02F 9/12** (2013.01 - US); **E02F 9/163** (2013.01 - EP); **E02F 9/166** (2013.01 - EP US); **E02F 9/225** (2013.01 - US); **E02F 9/2225** (2013.01 - US); **E02F 9/2292** (2013.01 - US)

Citation (search report)

- [X] CN 114032985 A 20220211 - JIANGSU XCMG ENGINEERING MACHINERY RES INSTITUTE CO LTD
- [X] WO 8911006 A1 19891116 - DRAZIL JAROMIR VACLAV [GB]
- [X] CN 106436790 A 20170222 - LIN DONGXING

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 4357537 A1 20240424**; GB 202316121 D0 20231206; US 2024133153 A1 20240425; US 2024229415 A9 20240711

DOCDB simple family (application)

**EP 23205225 A 20231023**; GB 202316121 A 20231020; US 202318382337 A 20231020