Title (en)

Concurrent cyclone separator and its applications.

Title (de)

Gleichstrom-Zyklonabtrennvorrichtung und ihre Anwendungen.

Title (fr)

Séparateur cyclonique à cocourant et ses applications.

Publication

EP 0461003 A1 19911211 (FR)

Application

EP 91401388 A 19910529

Priority

FR 9006937 A 19900605

Abstract (en)

Mixer-separator permitting a light phase L1, contained in a mixture M1 also comprising a dense phase D1, to be separated from the dense phase D1 and this phase L1 to be mixed with a dense phase D2 or with a mixture M2 containing this phase D2 and a light phase L2. The mixture M1 is introduced at (1) and the phase D1 is recovered at (10). The dense phase D2 or the mixture M2 is introduced at (3) and it penetrates at (4) into an inner second chamber into which at least a portion of the phase L1 also penetrates. A mixture comprising the phases L1, D2, and L2 if it as been introduced, is obtained at (4'). The apparatus preferably comprises blades (6) permitting the progression of the vortex in the outlet (5) to be limited. This apparatus permits the rapid heat exchange, for example quenching, of one phase L1 by a phase D2 or a mixture M2. It may also be used for rapidly replacing a phase D1 contained in a mixture M1, which also comprises a phase L1, by a phase D2 different from D1. <IMAGE>

IPC 1-7

B04C 3/00; B04C 7/00

IPC 8 full level

B04C 3/00 (2006.01); **B04C 3/06** (2006.01); **B04C 7/00** (2006.01)

CPC (source: EP US)

B04C 3/00 (2013.01 - EP US); **B04C 3/06** (2013.01 - EP US); **B04C 7/00** (2013.01 - EP US)

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EP 0461003 A1 19911211; **EP 0461003 B1 19950823**; CA 2043947 A1 19911206; CA 2043947 C 20011218; DE 69112286 D1 19950928; DE 69112286 T2 19960208; ES 2079045 T3 19960101; FR 2662618 A1 19911206; FR 2662618 B1 19930129; JP 3435515 B2 20030811; JP H04227867 A 19920817; US 5129930 A 19920714

DOCDB simple family (application)

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