

Title (en)  
Tilt actuator for shovel.

Title (de)  
Kippzylinder für Schaufelladereinrichtung.

Title (fr)  
Vérin de pivotement pour pelleuse.

Publication  
**EP 0530530 B1 19941026 (DE)**

Application  
**EP 92113409 A 19920806**

Priority  
DE 4128959 A 19910830

Abstract (en)  
[origin: US5308220A] The invention concerns a scoop-and-dump jack of a loader shovel or a fork of a shovel loader and comprising a piston-rod extension 46a guided in a sealed borehole of the jack cylinder-bottom 43 to achieve a dumping motion at least as rapid as the retracting motion and to permit simple assembly and maintenance of the jack, the diameter of said extension corresponding at least to that of the piston rod 46, the jack bearing-eye 50 and the jack cylinder-bottom being integrally joined by a connection member 49 extending over most of the length of advance of the piston-rod extension 46a, and the receiving space 51 for the piston-rod extension comprising a laterally open access for purposes of assembly or exchange of the guide means and seals 44, 45 in the jack cylinder-bottom.

IPC 1-7  
**F15B 15/14**

IPC 8 full level  
**E02F 3/34** (2006.01); **E02F 3/43** (2006.01); **E02F 9/22** (2006.01); **F15B 15/14** (2006.01); **F15B 15/28** (2006.01)

CPC (source: EP US)  
**E02F 3/432** (2013.01 - EP US); **E02F 9/2271** (2013.01 - EP US); **F15B 15/1433** (2013.01 - EP US); **F15B 15/2815** (2013.01 - EP US)

Cited by  
EP3620664A1

Designated contracting state (EPC)  
AT CH DE ES FR GB IT LI NL

DOCDB simple family (publication)  
**US 5308220 A 19940503**; AT E113345 T1 19941115; DE 4128959 A1 19930304; DE 59200692 D1 19941201; EP 0530530 A1 19930310; EP 0530530 B1 19941026; ES 2064142 T3 19950116; JP H05202529 A 19930810

DOCDB simple family (application)  
**US 93580992 A 19920827**; AT 92113409 T 19920806; DE 4128959 A 19910830; DE 59200692 T 19920806; EP 92113409 A 19920806; ES 92113409 T 19920806; JP 25402192 A 19920828