

Title (en)  
External, pressurized closed-cyclone apparatus for FCC unit

Title (de)  
Externes geschlossenes Druck-Cyclon für FCC-Anlage

Title (fr)  
Cyclone extérieur fermé, sous pression, pour unité FCC

Publication  
**EP 0758014 A3 19970402 (EN)**

Application  
**EP 96112454 A 19960801**

Priority  
US 51287095 A 19950809

Abstract (en)  
[origin: EP0758014A2] A pressurized closed-cyclone catalyst disengaging apparatus for use in an FCC unit. A closed-cyclone apparatus of the present invention independently pressurized in the absence of a disengager vessel has a line for venting stripping steam and hydrocarbon vapor from a catalyst stripping stage to a catalyst disengaging stage for rapidly disengaging catalyst particles from an FCC reaction hydrocarbon effluent.  
<IMAGE>

IPC 1-7  
**C10G 11/18**

IPC 8 full level  
**B04C 5/26** (2006.01); **B01J 35/10** (2006.01); **B01J 38/00** (2006.01); **B04C 9/00** (2006.01); **C10G 11/18** (2006.01); **C10G 55/06** (2006.01)

CPC (source: EP KR)  
**B04C 5/02** (2013.01 - KR); **B04C 9/00** (2013.01 - KR); **C10G 11/18** (2013.01 - EP)

Citation (search report)  
• [X] US 3261776 A 19660719 - BAUMANN GEORGE P, et al  
• [A] EP 0613935 A1 19940907 - KELLOGG M W CO [US]  
• [A] US 4502947 A 19850305 - HADDAD JAMES H [US], et al  
• [A] EP 0236055 A2 19870909 - ENGELHARD CORP [US]

Designated contracting state (EPC)  
DE ES FR GB NL

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**EP 0758014 A2 19970212; EP 0758014 A3 19970402**; CA 2180686 A1 19970210; JP H09143479 A 19970603; KR 970009895 A 19970327; MX 9603320 A 19970329

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**EP 96112454 A 19960801**; CA 2180686 A 19960708; JP 21015496 A 19960808; KR 19960032725 A 19960806; MX 9603320 A 19960809