

Title (en)  
RECIPROCATING PUMP

Title (de)  
HUBKOLBENPUMPE

Title (fr)  
POMPE A PISTON ALTERNATIF

Publication  
**EP 0774072 B1 19980617 (DE)**

Application  
**EP 96900275 A 19960117**

Priority  
• DE 9600046 W 19960117  
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Abstract (en)  
[origin: DE19503621A1] The invention is based on a reciprocating pump (10) with two coaxially arranged pistons (12) in which a reciprocating movement can be induced by an eccentric (16) fitted between them and are held against the eccentric (16) by a stirrup spring (28) engaging with the pistons (12). For the purposes of easy fitting, the invention proposes that the stirrup spring (28) take the form of a bent wire section with two open, hook-shaped eyes at their ends inserted in annular grooves (26) in the pistons (12) and forming a snap connection therewith.

IPC 1-7  
**F04B 1/04**

IPC 8 full level  
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**F04B 1/0426** (2013.01 - EP US); **F04B 9/045** (2013.01 - EP US)

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DOCDB simple family (publication)  
**DE 19503621 A1 19960808**; CN 1145657 A 19970319; DE 59600286 D1 19980723; EP 0774072 A1 19970521; EP 0774072 B1 19980617; JP 3883570 B2 20070221; JP H09511307 A 19971111; US 5897302 A 19990427; WO 9623974 A1 19960808

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**DE 19503621 A 19950203**; CN 96190010 A 19960117; DE 59600286 T 19960117; DE 9600046 W 19960117; EP 96900275 A 19960117; JP 52315296 A 19960117; US 71858296 A 19961002