

Title (en)

Rotating heat transfer and thermal purification device for gaseous effluents.

Title (de)

Drehende Vorrichtung zur Wärmeübertragung und zum thermischen Reinigen von Abgasen.

Title (fr)

Dispositif rotatif de transfert de chaleur et d'épuration thermique appliqué à des effluents gazeux.

Publication

EP 0684427 A1 19951129 (FR)

Application

EP 95401154 A 19950518

Priority

FR 9406282 A 19940524

Abstract (en)

The rotary unit consists of a shell or cage (2) and a crown (1) containing a charge of a material with a large heat exchange surface, a drive to rotate the cage and crown relative to one another about a vertical axis, and at least one duct (5) for introducing the effluent gas into the cage and another (6) to remove it after treatment. The crown has at least one sector (A) to connect the inlet duct at any time with the central part of the cage, and a second sector (B) to connect it with the outlet duct. The central part of the crown has an aperture (8) for a thermal or catalytic reactor which burns off or converts pollutants contained in the gases passing through it. The charge of solid material can be in the form of cryogenic nodules. <IMAGE>

IPC 1-7

F23G 7/06; **F28D 19/04**

IPC 8 full level

F23J 15/00 (2006.01); **F23G 7/06** (2006.01); **F23G 7/07** (2006.01); **F23J 15/08** (2006.01); **F28D 19/04** (2006.01)

CPC (source: EP KR US)

F23G 7/06 (2013.01 - KR); **F23G 7/068** (2013.01 - EP US); **F28D 19/045** (2013.01 - EP US)

Citation (applicant)

FR 2564037 A1 19851115 - INST FRANCAIS DU PETROLE [FR]

Citation (search report)

- [XY] GB 1166209 A 19691008 - KAZAKHSK NII ENERGETIKI [RU]
- [X] FR 2373769 A1 19780707 - AIR IND [FR]
- [X] FR 1397214 A 19650430 - CHAUSSON USINES SA
- [A] DE 3516831 A1 19861113 - LENTJES DAMPFKESSEL FERD [DE]
- [A] US 4231418 A 19801104 - LAGODMOS GEORGE P
- [Y] US 3404965 A 19681008 - SHILLER BENJAMIN P
- [A] US 3678992 A 19720725 - DANIELS ALEXANDER
- [A] GB 2065856 A 19810701 - STEINMUELLER GMBH L & C
- [XP] WO 9423246 A1 19941013 - APPLIED REGENERATIVE TECHNOLOG [US]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 12, no. 155 (C - 494) 12 May 1988 (1988-05-12)

Cited by

EP2400249A1; FR2961893A1; FR2786551A1; US6235249B1; US6193504B1; WO2009135573A3; EP1004806B1

Designated contracting state (EPC)

BE DE ES GB IT NL SE

DOCDB simple family (publication)

EP 0684427 A1 19951129; **EP 0684427 B1 20010228**; CA 2150000 A1 19951125; CA 2150000 C 20060214; DE 69520168 D1 20010405; DE 69520168 T2 20010621; ES 2156597 T3 20010701; FR 2720488 A1 19951201; FR 2720488 B1 19960712; JP 3655667 B2 20050602; JP H0868596 A 19960312; KR 100414430 B1 20040309; KR 950033399 A 19951226; NO 304906 B1 19990301; NO 952023 D0 19950522; NO 952023 L 19951127; US 5643538 A 19970701

DOCDB simple family (application)

EP 95401154 A 19950518; CA 2150000 A 19950523; DE 69520168 T 19950518; ES 95401154 T 19950518; FR 9406282 A 19940524; JP 14960395 A 19950524; KR 19950012992 A 19950524; NO 952023 A 19950522; US 44595895 A 19950522