

Title (en)

Vortex finder for a centrifugal separator (cyclone)

Title (de)

Tauchrohr für einen Fliehkraftabscheider (Zyklon)

Title (fr)

Capteur de tourbillon pour un séparateur centrifuge (cyclone)

Publication

EP 0596377 B1 19970305 (DE)

Application

EP 93117287 A 19931026

Priority

DE 4236895 A 19921031

Abstract (en)

[origin: EP0596377A1] A vortex finder for a centrifugal separator (cyclone) consists of a plurality of rings which are arranged one on top of the other and connected to one another. These rings are composed in turn of a plurality of plate-shaped segments (5). In order to provide a vortex finder which is suitable for adaptation to different sized centrifugal separators and on which individual components can be interchanged particularly easily, the segments (5) of a ring are coupled under the effect of gravity into segments of the respective ring arranged above. The bearing faces, required for connection to a segment arranged above, of the respective segment (5) are designed at least partially in the form of slopes (12) which are aligned with the outside of the vortex finder. Preferably, further slopes (10, 11) are provided which are aligned with the inside of the vortex finder so that reliable and self-locking suspension of the individual segment (5) within the structure forming the vortex finder is achieved. <IMAGE>

IPC 1-7

B04C 5/13

IPC 8 full level

B04C 5/12 (2006.01); **B04C 5/085** (2006.01); **B04C 5/103** (2006.01); **B04C 5/107** (2006.01); **B04C 5/13** (2006.01)

CPC (source: EP US)

B04C 5/085 (2013.01 - EP US); **B04C 5/13** (2013.01 - EP US)

Citation (examination)

- DE 3644339 A1 19880714 - KRUPP POLYSIUS AG [DE]
- US 1666284 A 19280417 - GILCHRIST WILLIAM A
- DE 2164503 A1 19730705 - NEWELL TONY FREDERICK
- US 716865 A 19021230 - CHOQUET HENRI [FR], et al

Cited by

CN111672642A

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL PT SE

DOCDB simple family (publication)

US 5441081 A 19950815; AT E149383 T1 19970315; CZ 229893 A3 19940518; CZ 285467 B6 19990811; DE 4236895 A1 19940505;
DE 59305596 D1 19970410; DK 0596377 T3 19970908; EP 0596377 A1 19940511; EP 0596377 B1 19970305; ES 2099882 T3 19970601;
FI 934527 A0 19931013; FI 934527 A 19940501; JP H06198220 A 19940719; SK 119593 A3 19940907; SK 280099 B6 19990806

DOCDB simple family (application)

US 14477293 A 19931029; AT 93117287 T 19931026; CZ 229893 A 19931029; DE 4236895 A 19921031; DE 59305596 T 19931026;
DK 93117287 T 19931026; EP 93117287 A 19931026; ES 93117287 T 19931026; FI 934527 A 19931013; JP 29234093 A 19931019;
SK 119593 A 19931027