

Title (en)
METHOD AND MIXING DEVICE FOR CONTROLLING THE INTRODUCTION OF A PULVERULENT MATERIAL INTO A LIQUID FOR A BATCH MIXING METHOD

Title (de)
VERFAHREN UND MISCHVORRICHTUNG ZUR STEUERUNG DER EINBRINGUNG EINES PULVERFÖRMIGEN STOFFES IN EINE FLÜSSIGKEIT FÜR EIN BATCH-MISCHVERFAHREN

Title (fr)
PROCÉDÉ ET DISPOSITIF DE MÉLANGE POUR LA RÉGULATION DE L'INTRODUCTION D'UNE SUBSTANCE SOUS FORME DE POUDRE DANS UN LIQUIDE POUR UN PROCÉDÉ DE MÉLANGE PAR LOTS

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Abstract (en)
[origin: WO2018228714A1] The invention relates to a method for controlling the introduction of a pulverulent material (P) into a liquid (F) consisting of at least one component for an inline mixing method according to the preamble of claim 1 or the preamble of sub-claim 2 and to a mixing device for carrying out the method, said method and mixing device ensuring that the disadvantages of the prior art which have become known are prevented. This is achieved by a first method in that, among others, • the pulverulent material (P) is supplied in a discontinuous manner in pulses by means of a chronological sequence of metering pulses (i), each of which is characterized by a mass flow of the pulverulent material (\dot{m}_P), a duration of the metering pulse (Δt_1), and a time interval between adjacent metering pulses (Δt_2), • a time-dependent power consumption ($I(t)$) is ascertained which is proportional to a stirring and/or shearing and homogenizing power required for a temporarily available mixing product (M^*), and • at the end of the time interval between adjacent metering pulses (Δt_2) and in the event of a deviation of the time-dependent power consumption ($I(t)$) from the reference power consumption (I_0) by more than a specified tolerance, either upwards or downwards, the duration of the metering pulse (Δt_1) for the following metering pulse (i) is shortened in the first case and lengthened in the second case while maintaining the ratio ($V = \Delta t_1/\Delta t_2$).

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