

Title (en)  
HYDROSTATIC AXIAL PISTON MACHINE

Title (de)  
HYDROSTATISCHE AXIALKOLBENMASCHINE

Title (fr)  
MACHINE HYDROSTATIQUE A PISTONS AXIAUX

Publication  
**EP 0742870 A1 19961120 (EN)**

Application  
**EP 95904712 A 19950109**

Priority  
• PL 9500001 W 19950109  
• PL 30428194 A 19940712

Abstract (en)  
[origin: WO9601946A1] The invention relates to a hydrostatic axial piston machine, which has a compact construction with a high power-to weight ratio of several kW/kg, high overall efficiency higher than 90 % and considerably reduced working noise. Its working pressure exceeds 42 MPa and machine working as a pump is self-sucking. The machine in accordance with the invention is characterised in that the shaft (2) is equipped with an axial cam (6), which drives the elements controlling the working medium's flow between working chambers and the low- or high-pressure channels (12, 13) and with immovably attached on the shaft (2) support plate (3) with a fixed inclination angle, while the flow controlling element's shape is preferably a sleeve (9) with at least one hole (10) and a projection (11) supported on the cam's (6) running surface, and the internal surface of the sleeve (9) with at least one piston (5) head form together the working chamber.

IPC 1-7  
**F04B 1/18**; **F04B 1/28**; **F04B 1/16**; **F04B 7/00**; **F04B 49/12**

IPC 8 full level  
**F04B 1/16** (2006.01); **F04B 1/18** (2006.01); **F04B 1/28** (2006.01); **F04B 7/00** (2006.01); **F04B 49/12** (2006.01)

CPC (source: EP US)  
**F04B 1/16** (2013.01 - EP); **F04B 1/18** (2013.01 - EP); **F04B 1/28** (2013.01 - EP); **F04B 7/0015** (2013.01 - EP); **F04B 49/12** (2013.01 - EP US)

Citation (search report)  
See references of WO 9601946A1

Cited by  
EP1672215A3; EP1672215A2

Designated contracting state (EPC)  
AT DE FR GB IT SE

DOCDB simple family (publication)  
**WO 9601946 A1 19960125**; AT E178974 T1 19990415; DE 69509070 D1 19990520; DE 69509070 T2 19991118; EP 0742870 A1 19961120; EP 0742870 B1 19990414; PL 173937 B1 19980529; PL 304281 A1 19960122

DOCDB simple family (application)  
**PL 9500001 W 19950109**; AT 95904712 T 19950109; DE 69509070 T 19950109; EP 95904712 A 19950109; PL 30428194 A 19940712