

Title (en)  
WORKING MACHINE

Title (de)  
ARBEITSMASCHINE

Title (fr)  
ENGIN DE TRAVAUX

Publication  
**EP 0838554 A4 19990506 (EN)**

Application  
**EP 96922250 A 19960705**

Priority  

- JP 9601881 W 19960705
- JP 17104495 A 19950706

Abstract (en)  
[origin: WO9702385A1] A working machine in which a boom (5) is fixed vertically pivotably to a vehicle body (4), to which boom an arm (7) is fixed vertically pivotably with a bucket (10) fixed vertically pivotably to the arm, the boom, arm and bucket being driven by a boom cylinder (6), an arm cylinder (8) and a bucket cylinder (11) respectively. A vibration generator (13) is fixed to the arm, and a rolling-compaction member (19), a chisel (58) or a pile driver to the vibration generator interchangeably. A float valve (84) is provided which allows an expansion chamber to communicate with a contraction chamber of at least one of the boom cylinder, arm cylinder and bucket cylinder, and establishes or cuts off communication between them and a tank. The float valve is opened when a rolling-compaction operation is carried out, and closed when a breaking operation and a pipe driving operation are carried out.

IPC 1-7  
**E02F 3/36; E01C 19/34; B25D 9/16; B25D 17/08**

IPC 8 full level  
**B25D 9/14** (2006.01); **E02F 3/96** (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP KR)  
**B25D 9/145** (2013.01 - EP); **E02F 3/36** (2013.01 - KR); **E02F 3/967** (2013.01 - EP); **E02F 9/221** (2013.01 - EP)

Citation (search report)  

- No further relevant documents disclosed
- See references of WO 9702385A1

Cited by  
CN104032789A; FR2881764A1; DE19844313A1; CN102720198A

Designated contracting state (EPC)  
DE GB IT

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**JP 9601881 W 19960705**; EP 96922250 A 19960705; KR 19970709726 A 19971226