

Title (en)  
SEPARATING FINE SOLID PARTICULATES FROM A GAS STREAM

Title (de)  
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Title (fr)  
SEPARATION DE FINES MATIERES PARTICULAIRES SOLIDES D'UN FLUX DE GAZ

Publication  
**EP 1472004 A1 20041103 (EN)**

Application  
**EP 02736482 A 20020124**

Priority  
US 0202232 W 20020124

Abstract (en)  
[origin: WO03066225A1] The present invention relates to a cyclone separator for use between an upper (102) and a lower tube sheet (104), the cyclone (100) comprising: a substantially vertical cyclone body (106) having a closed bottom end (108) and a top end (110) fixed with respect to the upper tube sheet (102), the cyclone body (106) defining a feed gas inlet (112) at its top end (110), the feed gas inlet (112) extending above the upper tube sheet (102) for receiving a particle-contaminated gas stream therefrom, the cyclone body (106) further defining a sidewall of the cyclone body, the sidewall defining a plurality of discharge openings (114) located between the upper (102) and the lower tube sheets (104) for discharging particles and a minor amount of an underflow gas stream; one or more swirl vanes (116) located proximate the gas inlet (112) to induce centripetal acceleration of the particle-contaminated gas stream; a gas outlet tube (118) defining a clean gas inlet (120) end located centrally within the cyclone body (106) for receiving a purified gas stream and further defining a clean gas outlet (122) located below the lower tube sheet (104) for discharging the purified gas stream, the gas outlet tube (118) extending through the closed bottom end (108) of the cyclone body (106) and further extending through the lower tube sheet (108).

IPC 1-7  
**B04C 3/06**; **B04C 3/04**

IPC 8 full level  
**B01D 45/14** (2006.01); **B04C 3/04** (2006.01); **B04C 3/06** (2006.01)

CPC (source: EP)  
**B01D 45/14** (2013.01); **B04C 3/04** (2013.01); **B04C 3/06** (2013.01); **B04C 2003/006** (2013.01)

Citation (search report)  
See references of WO 03066225A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 03066225 A1 20030814**; AU 2002309484 A1 20030902; CA 2477482 A1 20030814; CN 1287902 C 20061206; CN 1622860 A 20050601; EP 1472004 A1 20041103

DOCDB simple family (application)  
**US 0202232 W 20020124**; AU 2002309484 A 20020124; CA 2477482 A 20020124; CN 02828591 A 20020124; EP 02736482 A 20020124