

Title (en)  
Magnetic drive pump

Title (de)  
Magnetpumpe

Title (fr)  
Pompe à entraînement magnétique

Publication  
**EP 0664400 B1 19990317 (DE)**

Application  
**EP 94118999 A 19941201**

Priority  
• DE 4343854 A 19931222  
• US 48891095 A 19950609

Abstract (en)  
[origin: US5580216A] A magnetic pump is provided which is especially useful for pumping corrosive agents, having simplified components made of a hard ceramic, preferably silicon carbide, which form ceramic-on-ceramic axial and radial bearing surfaces. The pump has an impeller and magnetic rotor, each being mounted on an opposite end of a ceramic shaft by a respective ceramic bush. The shaft rides in ceramic first and second plain bearing bushes, each of which forms a radial bearing surface and an axial bearing journal end face. The ceramic impeller bush is secured to the shaft by a form fit and provides an axial bearing surface against the first bearing bush end face. Similarly, the ceramic rotor bush is secured to the shaft by a form fit and forms an axial bearing surface against the end face of the second plain bush.

IPC 1-7  
**F04D 29/04; F04D 13/02**

IPC 8 full level  
**F04D 13/02** (2006.01); **F04D 29/04** (2006.01); **F04D 29/041** (2006.01); **F04D 29/043** (2006.01); **F04D 29/046** (2006.01); **F04D 29/047** (2006.01)

CPC (source: EP US)  
**F04D 13/026** (2013.01 - EP US); **F04D 29/0413** (2013.01 - EP US); **F04D 29/043** (2013.01 - EP US); **F04D 29/0465** (2013.01 - EP US); **F04D 29/047** (2013.01 - EP US); **F05C 2203/0813** (2013.01 - EP US)

Cited by  
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Designated contracting state (EPC)  
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