

Title (en)
Pump with rocking disk.

Title (de)
Taumelscheibenpumpe.

Title (fr)
Pompe à plateau oscillant.

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EP 0595279 A1 19940504 (EN)

Application
EP 93117372 A 19931027

Priority
JP 31299292 A 19921028

Abstract (en)
A pump with rocking disk is disclosed, which has a commonly termed friction-free structure without any frictional part in the pump chamber(24). It is small in size and nevertheless has a function of pumping out process fluid continuously and at a high rate. It is thus suited for applications for feeding process liquid for semiconductor manufacture and also for feeding blood or the like in medical fields. In the pump chamber, a rocking disk(34) is coupled to a drive shaft(18) via an inclined shaft portion(36) or the like as operative coupling means such that it is at an angle to the axis(X - X) of the drive shaft(18). A bellows(42) is stretched light-tight as a partitioning member between the rear side of the disk and a pump casing(20). The partitioning member prevents rotation of the disk in unison with the drive shaft but permits rocking motion of the disk. With this rocking motion, fluid in the pump chamber is fed from a suction port(30) formed in the central part of a front wall (26) through the pump chamber to a discharge port(32) formed on the outer periphery of a barrel(28) of the pump casing. <IMAGE>

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Citation (search report)
• [XY] FR 1361933 A 19640529 - RECH S ET D EXPL S IND SOREXI
• [Y] FR 84244 E 19641224
• [A] FR 1049230 A 19531229
• [A] GB 752435 A 19560711 - RICHARD THOMAS CORNELIUS
• [A] GB 1143675 A

Cited by
ITTO20100716A1; FR3091318A1; US12018672B2; WO2019081966A1; WO2020136255A1

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