

Title (en)
INVERTING FILTER CENTRIFUGE

Title (de)
STÜLPFILTERZENTRIFUGE

Title (fr)
CENTRIFUGEUSE A FILTRE DE RECOUVREMENT

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Application
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Abstract (en)
[origin: US7168571B2] The invention relates to an inverting filter centrifuge comprising a filter drum (16) that is rotatably mounted in a machine frame and projects in a cantilevered manner into a housing that is connected to the machine frame, said drum radially surrounding a centrifugal chamber (14) that can be subjected to an excess or negative pressure. The centrifugal chamber (14) is sealed on one end face by a centrifugal chamber cover (25) and on the other face by a sliding base (23). The filter drum (16), the centrifugal chamber cover (25) and the sliding base (23), together with a sliding shaft (12) that is connected in a fixed manner to the latter are driven by a hollow shaft (3) that causes them to rotate in unison. The filter drum (16) and the sliding base (23) are moved in relation to one another by an axial displacement of the sliding shaft (12), said action inverting a filter cloth (22) and discharging the separated solid matter from the centrifugal chamber (14). The centrifuge is provided with a passage for the media that is to be introduced into the rotating chamber, said passage running from the sliding base side via the sliding shaft to a radially static inlet channel (26) and removing the need for seals in the centrifugal chamber (14) and the solid matter collection chamber (32). The lack of abraded particles achieved by the absence of seals in the sensitive centrifugal chamber and solid matter collection chamber eliminates the risk of contamination. The optimal configuration for a clean room installation renders the inventive inverting filter centrifuge particularly suitable for the processing of highly pure/pharmaceutical products.

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