

Title (en)  
INVERTING FILTER CENTRIFUGE

Title (de)  
STÜLPFILTERZENTRIFUGE

Title (fr)  
CENTRIFUGEUSE A FILTRE DE RECOUVREMENT

Publication  
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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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