Title (en)

METHOD AND DEVICE FOR MONITORING THE CONTENTS OF MIXED REACTORS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ÜBERWACHUNG DES INHALTS DURCHMISCHTER REAKTOREN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE SURVEILLANCE DE CONTENU DE RÉACTEURS MIXTES

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Application

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Abstract (en)

[origin: WO2023241869A1] The invention relates to a method and to a device for monitoring the contents of mixed reactors. The invention is particularly applicable for monitoring the contents of mixed reactors which have high requirements for sterility and purity as well as in applications which have reactors with complex geometry or a small size and the associated limited accessibility to measuring apparatuses. The invention can therefore be applied, for example, in the process monitoring of cell cultures or chemical reactions and of processing, purification and formulation processes of pharmaceutical, biological or chemical products as well as in the monitoring of storage processes. The problem of the present invention is that of providing a method by means of which the contents of mixed reactors can be monitored with sensors inside the reactor robustly and and in an easy-to-handle manner, while simultaneously having good scalability in large and small reactor volumes and having the possibility of detecting a plurality of properties of the reactor contents. The problem of monitoring the contents of mixed reactors is solved according to the invention, the reactor contents having at least one property to be monitored and the at least one property to be monitored influencing at least one signal of at least one sensor component and the at least one signal of the at least one sensor component being detected by at least one measuring arrangement, by a method in which at least one sensor, which contains the at least one sensor component, is not stationary and moves in the reactor so that the at least one sensor is not permanently located in the detection region of the at least one measuring arrangement and the at least one signal of the at least one sensor component is at least detected by the at least one measuring arrangement while the at least one sensor is located in the detection region of the at least one measuring arrangement.

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