

Title (en)  
CATALYTIC REACTOR CARTRIDGE

Title (de)  
PATRONE FÜR KATALYTISCHEN REAKTOR

Title (fr)  
CARTOUCHE D'UN REACTEUR CATALYTIQUE

Publication  
**EP 1871997 A4 20101110 (EN)**

Application  
**EP 06740779 A 20060410**

Priority  

- US 2006013242 W 20060410
- US 10597205 A 20050414
- US 10597305 A 20050414
- US 10597405 A 20050414

Abstract (en)  
[origin: WO2006113196A2] A reactor cartridge includes a plurality of spaced- apart monoliths , formed along a tube or other mandrel . Each monolith is formed of a pair of flat and corrugated metal strips , spirally wound around the tube . These strips could be made of solid or screen material . The corrugations are skewed, such that the monolith imparts a swirl to gases flowing through it . The corrugations of the strips in adjacent monoliths are oriented differently, so that successive monoliths impart different swirls to the gases, so as to promote mixing of gases and better heat transfer from the exterior to the interior of the cartridge. An insertion and removal tool simplifies the procedure for stacking such cartridges in a long pipe, or for removing cartridges from the pipe. The all-metal construction facilitates heat transfer through the entire reactor, and avoids the problems associated with packed ceramic beds.

IPC 8 full level  
**B01J 8/04** (2006.01); **B01J 19/24** (2006.01); **B01J 19/32** (2006.01); **B25F 1/00** (2006.01); **F01N 3/28** (2006.01); **F01N 13/02** (2010.01); **F01N 13/18** (2010.01)

CPC (source: EP)  
**B01J 19/2415** (2013.01); **B01J 19/2485** (2013.01); **B01J 19/32** (2013.01); **C01B 3/38** (2013.01); **C01B 3/384** (2013.01); **C01B 3/40** (2013.01); **F23C 13/00** (2013.01); **B01J 2219/32206** (2013.01); **B01J 2219/3221** (2013.01); **B01J 2219/32227** (2013.01); **B01J 2219/32237** (2013.01); **B01J 2219/32275** (2013.01); **B01J 2219/32296** (2013.01); **B01J 2219/32408** (2013.01); **B01J 2219/32466** (2013.01); **B01J 2219/328** (2013.01); **C01B 2203/0233** (2013.01); **C01B 2203/063** (2013.01); **C01B 2203/065** (2013.01); **C01B 2203/066** (2013.01); **C01B 2203/068** (2013.01); **C01B 2203/1023** (2013.01)

Citation (search report)  

- [XY] EP 0433223 A1 19910619 - SULZER AG [CH]
- [YA] EP 1329603 A1 20030723 - CALSONIC KANSEI CORP [JP]
- [A] EP 0687806 A1 19951220 - SHOWA AIRCRAFT IND [JP]
- See references of WO 2006113196A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

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**US 2006013242 W 20060410; CA 2604959 A 20060410; EP 06740779 A 20060410**