

Title (en)
LIQUID PUMP.

Title (de)
PUMPE FÜR FLÜSSIGKEITEN.

Title (fr)
POMPE A LIQUIDES.

Publication
EP 0216774 A4 19870513 (EN)

Application
EP 85903182 A 19850702

Priority
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Abstract (en)
[origin: WO8600667A1] In a two-stage fuel pump (14) liquid fuel passes via gear pump (24) and radial piston pump (28) to two similar metering fuel distributors (32), (34). Delivery from piston pump (28) is variable by means of an eccentric piston drive arrangement such that maximum delivery occurs under reduced speed conditions, such as engine cranking or heavy load. Distribution (32), (34) comprise hollow cylindrical members (230) in which rotate spindles (234) driven from gear pump (24). The spindles (234) have cavities (300), (302) which periodically align with an arrangement of ports through the walls of members (230). As spindles (234) rotate, fuel is alternately received into and delivered from cavities (300), (302) metering and delivery being effected by a slidable pin (304) which axially reciprocates through spindle (234) to intrude a controllable variable amount into cavities (300), (302) under alternately applied fuel pressure to effect variable fuel displacement. Provision is made for varying the timing of fuel displacement by variation of the angular displacement of the spindle (234) of the distributor (32) relative to its drive shaft (90) from the gear pump (24).

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Citation (search report)
• [X] US 3077872 A 19630219 - ALLEN ROBERT L
• [X] US 3093079 A 19630611 - GRAHAM GEORGE C
• [A] DE 1020488 B 19571205 - DAIMLER BENZ AG
• [A] GB 729483 A 19550504 - LUCAS INDUSTRIES LTD
• See references of WO 8600667A1

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