

Title (en)

Process and device for diphasic compression for the treatment of oil products

Title (de)

Verfahren und diphasige Verdichtungsanordnung zum Behandeln eines Erdölproduktes

Title (fr)

Procédé et dispositif de compression diphasique pour le traitement d'un effluent pétrolier

Publication

EP 0917905 B1 20040107 (FR)

Application

EP 98402507 A 19981008

Priority

FR 9714604 A 19971119

Abstract (en)

[origin: EP0917905A1] The apparatus to give a two-phase compression (10) to carry the energy of a number of fluids, where one is essentially liquid and the other is essentially a gas and at least one can be mixed with another, imparts a given energy value to each. The mixture from the compression stage (10) is in a liquid or essentially liquid form at a set pressure level. The entry and and/or outlet have hydraulic pump systems to move the liquid material. The apparatus has two sections, where the first gives a mixture at a pressure level and the second section converts the mixture into a second pressure level. The sections are sealed from each other such as by a labyrinth passage, and have links for the mixture to be transferred between them, with their hydraulic pump systems back-to-back to minimize the axial forces. A process and/or mixing stage is fed from the compression stage (10). The process/mixing stage has a refrigeration system, and a refrigeration circuit acts at least on part of the two-phase mixture and/or part of the mixture from the two-phase compression (10). A system registers the parameters of the liquid and/or the operation of the compressor, with a unit to calculate the necessary modification to the rotary speed of the two-phase compressor required for the process and/or the refrigeration action and/or the flow of the recirculating refrigeration fluid. A gas feed is between a pump stage and the two-phase compression, to introduce a gas into the pumped liquid, and a further feed passes gas into the mixture from the compressor.

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