

Title (en)

DEVICE AND METHOD FOR THERMALLY PRE-TREATING SOLID RAW MATERIALS IN A CONCENTRICALLY STEPPED FLUIDIZED BED

Title (de)

VORRICHTUNG UND VERFAHREN ZUR THERMISCHEN VORBEHANDLUNG VON FESTEN EINSATZSTOFFEN IN EINER KONZENTRISCH GESTUFTEN WIRBELSCHICHT

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR LE PRÉTRAITEMENT THERMIQUE DE MATIÈRES PREMIÈRES SOLIDES DANS UN LIT FLUIDISÉ ÉCHELONNÉ CONCENTRIQUEMENT

Publication

EP 2560750 A1 20130227 (DE)

Application

EP 11714489 A 20110331

Priority

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Abstract (en)

[origin: CA2794213A1] The invention relates to a fluidized bed reactor for thermally pre-treating solid raw materials containing water with devices for receiving a stepped, stationary fluidized bed, comprising at least two concentrically arranged treatment zones. Each treatment zone has at least one separate gas inlet for fluidizing gas, and the individual treatment zones are only connected to each other by overflows. The outermost treatment zone has a feeding device for raw material. Each treatment zone is divided from the respective other adjacent treatment zone by an overflow weir, and the innermost treatment zone has an outlet for reaction products. The solid raw material is fed into the outermost treatment zone of the fluidized bed, said fluidized bed being loosened and fluidized with fluidizing gas. A first temperature and a first residence time are set in a first step of the fluidized bed, and a second temperature and a second residence time are set in a second step of the fluidized bed. The temperatures of the fluidizing gas of the first step and the second step are controlled separately. The fluidized material flows out of the outer treatment zone over the overflow weir into the inner treatment zone, and the fluidized material is drawn off from the floor of the innermost treatment zone with the product.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2011131287A1

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