

Title (en)
Centrifuge with Ranque tube cooling

Title (de)
Zentrifuge mit Kühlung mittels Ranque-Rohr

Title (fr)
Centrifugeuse à refroidissement par tube de Ranque

Publication
EP 1033173 B1 20050810 (FR)

Application
EP 00400470 A 20000221

Priority
FR 9902512 A 19990301

Abstract (en)
[origin: EP1033173A1] The centrifuge (1) has a Ranque tube (30) chilling pressurized gas supplied to a rotor chamber. The chilled gas enters the fluid tight chamber (5) beneath the centrifuge rotor (6). The rotor (6) is driven by pressurized gas. An aspiration unit with a Venturi injector uses the pressurized gas to entrain the gas from a purification unit (10) that filters or chemically treats gas drawn out from the chamber (5).

IPC 1-7
B04B 15/02; B04B 9/06; B04B 9/08; B04B 7/06

IPC 8 full level
B04B 5/02 (2006.01); **B04B 7/06** (2006.01); **B04B 9/06** (2006.01); **B04B 9/08** (2006.01); **B04B 15/02** (2006.01); F25B 9/04 (2006.01)

CPC (source: EP US)
B04B 7/06 (2013.01 - EP US); **B04B 9/06** (2013.01 - EP US); **B04B 9/08** (2013.01 - EP US); **B04B 15/02** (2013.01 - EP US);
F25B 9/04 (2013.01 - EP US)

Designated contracting state (EPC)
DE GB IT

DOCDB simple family (publication)
EP 1033173 A1 20000906; **EP 1033173 B1 20050810**; DE 60021782 D1 20050915; DE 60021782 T2 20060420; FR 2790407 A1 20000908;
FR 2790407 B1 20010601; JP 2000246146 A 20000912; JP 3398783 B2 20030421; US 6334841 B1 20020101

DOCDB simple family (application)
EP 00400470 A 20000221; DE 60021782 T 20000221; FR 9902512 A 19990301; JP 2000055421 A 20000301; US 51602900 A 20000229