

Title (en)  
Fluid driven percussion device

Title (de)  
Druckmittelbetriebene Schlagvorrichtung

Title (fr)  
Dispositif à percussion actionné par fluide

Publication  
**EP 0934804 A3 20030305 (DE)**

Application  
**EP 99101199 A 19990122**

Priority  
DE 19803449 A 19980130

Abstract (en)  
[origin: US6959967B1] A fluid-powered impact vibrator ( 5 ), in particular a hydraulic hammer, comprising a fluid-powered percussion hammer ( 8 ) with a percussion piston ( 18 ) that is moved back and forth under the effect of a control means ( 10 ) and comprising a guide unit ( 7 ) on which the percussion hammer is supported, wherein the impact vibrator is additionally provided with a control valve, designed as a pressure monitor, for adaptation to the supplied input power. The control valve preferably is a pressure shut-off valve or a pressure-limiting valve ( 25 ) that is connected to the input pressure line ( 3 ) provided with the operating pressure, and automatically stops the percussion hammer ( 8 ) if the operating pressure resulting from the input power exceeds a specified maximum value. To stop the percussion hammer ( 8 ), either the pressure line ( 3 ) is blocked or the control means ( 10 ) is held in one of its end positions, i.e., the operating stroke or the return stroke positions. Moreover, the pressure shut-off valve or the pressure-limiting valve ( 25 ) preferably is a component of the guide unit, consisting of a support frame ( 7 ), or the percussion hammer ( 8 ) itself.

IPC 1-7  
**B25D 9/26**

IPC 8 full level  
**B25D 9/26** (2006.01); **B25D 17/10** (2006.01); **E21B 1/26** (2006.01)

CPC (source: EP US)  
**B25D 9/26** (2013.01 - EP US)

Citation (search report)  
• [A] FR 2397578 A1 19790209 - BAUDET ALAIN [FR]  
• [A] US 4900093 A 19900213 - KRONE JOHN J [US], et al  
• [A] US 4718329 A 19880112 - NAKAJIMA KICHIO [JP], et al  
• [A] PATENT ABSTRACTS OF JAPAN vol. 009, no. 046 (M - 360) 27 February 1985 (1985-02-27)

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**US 6959967 B1 20051101**; AT E315457 T1 20060215; DE 19803449 A1 19990805; DE 59913032 D1 20060406; EP 0934804 A2 19990811; EP 0934804 A3 20030305; EP 0934804 B1 20060111; ES 2257827 T3 20060801

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**US 23873599 A 19990128**; AT 99101199 T 19990122; DE 19803449 A 19980130; DE 59913032 T 19990122; EP 99101199 A 19990122; ES 99101199 T 19990122