

Title (en)

IMPROVEMENTS RELATING TO VARIABLE DELIVERY PUMPS

Publication

EP 0210786 B1 19900509 (EN)

Application

EP 86305463 A 19860716

Priority

GB 8518558 A 19850723

Abstract (en)

[origin: EP0210786A1] A variable delivery pump comprises an outer casing 25, a cam ring 24 mounted in the casing for movement about a pivot 27 to vary the throw of the cam ring relative to the rotor 15 and vary the pump delivery. Two roller abutments 28 in recesses in the casing co-operative with arcuate surfaces 29 on the cam ring and pivot 27 to guide and locate the cam ring in its pivotal movement and to define chambers 34, 35, 36 between the cam ring and the casing. A spring 32 urges the cam ring into its maximum delivery position, and differential pressures obtained e.g. from the upstream and downstream sides of a control orifice in the pump outlet passage are applied in chamber 34, 35 respectively to produce a force acting in opposition to spring 32. These pressures in chambers 34, 35 act in concert to produce a resultant force acting to load the cam ring into tighter sealing engagement with the roller abutments 28 in opposition to the force exerted on the ring internally by the pump delivery pressure.

IPC 1-7

F04C 15/04

IPC 8 full level

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CPC (source: EP KR)

F04C 2/10 (2013.01 - KR); **F04C 14/226** (2013.01 - EP)

Cited by

CN104033329A; GB2406140A; DE102004002076B4; GB2406141B; EP3034780A1; CN105715547A; EP3165769A1; US9932982B2; US9109597B2; US6375435B2; WO0146591A1; US9181803B2; US9534597B2; US7108493B2; US8740593B2; US9435338B2; US7491043B2; EP1828610B1; EP1828610A1

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