

Title (en)
CROSS-FLOW FILTRATION UNIT

Title (de)
CROSSFLOW-FILTRATIONSEINHEIT

Title (fr)
UNITE DE FILTRATION A CONTRE-COURANT

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Abstract (en)
[origin: WO0149401A1] The invention relates to an improved cross-flow filtration unit for separating substances by the cross-flow filtration of liquid media and recovering the desired substances in the filtrate and/or the concentrate. The unit is characterised by an improved filtration performance and product yield. The inventive cross-flow filtration unit has a filtration material consisting of two microporous membrane layers which lie on top of one another, whereby one membrane layer facing a filtrate collection gap has an average pore size that produces an exclusion limit of approximately 1000 dalton to 1.2 μ m, preventing the concentrate substances from passing through this membrane layer and whereby the membrane layer facing the overflow gap has an average pore size which is greater than that of the first membrane by at least a factor of 1.3. The cross-flow filtration unit can be used in the pharmaceutical, medical, cosmetic, chemical, bio-technical, genetic engineering and environmental protection industries and the laboratory field to filter liquids, emulsions, suspensions, beverages, water and solutions for obtaining valuable materials, separating substances, for depyrogenisation or sterilisation, for separating harmful substances, micro-organisms or cellular components and for the desalination and concentration of protein solutions and other biological media.

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