

Title (en)  
GEAR MACHINE

Title (de)  
ZAHNRADMASCHINE

Title (fr)  
MACHINE A ENGRENAGES

Publication  
**EP 0638144 B1 19970514 (DE)**

Application  
**EP 94904577 A 19940118**

Priority  
• DE 9400033 W 19940118  
• DE 4303337 A 19930205

Abstract (en)  
[origin: WO9418455A1] The proposal relates to a gear machine (pump or motor) having two outwardly engaging pairs of gears (21, 22) in staggered array which are secured by gearing (30) to a drive shaft (31) in which the number of teeth of the gearing (30) is an even multiple of the external teeth of the driven pinions (16, 18). The width (b) of the teeth of the driven pinions (16, 18) on the drive shaft (31) is smaller than the width (B) of the gears and especially smaller than half the gear width (B). This provides the gear machine with better mechanical properties and increases its efficiency. The invention is also applicable to gear machines with only one pair of gears (21a).

IPC 1-7  
**F04C 2/10**; F04C 15/00; F04C 11/00

IPC 8 full level  
**F04C 2/10** (2006.01); **F04C 2/18** (2006.01); **F04C 11/00** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)  
**F04C 2/18** (2013.01 - EP US); **F04C 11/001** (2013.01 - EP US); **F04C 15/0073** (2013.01 - EP US); **Y10T 74/19679** (2015.01 - EP US)

Cited by  
CN103775332A

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**DE 4303337 A1 19940811**; **DE 4303337 C2 19950126**; DE 59402723 D1 19970619; EP 0638144 A1 19950215; EP 0638144 B1 19970514; US 5496163 A 19960305; WO 9418455 A1 19940818

DOCDB simple family (application)  
**DE 4303337 A 19930205**; DE 59402723 T 19940118; DE 9400033 W 19940118; EP 94904577 A 19940118; US 25670094 A 19940720