

Title (en)  
HIGH PRESSURE WATER PUMP

Title (de)  
HOCHDRUCKWASSERPUMPE

Title (fr)  
POMPE A EAU HAUTE PRESSION

Publication  
**EP 1358407 A4 20040811 (EN)**

Application  
**EP 02705783 A 20020116**

Priority  
• US 0201037 W 20020116  
• US 26239301 P 20010119

Abstract (en)  
[origin: MXPA03006470A] A high-pressure water pump for supplying high pressure water for atomization in the inlet stream of a gas turbine is disclosed which includes at least one hydraulic cylinder containing a piston secured to a piston rod extending from the hydraulic cylinder and defining within the hydraulic cylinder first and second hydraulic chambers on opposite sides thereof, hydraulic oil pump and solenoid valve for selectively supplying oil under high pressure alternately to said hydraulic chambers while releasing oil from the opposite chamber thereby to reciprocate said piston rod, and at least one water cylinder including a housing and a piston therein secured to the piston rod for movement therewith and defining at least one fluid chamber in the cylinder on the side of thereof opposite the piston rod ; and check valves in fluid communication with said fluid chamber for allowing water to enter the chamber from a water source when the piston in the water cylinder is moved by the hydraulic cylinder in a direction which enlarges the volume of the fluid chamber and forces water from the fluid chamber at high pressure, while shutting off the supply of water to the chamber, when the piston in the water cylinder is moved by the hydraulic cylinder in a direction that decreases the volume of said fluid chamber.

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**F04B 17/00**; F04B 9/113; F04B 9/111; F04B 9/117

IPC 8 full level  
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IPC 8 main group level  
**F04C** (2006.01)

Citation (search report)  
• [X] WO 0077397 A1 20001221 - MARINZET BERNARD [FR]  
• [X] US 4913809 A 19900403 - SAWADA IWAO [JP], et al  
• [X] US 4659294 A 19870421 - BARTHOMEUF JEAN-CLAUDE S [FR]  
• [A] US 5564912 A 19961015 - PECK WILLIAM E [US], et al  
• See references of WO 02057632A2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

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EP 02705783 A 20020116; MX PA03006470 A 20020116; ZA 200305406 A 20030714