

Title (en)
Piston pump.

Title (de)
Kolbenpumpe.

Title (fr)
Pompe à piston.

Publication
EP 0096954 A2 19831228 (EN)

Application
EP 83301911 A 19830405

Priority
GB 8210204 A 19820406

Abstract (en)
A pump cylinder (18) is driven in reciprocation relative to a hollow piston (22) within the cylinder. The piston and cylinder each have valved inlet ports (33, 34; 43, 44) at each end. A tubular member (14) communicates with the hollow of the piston centrally between the piston ends and extends perpendicular to the piston, serving further as a stationary pivot for oscillation of the piston while the cylinder is driven in a swinging reciprocation relative to the piston. The tubular member extends through and works relative to a slot (19) formed through the cylinder wall so that reciprocation of the cylinder pumps a fluid along a flow path through the valved inlet ports and along said tubular member. The cylinder is driven at low speed by a motor (15) through a gear box (16) rigidly secured to a tubular frame (71) of the pump. A number of piston and cylinder devices may be driven by a common drive means, and employ a common tubular member, in a modular arrangement. The pump is simple, reliable and quiet, and is effective to provide small quantities of air at low pressure, e.g. for aeration at isolated effluent treatment plants and at fish farms.

IPC 1-7
F04B 19/02

IPC 8 full level
F04B 1/10 (2006.01)

CPC (source: EP)
F04B 1/10 (2013.01)

Designated contracting state (EPC)
AT BE CH DE FR IT LI NL SE

DOCDB simple family (publication)
EP 0096954 A2 19831228; EP 0096954 A3 19851121

DOCDB simple family (application)
EP 83301911 A 19830405