

Title (en)

Centrifugal separators of the cyclonic type.

Title (de)

Zentrifugalzyklonabscheider.

Title (fr)

Perfectionnements aux séparateurs centrifuges du genre cyclone.

Publication

**EP 0028996 A1 19810520 (FR)**

Application

**EP 80420122 A 19801107**

Priority

FR 7928023 A 19791108

Abstract (en)

[origin: CA1139243A] The present invention relates to improvements in centrifugal separators of the cyclone type, in which the liquid or gaseous fluid to be purified passes through an inlet blading which is sectioned so as to cause the fluid to rotate rapidly in so-called irrotational flow or regime with uniform longitudinal component, around high voltage electrode. An outlet device firstly comprises a convergent portion which partly converts the energy of rotation into energy of longitudinal translation, then a blading which completes the conversion, and finally a divergent portion in which the excess of dynamic pressure of flow is converted into static pressure in order to recover as much as possible of the energy applied to the fluid upstream of the inlet of the cyclone device. The separated particles are evacuated through a tangential outlet. The invention is more particularly applicable to the purification of fluids.

Abstract (fr)

Le fluide liquide ou gazeux à épurer traverse l'aubage d'entrée (8) profilé de manière à le faire tourner rapidement suivant le régime irrotationnel avec composante longitudinale uniforme, autour de l'électrode haute tension (14). Le dispositif de sortie (5) comprend d'abord un couvergent (9) qui transforme en partie l'énergie de rotation en énergie de translation longitudinale, puis un aubage (13) qui achève la transformation, et enfin un divergent (11) dans lequel l'excès de pression dynamique d'écoulement se transforme en pression statique afin d'achever de récupérer au maximum l'énergie appliquée au fluide en amont de l'entrée (4) du dispositif cyclone. Les particules séparées sortent tangentiellement en (15). Epuration des fluides.

IPC 1-7

**B04C 3/06; B03C 3/14**

IPC 8 full level

**B03C 3/15** (2006.01); **B04C 3/06** (2006.01)

CPC (source: EP US)

**B03C 3/15** (2013.01 - EP US); **B04C 3/06** (2013.01 - EP US); **B04C 2009/001** (2013.01 - EP US)

Citation (search report)

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- FR 61665 E 19550517
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- US 4010011 A 19770301 - REIF ROBERT B

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WO9309875A1

Designated contracting state (EPC)

BE CH DE GB IT NL SE

DOCDB simple family (publication)

**EP 0028996 A1 19810520; EP 0028996 B1 19830511**; AU 535526 B2 19840329; AU 6419280 A 19810514; BR 8007168 A 19810512; CA 1139243 A 19830111; DE 28996 T1 19830414; DE 3063179 D1 19830616; FR 2469211 A1 19810522; FR 2469211 B1 19830729; IN 153607 B 19840728; JP H0230300 B2 19900705; JP S57113858 A 19820715; US 4390426 A 19830628; ZA 806808 B 19811028

DOCDB simple family (application)

**EP 80420122 A 19801107**; AU 6419280 A 19801107; BR 8007168 A 19801105; CA 364024 A 19801105; DE 3063179 T 19801107; DE 80420122 T 19801107; FR 7928023 A 19791108; IN 1278CA1980 A 19801115; JP 15643080 A 19801105; US 38198182 A 19820525; ZA 806808 A 19801104