

Title (en)

COMPRESSION DEVICE, ESPECIALLY FOR FILLING A TANK UNDER PRESSURE

Publication

**EP 0461943 A3 19920701 (FR)**

Application

**EP 91401216 A 19910507**

Priority

FR 9006043 A 19900515

Abstract (en)

[origin: EP0461943A2] The gas compression device comprises a motor (1), a piston (2) capable of moving linearly in a pump body, a means of transmission (T) between the motor (1) and the piston (2) capable of converting the rotary movement supplied by the motor (1) into a reciprocating translational movement of the piston (2). Means of varying the speed, comprising a cam (12) are provided for imparting a different speed to the piston (2) of the compressor according to the resistance offered to the motor (1) during a complete admission-compression cycle, in such a way that the load moment is essentially constant and the motor (1) functions at its maximum torque and therefore at its maximum efficiency. The profile of the cam (12) is determined so as to ensure an essentially isothermic compression of the gas. <IMAGE>

IPC 1-7

**F04B 9/04**; F04B 39/00; F04B 39/10; F04B 49/02

IPC 8 full level

**F04B 35/00** (2006.01); **F04B 9/04** (2006.01); **F04B 35/01** (2006.01); **F04B 39/00** (2006.01); **F04B 39/10** (2006.01); **F04B 41/02** (2006.01); **F04B 49/18** (2006.01)

CPC (source: EP US)

**F04B 9/042** (2013.01 - EP US); **F04B 39/0016** (2013.01 - EP US); **F04B 39/10** (2013.01 - EP US); **F04B 49/18** (2013.01 - EP US); **Y10T 74/1828** (2015.01 - EP US); **Y10T 74/2107** (2015.01 - EP US)

Citation (search report)

- [XD] EP 0286792 A2 19881019 - CILLIT WASSERTECHNIK [DE]
- [Y] FR 1014838 A 19520822 - M DELORD SOC
- [Y] GB 347594 A 19310423 - INDIA RUBBER GUTTA PERCHA TELE, et al
- [Y] US 3465952 A 19690909 - SMITH DRESDEN G, et al
- [A] FR 2253929 A1 19750704 - ELITEX ZAVODY TEXTILNIHO [CS]
- [A] US 1938218 A 19331205 - DEMPSEY JR ARTHUR E
- [A] CH 152975 A 19320229 - SCHWEIZERISCHE LOKOMOTIV [CH]
- [A] US 4497614 A 19850205 - FRINK SHELBY T [US]

Cited by

FR3033599A1; WO2016142613A1; WO9423202A1; WO2007134633A1; WO2012097227A1

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DOCDB simple family (application)

**EP 91401216 A 19910507**; AT 91401216 T 19910507; CA 2042567 A 19910514; DE 69110769 T 19910507; FR 9006043 A 19900515; JP 20501491 A 19910515; US 69868491 A 19910513