

Title (en)
DEVICE AND METHOD FOR COMPENSATING SHORT-TERM PRESSURE OR VOLUME FLUCTUATIONS OF A MEDIUM IN A CONTINUOUS BIOPHARMACEUTICAL PROCESS

Title (de)
VORRICHTUNG UND VERFAHREN ZUM AUSGLEICH VON KURZFRISTIGEN DRUCK- ODER VOLUMENSCHWANKUNGEN EINES MEDIUMS IN EINEM KONTINUIERLICH GEFÜHRTEM BIOPHARMAZEUTISCHEN PROZESS

Title (fr)
DISPOSITIF ET PROCÉDÉ DE COMPENSATION DES FLUCTUATIONS DE PRESSION OU DU VOLUME DE COURTE DURÉE D'UN FLUIDE DANS UN PROCESSUS BIOPHARMACEUTIQUE SE DÉROULANT EN CONTINU

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EP 3908400 A1 20211117 (DE)

Application
EP 19835394 A 20191219

Priority
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Abstract (en)
[origin: WO2020144044A1] A device (10) for compensating short-term pressure or volume fluctuations of a medium in a continuous biopharmaceutical process comprises a receiving space (24) fluidically connected to a process line through which a medium flows, said receiving space being provided for the short-term storage of an excess amount of a medium flowing into the receiving space (24). The device (10) further comprises a compensating space (26), which is separated from the receiving space (24) by a deflectable, more particularly flexible and elastically deflectable, element (22; 42; 48; 56), and a counter pressure means (30), arranged in the compensating space (26), for exerting a counter pressure on the deflectable element (22; 42; 48; 56) in the direction of the receiving space (24). All components of the device (10) coming into contact with the medium are designed as disposable components. A method for compensating short-term pressure or volume fluctuations of a medium in a continuous biopharmaceutical process comprises the following steps: providing a receiving space (24) fluidically connected to a process line through which a medium flows; receiving an excess amount of a medium flowing into the receiving space (24) in the event of an excess pressure or excess volume in the process line; charging a stored energy source by means of the medium flowing into the receiving space (24), and ejecting at least some of the received excess amount of the medium out of the receiving space (24) if the pressure drops below a target pressure range or of the flow rate drops below a target flow rate range through conversion of the energy stored in the stored energy source.

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