

Title (en)
Swirl tube separator.

Title (de)
Wirbelrohr-Abscheider.

Title (fr)
Tube séparateur à vortex.

Publication
EP 0360360 B1 19940316 (EN)

Application
EP 89202391 A 19890921

Priority
GB 8822348 A 19880922

Abstract (en)
[origin: EP0360360A2] Swirl tube separator comprising a cylindrical housing (1) having an inlet part (3) at its upper end and a solids outlet opening (5) at its lower end part. The inlet part (3) is provided with swirl imparting means (19). A swirl zone (20) extends in the housing (1) between the swirl imparting means (19) and the solids outlet opening (5). An open-ended fluid outlet conduit (11) is arranged concentrically in the housing (1) and comprises a primary section (13) extending into the inlet part (3) of the housing (1), a downwardly tapering frustoconical section (15) joined to the lower end of the primary section (13), and a secondary section (17) having a diameter equal to the smallest diameter of the frustoconical section (15) and joined to the lower end of the frustoconical section (15). The ratio of the distance between the lower ends of the fluid outlet conduit (11) and the swirl zone (20) to the inner diameter of the housing (1) is between 1.0 and 3.0.

IPC 1-7
B04C 5/081

IPC 8 full level
B01D 45/12 (2006.01); **B04C 5/081** (2006.01); **B04C 5/103** (2006.01); **B04C 5/13** (2006.01)

CPC (source: EP KR)
B04C 5/08 (2013.01 - KR); **B04C 5/081** (2013.01 - EP); **B04C 5/103** (2013.01 - EP); **B04C 5/13** (2013.01 - EP)

Cited by
CN112146087A; US8287613B2; US7648544B2; US8025717B2; WO2016156947A1; WO2008145657A1; WO2024047123A1

Designated contracting state (EPC)
BE DE ES FR GB IT NL

DOCDB simple family (publication)
EP 0360360 A2 19900328; EP 0360360 A3 19910130; EP 0360360 B1 19940316; AU 4159189 A 19900329; AU 616800 B2 19911107; CA 1336899 C 19950905; DE 68913882 D1 19940421; DE 68913882 T2 19940630; ES 2050785 T3 19940601; GB 8822348 D0 19881026; JP 2907458 B2 19990621; JP H02115056 A 19900427; KR 0152963 B1 19981015; KR 900004408 A 19900412

DOCDB simple family (application)
EP 89202391 A 19890921; AU 4159189 A 19890920; CA 610163 A 19890901; DE 68913882 T 19890921; ES 89202391 T 19890921; GB 8822348 A 19880922; JP 24488189 A 19890920; KR 890013472 A 19890919