

Title (en)

Fluid delivery device with a ceramic internal gear pump

Title (de)

Förderaggregat mit einer keramischen Innenzahnradpumpe

Title (fr)

Dispositif de circulation de fluide avec une pompe à engrenages internes en matière céramique

Publication

EP 0664394 B1 20000719 (DE)

Application

EP 95100332 A 19950112

Priority

DE 4401783 A 19940121

Abstract (en)

[origin: EP0664394A1] The delivery unit has an inner pinion causes which an outer pinion via a toothing arranged between the inner pinion and the running ring to rotate with it. The inner pinion has one tooth less than the outer pinion, which causes a pumping effect to occur. At least parts of the inner gearwheel pump, such as the running ring, the inner pinion and outer pinion, are of a ceramic material, which is aluminium oxide or silicon carbide. The surface of the tooth contours of the inner and outer pinions is treated by pressing or injection moulding.

IPC 1-7

F04C 2/08

IPC 8 full level

F04C 2/08 (2006.01); **F04C 2/10** (2006.01); **F04C 15/00** (2006.01); **F04C 15/06** (2006.01)

CPC (source: EP KR US)

F04C 2/08 (2013.01 - KR); **F04C 2/082** (2013.01 - EP US); **F04C 2/12** (2013.01 - KR); **F04C 2230/22** (2013.01 - EP US); **F05C 2203/08** (2013.01 - EP US); **F05C 2203/0817** (2013.01 - EP US); **F05C 2203/0869** (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

DE FR GB IT

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EP 0664394 A1 19950726; **EP 0664394 B1 20000719**; DE 4401783 A1 19950727; DE 59508576 D1 20000824; JP H0835490 A 19960206; KR 100385747 B1 20030806; KR 960029622 A 19960817; US 5618171 A 19970408

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