

Title (en)  
HYDRAULIC ACTUATOR DEVICE FOR RAISING AND LOWERING A SEAT AND LID

Title (de)  
HYDRAULISCHE BETÄTIGUNGSVORRICHTUNG ZUM ANHEBEN UND SENKEN EINES SITZES UND EINES DECKELS

Title (fr)  
DISPOSITIF D'ACTIONNEMENT HYDRAULIQUE POUR LEVER ET BAISSER LE COUVERCLE ET LA LUNETTE D'UN W.-C.

Publication  
**EP 2433535 A1 20120328 (EN)**

Application  
**EP 10777982 A 20100518**

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• MX 2009005262 A 20090518

Abstract (en)  
The present invention generally relates to means and devices used in toilets or lavatories; particularly relates to means used for automatically raise and lower the toilet covering lids and more specifically relates to a hydraulic drive device for raising and lowering the covering lid and seat of the toilet hole; characterized in that comprises a housing that comprises two adjoining hollow chambers, one left and one right, the chambers housing a left rotating shaft and a right rotating shaft, respectively; both shafts comprise a fixed counterweight that can rotate along with the shaft inside the chambers; each chamber also houses a left elastic diaphragm and a right one, adjoined and interacting with the counterweights; said diaphragms comprising at least one connecting pivot wherein an inlet and/or outlet working fluid duct is connected so as to drive-push the counterweights when are inflated with working fluid supplied by an automatic system or by a contact driving elements system, and causing the swinging of said shafts connected to a toilet lid and seat, respectively, and which comprise in the back part a left connection flange and a right one with orifice, through which a left fixing bolt is inserted and a right one, fixed to the ends of the rotating shafts with the corresponding counterweights.

IPC 8 full level  
**A47K 13/10** (2006.01)

CPC (source: EP US)  
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Cited by  
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