

Title (en)
Floating pump bearing

Title (de)
Gleitlager mit schwimmenden Lagerschalen für eine Kreiselpumpe

Title (fr)
Palier intermédiaire ou de bout pour pompe multicellulaire semi-flottant

Publication
EP 1331399 A1 20030730 (FR)

Application
EP 03290029 A 20030107

Priority
FR 0200867 A 20020124

Abstract (en)
The pump consists of vaned wheels (1) mounted on a shaft (2) and rotating together with it by means of a common bearing and an axial locking assembly, with the wheels located inside diffusers held together in a pump housing. The bearing comprises an inner ring (8) that rotates with the shaft and is made from silicon carbide, tungsten carbide or graphite, an outer ring (9) set with a clearance from the inner ring, and two sleeves (10, 11) of a material that is softer than the inner ring, e.g. of a metal such as stainless steel. Each sleeve has an outer radial rim (13) at one end, and they drive the inner ring through an elastic seal ring (15).

Abstract (fr)
Dans cette pompe multicellulaire, le palier comprend deux chemises (10,11) annulaires, interposées entre l'arbre (2) et la bague (8) intérieure en un matériau moins dur que celui de la bague et munies à l'extrémité d'un rebord (13) radial ainsi qu'un joint (15) torique entre la bague (8) intérieure et les chemises (10,11). <IMAGE>

IPC 1-7
F04D 29/04; F04D 1/06

IPC 8 full level
F04D 1/06 (2006.01); **F04D 29/04** (2006.01); **F04D 29/046** (2006.01); **F04D 29/047** (2006.01); **F04D 29/049** (2006.01)

CPC (source: EP)
F04D 1/063 (2013.01); **F04D 29/0465** (2013.01); **F04D 29/047** (2013.01); **F04D 29/049** (2013.01)

Citation (search report)
• [A] EP 0667456 A1 19950816 - AHLSTROEM OY [FI]
• [A] EP 0492605 A1 19920701 - EBARA CORP [JP]

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CN105317729A; EP1596069A3; CN108757544A

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