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(54) Title: PROCESS FOR CELL CULTURING BY CONTINUOUS PERFUSION AND ALTERNATING TANGENTIAL FLOW

(57) Abstract: The invention relates to a process for the culturing of cells by continuous perfusion culturing of a cell culture comprising cell culture medium and cells, wherein cell culture medium is added to the cell culture, the cell culture is circulated over a filter module comprising hollow fibers resulting in an outflow of liquid having a lower cell density than the cell culture and the flow within the filter module is an alternating tangential flow. Preferably, culture medium is added at a particular perfusion rate and/or biomass is removed form the culture at least once. The method is especially suitable for the culturing of aggregating cells. The invention also relates to such a process wherein a biological substance, preferably an antibody, is produced by the cells, which biological substance may be further purified in downstream processing.

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