

Title (en)

Suction regulated annular gear pump.

Title (de)

Sauggeregelte Zahnringpumpe.

Title (fr)

Pompe à engrenage annulaires avec régulation d'aspiration.

Publication

EP 0422617 B1 19940309 (DE)

Application

EP 90119424 A 19901010

Priority

DE 3933978 A 19891011

Abstract (en)

[origin: EP0422617A1] On a suction-regulated annular gear pump a constant reduction in the vacuum occurring in the delivery cells of the pump at higher speed is brought about by means of a long delivery cell distance from the end of the intake area to the start of the outlet orifice and the resulting reduction in the size of the delivery cells. In order to prevent trapped oil when working at lower speed, the delivery cells between the gear teeth succeeding one another in the delivery direction are each connected to the adjacent delivery cells by overflow ducts passing through the gear teeth, in which non-return valves prevent any flow counter to the delivery direction. <IMAGE>

IPC 1-7

F04C 15/00; F04C 2/10

IPC 8 full level

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CPC (source: EP KR US)

F04C 2/084 (2013.01 - EP US); **F04C 2/088** (2013.01 - EP US); **F04C 2/10** (2013.01 - KR); **F04C 2/102** (2013.01 - EP US);
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Cited by

EP0570700A1; US5359771A; CN104549793A; EP3081743A1; RU2719005C2; CN113557001A

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DOCDB simple family (publication)

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JP 2638282 B2 19970806; JP H03175182 A 19910730; KR 0153522 B1 19990115; KR 910008286 A 19910531; US 5096397 A 19920317;
US 5122335 A 19920616

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US 59371490 A 19901004; US 75080291 A 19910827