

Title (en)  
Gear pump

Title (de)  
Zahnradpumpe

Title (fr)  
Pompe à engrenages

Publication  
**EP 0778417 A3 19971001 (DE)**

Application  
**EP 97104556 A 19970318**

Priority  
EP 97104556 A 19970318

Abstract (en)  
[origin: EP0778417A2] The pump has toothed gears (Z1,2) to feed a medium (M) from an intake pipe (ZF) into an outlet pipe (AF). A central axis (ZFA) through the intake pipe encloses an acute angle alpha with the plane (E) formed by the longitudinal axis (A1,2) of the gear or a central axis (AFA) through the outlet pipe encloses an acute angle beta with the plane. One or both angles are between 30 and 60 degrees e.g. 45 degrees, and they may be of the same size. The central axes through the intake and outlet pipes are parallel.

IPC 1-7  
**F04C 2/18**

IPC 8 full level  
**F04C 2/08** (2006.01); **F04C 2/18** (2006.01); **F04C 15/06** (2006.01)

CPC (source: EP)  
**F04C 2/086** (2013.01); **F04C 2/18** (2013.01); **F04C 15/06** (2013.01); **F04C 2250/10** (2013.01)

Citation (search report)

- [X] DE 190361 C
- [A] GB 1095353 A 19671213 - LUCAS INDUSTRIES LTD
- [A] US 1928885 A 19331003 - CHARLES GAMER

Cited by  
EP3335855A1; WO2018108349A1

Designated contracting state (EPC)  
CH LI

DOCDB simple family (publication)  
**EP 0778417 A2 19970611; EP 0778417 A3 19971001; EP 0778417 B1 20030611; DE 59710244 D1 20030717**

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**EP 97104556 A 19970318; DE 59710244 T 19970318**