

Title (en)  
HIGH PRESSURE CLEANING DEVICE

Title (de)  
HOCHDRUCKREINIGUNGSGERÄT

Title (fr)  
APPAREIL DE NETTOYAGE HAUTE PRESSION

Publication  
**EP 1045989 B1 20020320 (DE)**

Application  
**EP 98966373 A 19981218**

Priority  
• DE 19800680 A 19980110  
• EP 9808332 W 19981218

Abstract (en)  
[origin: DE19800680A1] The invention relates to a high-pressure cleaning device, comprising a motor and a piston pump driven by said motor. The pistons of the piston pump are elastically located on a swash plate driven by the motor. The device also comprises a motor shaft which is rotationally mounted on both sides and is rigidly connected to the swash plate on one end, in addition to a roller bearing with two concentric bearing rings at the end on the swash plate side, whose outer bearing ring is supported in an end plate of the motor while the inner bearing ring surrounds the motor shaft. The bearing on the swash plate side of the motor shaft is embodied in such a way that the motor shaft and the bearing can be easily assembled and are, to a great extent, independent from unavoidable manufacturing tolerances. To this end, the inner bearing ring loosely surrounds the motor shaft.

IPC 1-7  
**F04B 1/14**

IPC 8 full level  
**F04B 1/14** (2006.01); **F04B 53/22** (2006.01)

CPC (source: EP US)  
**F04B 1/148** (2013.01 - EP US); **F04B 53/22** (2013.01 - EP US)

Cited by  
DE102008014974B4; DE102008051434A1; DE102008051433A1; DE102008014974A1; DE102008014253A1; DE102008051333A1

Designated contracting state (EPC)  
BE CH DE DK FR GB IT LI LU NL

DOCDB simple family (publication)  
**DE 19800680 A1 19990715**; AU 2275099 A 19990726; BR 9814810 A 20001003; DE 59803473 D1 20020425; DK 1045989 T3 20020527; EP 1045989 A1 20001025; EP 1045989 B1 20020320; US 6499962 B1 20021231; WO 9935397 A1 19990715

DOCDB simple family (application)  
**DE 19800680 A 19980110**; AU 2275099 A 19981218; BR 9814810 A 19981218; DE 59803473 T 19981218; DK 98966373 T 19981218; EP 9808332 W 19981218; EP 98966373 A 19981218; US 61192900 A 20000707