

Title (en)
RECIPROCATING PUMP

Publication
EP 0265591 B1 19910724 (EN)

Application
EP 87107692 A 19870526

Priority
JP 25519486 A 19861027

Abstract (en)
[origin: EP0265591A2] A reciprocating pump comprises three parallel connected plunger piston arrangements and is driven via a cam mechanism (10) by means of a rotary driving device. In order to insure a constant discharge, the cam mechanism (1) comprises three plate cams (14) fixed on a common shaft (13) so that they are spaced 120 DEG apart from each other, the displacement curve (a1 : a2; a3) of each plate cam has an ascending region in which displacement increases as the angle of rotation of the plate cam increases, and a descending region in which displacement decreases as the angle of rotation of the plate cam increases, either the ascending region or the descending region including an accelerating section in which displacement acceleratantly changes, a uniform velocity section in which displacement linearly changes, and a decelerating section in which displacement deceleratantly changes, the arrangement being such that the sum of the displacement per unit angle of rotation in the accelerating section and the displacement per corresponding unit angle of rotation in the decelerating section is equal to the displacement per unit angle of rotation in the uniform velocity section.

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CPC (source: EP)
F04B 9/042 (2013.01); **F04B 11/0066** (2013.01)

Cited by
CN114934884A; GB2344141A; GB2344141B

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CH DE FR GB IT LI SE

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EP 0265591 A2 19880504; EP 0265591 A3 19890322; EP 0265591 B1 19910724; DE 3771646 D1 19910829

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