

Title (en)
CONSTRUCTED PISTON OR PISTON CONSISTING OF COMPONENTS THAT ARE WELDED OR SOLDERED TOGETHER

Title (de)
GEBAUTER KOLBEN ODER AUS MITEINANDER VERSCHWEISSTEN BZW. VERLÖTETEN BAUTEILEN BESTEHENDER KOLBEN

Title (fr)
PISTON CONSTRUIT OU COMPOSE D'ELEMENTS ASSEMBLES PAR SOUDAGE OU BRASAGE

Publication
EP 1144834 B1 20040728 (DE)

Application
EP 00903523 A 20000104

Priority
• DE 0000094 W 20000104
• DE 19902144 A 19990120

Abstract (en)
[origin: DE19902144A1] The piston has a lower part (3), which at least in the region of the boss (7), is made of forged steel. Below the boss, the lower part has a shaft extension (5), the external diameter of which, at least in the pressure-counterpressure direction, is roughly the same as the external diameter of the component (6), and which is welded or soldered to the component (6) with the boss.

IPC 1-7
F02F 3/00

IPC 8 full level
F02F 3/00 (2006.01); **F02F 3/22** (2006.01); **F16J 1/00** (2006.01)

CPC (source: EP US)
F02F 3/0023 (2013.01 - EP US); **F02F 3/003** (2013.01 - EP US); **F02F 3/22** (2013.01 - EP US); **F02F 2200/04** (2013.01 - EP US);
F05C 2201/0448 (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
DE 19902144 A1 20000727; DE 50007200 D1 20040902; EP 1144834 A1 20011017; EP 1144834 B1 20040728; JP 2002535548 A 20021022;
JP 4410944 B2 20100210; US 6467397 B1 20021022; WO 0043661 A1 20000727

DOCDB simple family (application)
DE 19902144 A 19990120; DE 0000094 W 20000104; DE 50007200 T 20000104; EP 00903523 A 20000104; JP 2000595048 A 20000104;
US 88965401 A 20010719