

Title (en)  
Sand trap device

Title (de)  
Sandfanganlage

Title (fr)  
Trappe de sable

Publication  
**EP 1134323 A3 20030129 (DE)**

Application  
**EP 01106213 A 20010314**

Priority  
DE 10012379 A 20000314

Abstract (en)  
[origin: EP1134323A2] The sand and grit interceptor (detritor) comprises a circular tank (1) with an upward, central internal projection (3) in the base (2). The surrounding annular interception channel so formed, reduces downwardly in cross section. Preferred features: The angle of inclination is selectable but preferably about 40 degrees. An annular sand collection channel (4) is defined; its width is preferably about 30% of the tank radius. Tank depth is preferably at least 40%-50% of the tank diameter. The outer wall is upright. There is at least one scraper (10) operating near the internal base to carry sand to an extraction opening. Basal- (10) and scum- (5, 6) scrapers are turned on the same vertical shaft (8), preferably offset through 180 degrees upon it. The base scraper may be moved radially. The scraper moves the settled sand when turned in one direction; in the other, it conveys it to washing and possible aeration. The scraper lifts sand up a ramp, stirring it up. A vertical plate interceptor is included on another side, causing sand to be transported only along the channel. Aeration is provided near the cylindrical outer wall. A distributed annular aerator is provided. The fat trap (13) includes flotation lamellae. A scum separator provided, includes a scraper plate (6) moving relatively to a hopper (7). It is turned on a vertical shaft (8), the plate extending above and below the level of operation (A). The hopper inlet has a ramp, preferably two. The scum scraper plate can be tilted about an axis (9) running longitudinally through it, being at the same time spring-loaded into one position.

IPC 1-7  
**E03F 5/14; B01D 21/00**

IPC 8 full level  
**E03F 5/14** (2006.01)

CPC (source: EP)  
**E03F 5/14** (2013.01)

Citation (search report)

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