

Title (en)

Multiple-gear pump.

Title (de)

Mehrfache Zahnradpumpe.

Title (fr)

Pompe multiple à engrenages.

Publication

**EP 0091347 A1 19831012 (FR)**

Application

**EP 83400618 A 19830324**

Priority

FR 8205409 A 19820330

Abstract (en)

1. A multiple gear pump comprising in a casing a first pump (1) arranged to supply a large work fluid mass flow rate to at least a first equipment (3) and at least a second pump (2) arranged to supply a smaller work fluid mass flow rate to at least a second independent equipment (4), each pump comprising a driven pinion and an idle pinion, means for connecting the driven pinions to a drive element (M), an orifice (8) for feeding work fluid into the casing, a first (9) and a second (10) passage for feeding work fluid between the inlet orifice and the first and second pumps, respectively, formed in the casing, a first (6) and a second (7) outlet orifice for discharging work fluid separately connected to said first and second pumps, respectively, and arranged to be connected to said first (3) and second (4) independent equipments, respectively, a refeeding orifice (12) for refeeding work fluid from the second equipment (4) formed in the casing, and a refeeding line (13) providing communication between the refeeding orifice (12) and the inlet orifice (8), characterized in that the refeeding line (13, 13') opens into the first feeding passage (9) of the first pump (1) and in that the idle pinions (111, 112) each have a hollow axis (113, 114), with the refeeding line (13') passing through said hollow axes.

Abstract (fr)

Le corps de pompe renferme une première pompe (1) alimentant (via 6) des équipements sous un fort débit et une seconde pompe (2) alimentant (via 7) un équipement d'une autre classe avec un faible débit, le retour du fluide de cet équipement s'effectuant dans la pompe, le trajet de retour (12, 122, 123, 124) débouchant dans le premier passage (9) d'amenée du fluide à la première pompe (1). Dans un mode de réalisation préféré, le trajet de retour passe par les axes creux des pignons fous des première et seconde pompe (1, 2) en permettant de même le retour à l'aspiration des fuites internes des paliers des pompes.

IPC 1-7

**F04C 15/04**; **F04C 11/00**

IPC 8 full level

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CPC (source: EP)

**F04C 2/18** (2013.01); **F04C 11/001** (2013.01); **F04C 14/02** (2013.01)

Citation (search report)

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