

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

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