

Title (en)
High pressure liquid pump

Title (de)
Flüssigkeitshochdruckpumpe

Title (fr)
Pompe à haute pression pour tous liquides

Publication
EP 1048849 A1 20001102 (FR)

Application
EP 00202790 A 19970530

Priority
• EP 97926060 A 19970530
• FR 9607043 A 19960607
• FR 9613502 A 19961106

Abstract (en)
The pump assembly combines a hydraulic pump (I) and a membrane pump (II) in which supple membranes are reciprocated by the displacement of a pumped hydraulic fluid. The pistons (4) of the first pump are hollow and traversed by the hydraulic fluid which passes in the suction phase through a curved recess in a swashplate (1) or cam. The membrane (24) of the second pump is held in place by a spring (15). At the end of each piston's compression stroke there is a communication between the chamber (12,13) containing the fluid forced against the membrane and the suction chamber (9). The hydraulic fluid is drawn by the movement of the pistons and compressed by the membrane, which ensures a heat exchange between the heated and non-heated fluids and a return of the membrane to its initial position.

Abstract (fr)
Une pompe qui permet de pomper n'importe quelle sorte de liquide tout en lui imprimant une pression de roulement très élevée. Les éléments (24, 44) qui provoquent l'aspiration puis le refoulement du liquide à pomper sont entraînés par des moyens exclusivement hydrauliques à l'exclusion de moyens mécaniques ; de sorte qu'il n'y a aucun contact matériel entre lesdits éléments moteurs et le produit pompé et qu'ainsi ledit produit ne peut pas détériorer lesdits éléments mécaniques moteurs, la chambre recevant le liquide hydraulique étant à la fin de chaque cycle de compression remise en communication directe avec la réserve de liquide hydraulique. <IMAGE>

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IPC 8 full level
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CPC (source: EP US)
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