

Title (en)
Inlet controlled gear pump.

Title (de)
Sauggeregelte Zahnringpumpe.

Title (fr)
Pompe à engrenages avec contrôle de l'aspiration.

Publication
EP 0561304 B1 19941026 (DE)

Application
EP 93104085 A 19930312

Priority
DE 4209143 A 19920320

Abstract (en)
[origin: JPH0617765A] PURPOSE: To improve efficiency and throughput of a pump by providing each of a suction passage and an outlet passage with a throttle member for adjusting a flow rate, and controlling the opening and closing of each throttle member so as to reduce fluid resistance in the pump. CONSTITUTION: A hollow gear 2 is arranged in a housing 1, a shaft 3 comprising a pinion 4 is arranged in the hollow gear 2, and a plurality of displacement cells 13, 17 are defined therebetween. A suction opening 11 is in communication with a suction passage 30 comprising a throttle 31. Further, an outlet opening 20 is in communication with an outlet passage 19. In this case, a bypass passage 31 is associated with the suction passage 30, and a throttle flap 43 is arranged therein. On the other hand, another outlet opening 35 is formed upstream in a rotational direction of the outlet opening 20. The outlet opening 35 is in communication with the outlet passage 19 via a conduit 36, and a throttle flap 37 is disposed in the conduit 36. Then, the flaps 37, 43 are controlled to open and close, respectively.

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F04C 15/04

IPC 8 full level
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CPC (source: EP US)
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