

Title (en)

Use of a two-phase turbine in a hydrotreating process

Title (de)

Anwendung einer Zweiphasenturbine in einem Hydrobehandlungsverfahren

Title (fr)

Utilisation d'une turbine diphasique dans un procédé d'hydrotraitement

Publication

**EP 1505250 B1 20101006 (FR)**

Application

**EP 04291934 A 20040728**

Priority

FR 0309620 A 20030804

Abstract (en)

[origin: EP1505250A1] A fluid with a liquid proportion greater than or equal to 95% at a pressure P1 is expanded across a single-phase turbine to obtain a fluid with a liquid proportion less than or equal to 5% at a pressure P2. The second fluid is expanded again through a two- phase turbine to obtain a fluid at pressure P3. The two-phase turbine is a rotodynamic turbine. The single phase and two-phase turbines form a single machine with at least one single phase impulsor and distributor and at least one two-phase impulsor and distributor. The turbines, impulsors and distributors share a common shaft. Before the first expansion, part of the high pressure fluid is taken and expanded in a first device, then the rest of the fluid is expanded in a second device before entering the single-phase turbine. The low pressure fluid from the two- phase turbine is expanded in a third device. The first, second and third devices are expansion valves or turbines.

IPC 8 full level

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