

Title (en)  
SELF-LEVELLING MOBILE SUPPORTING CHASSIS

Title (de)  
SELBSTNIVELLIERENDER MOBILER TRÄGER

Title (fr)  
ELEVATEUR A NACELLE MOBILE

Publication  
**EP 1069817 A1 20010124 (EN)**

Application  
**EP 98960917 A 19981222**

Priority  
• AU 9801060 W 19981222  
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• AU 4852997 A 19971222

Abstract (en)  
[origin: WO9931962A1] A work platform-supporting device is held by legs extendable by hydraulic rams and retractable by its own weight. A sensing device including a pendulum (43) attached by a stem (45) to a universal joint (46) controls the movement of the rams. Two pairs of control valves located at 90 DEG to each other are attached to the stem (45). One pair of control valves reacts to the pitch of the platform while the other pair reacts to the roll of the platform. These valves are attached to a hinge mechanism, which is connected to the stem by a ball joint (67). When the sensing device and the platform are level the valves are in a neutral position. When the platform becomes inclined the pendulum moves to a vertical position thus activating the valves. The valves allow hydraulic fluid to flow into the ram on the downhill side of the platform and the ram on the uphill side retracts allowing hydraulic fluid to return to the hydraulic fluid reservoir. The valves have built-in dampers and the pendulum is immersed in a viscous fluid (42).

IPC 1-7  
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IPC 8 full level  
**B60G 17/019** (2006.01)

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