

Title (en)
ROTARY PUMP FOR DELIVERING GASES AND LIQUIDS, PARTICULARY FOR USE AS A DRIVING UNIT FOR BLOOD DIAPHRAGM PUMPS

Publication
EP 0094379 B1 19870128 (DE)

Application
EP 83890083 A 19830511

Priority
• AT 17183 A 19830120
• AT 185782 A 19820512

Abstract (en)
[origin: EP0094379A1] 1. A rotary pump for driving blood diaphragm pumps and for delivering gaseous and liquid substances, in the manner of a trochoidal rotary piston pump, equipped at a 2:3 ratio with a two-lobed trochoidal casing track (2) and a triangular piston (5) rotating on an eccentric (6) of an eccentric shaft (7), the corners of said piston being in constant sliding contact with the casing track (2), characterized in that two suction and discharge channels are provided which extend through the barrel casing (1) and open into the casing track (2), their orifices (12, 12'), each exhibiting an overflow pocket (120, 120') extending in the same direction in the form of a recess over an equally large portion of the casing track (2) in each case, the position and dimension of the orifices (12, 12') with the overflow pockets (120, 120') being defined such that - regarded in a radial section of the pump - the control edges (16, 16'), at the front in the direction of rotation (13) of the piston (5), of the two orifices (12, 12') with the overflow pockets (120, 120') each coincide with one of the two simultaneous points (D1 , D2) of the two-lobed trochoid of the casing track (2), while the position of the control edges (14, 14'), at the back in the direction of rotation (13) of the piston (5), of the two orifices (12, 12') with the overflow pockets (120, 120') is defined such that when the piston (5) is in the dead center position, for example, the forward piston corner (17) in a chamber (A) is located directly above the front control edge (16') of one of the two orifices (12'), while the following piston corner (15) is located directly above the back control edge (14) of the other orifice (12).

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IPC 8 full level
F04C 2/22 (2006.01)

CPC (source: EP US)
F04C 2/22 (2013.01 - EP US); **F04C 2210/1016** (2013.01 - EP US); **Y10S 128/03** (2013.01 - EP US)

Cited by
CN100407911C; FR2844312A1

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EP 0094379 A1 19831116; **EP 0094379 B1 19870128**; CA 1207189 A 19860708; DE 3317223 A1 19831222; DE 3317223 C2 19880825; US 4594060 A 19860610

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