

Title (en)  
HYDRAULIC SHOVEL

Title (de)  
HYDRAULISCHER BAGGER

Title (fr)  
PELLE HYDRAULIQUE

Publication  
**EP 0955415 A4 20010117 (EN)**

Application  
**EP 98945533 A 19980930**

Priority  
• JP 9804402 W 19980930  
• JP 26872197 A 19971001

Abstract (en)  
[origin: EP0955415A1] An object of this invention is to provide a hydraulic excavator equipped with a blade (3), which upon performing digging work by its working equipment (4), allows the working equipment (4) to be heightened in performance to such an extent as permitting full exhibition of mechanical ability with which the working equipment (4) is inherently provided as to the cutting depth. Described specifically, owing to such an interference-preventing function of a controller (40) that, when a pivoted angle of the first boom (5) takes a value in a predetermined pivoted angle range before a critical angle upon conducting civil engineering works by the working equipment (4) with a truck frame (1) being directed forward, a control signal is outputted to increase a restriction of a solenoid-operated proportional pressure-reducing valve (17) as a first boom (5) approaches closer to a hazardous zone, the first boom (5) is surely prevented from being lowered excessively and interfering with the blade (3). When further digging work is required to dig deeper after digging is effected close to a maximum cutting depth Hd1 by the working equipment (4), a revolving superstructure 2 is caused to revolve over approximately 180 DEG and a change-over switch (37) is pressed. This makes it possible to cancel the interference-preventing function, thereby permitting continuation of subsequent digging work to a maximum cutting depth Hd2. <IMAGE>

IPC 1-7  
**E02F 3/43**; **E02F 9/20**

IPC 8 full level  
**E02F 9/20** (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP)  
**E02F 9/2033** (2013.01); **E02F 9/2228** (2013.01); **E02F 9/2285** (2013.01)

Citation (search report)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01 30 January 1998 (1998-01-30)  
• See references of WO 9916980A1

Cited by  
US9897112B2; EP3974585A4

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