

Title (en)
APPARATUS FOR SEPARATING PARTICULATES FROM A FLUID STREAM

Title (de)
VORRICHTUNG ZUR TRENNUNG VON PARTIKELN AUS EINEM FLÜSSIGKEITSSTROM

Title (fr)
APPAREIL DE SEPARATION APPAREIL DE SEPARATION APPAREIL DE SEPARATION

Publication
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Application
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Priority

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- US 1741504 A 20041220

Abstract (en)
[origin: WO2006065964A1] A screen apparatus (100) for improved separation of particulates from a fluid stream is configured and arranged to filter relatively large particulates from the fluid stream as the fluid stream passes from a storage chamber (16) of the tank (11) to a tank outlet (13) and is removably affixed to a diverter, such as a baffle (14), used to divert a portion or all of the fluid into the storage chamber. The screen (100) is preferably shaped to substantially conform to the shape of the diverter (14) to aid in the smoothing of the fluid flow within the retention section of the tank and may be entirely porous, or it may be non-porous at its leading edge (104) to minimize particulate build-up at the transition from the tank interior wall to the screen (100). The apparatus may optionally include a second screen (200) to provide additional filtering of floating particulates as the fluid level in the tank exceeds the crown elevation of the inlet (12). The second screen (200) may be substantially horizontally oriented and may be combined with a collection weir (201) and may be conical in shape. A high flow bypass arrangement for the separation system may include an upper baffle (300) and a lower baffle (310) or a screen (320) instead of the lower baffle (310). The upper baffle (300) is set closer to the center of the tank (11) than the lower baffle (310) or screen (320), thereby providing more volume for flow diversion behind the upper baffle (300).

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