

Title (en)

Process and device for the preparation of fine particle dispersions

Title (de)

Verfahren und Vorrichtung zur Herstellung von feinteiligen Feststoffdispersionen

Title (fr)

Procédé et dispositif pour la préparation de dispersions de solides fins

Publication

EP 0766997 A1 19970409 (DE)

Application

EP 96114996 A 19960919

Priority

DE 19536845 A 19951002

Abstract (en)

The prodn. of fine particle dispersions of solids with a mean particle size of 0.01-20 µm, from a coarse predispersion consisting of 1-60 vol.% solid and at least 40-99 vol.% of a non-solvent diluent for the solid, which pref. is a solid of mean particle size < 1 mm (additionally, if necessary the predispersion contains 1-100 pts. wt. of an agent to aid dispersion, relative to the solid and/or active surface cpds.), comprises feeding the predispersion through at least one device in a passageway, having at least one nozzle or slot with bore dia. or slot width of 0.05-1 mm, and a length to dia. ratio of the bore or depth to width ratio of the slot of 1-10. Between the nozzle inlet and outlet, there is a pressure difference of at least 5 (pref. 10) bar. Also claimed is a device to carry out the above process.

Abstract (de)

Die Erfindung betrifft ein Verfahren zur Herstellung feinteiliger Dispersionen von Feststoffen mit einer Partikelgröße von 0,01 bis 20 µm durch Zerkleinern grobteiliger Dispersionen in einer Loch- oder Schlitzdüse 4 mit spezifischem Bohrungslänge zu -durchmesser-Verhältnis bei einer Druckdifferenz größer 5 bar zwischen Düseneingang und Düsenausgang. Die Erfindung betrifft auch eine Vorrichtung zur Herstellung der feinteiligen Dispersion. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

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B01F 33/40511 (2022.01 - EP US); **B01F 23/56** (2022.01 - US); **B01F 25/50** (2022.01 - EP US); **B01F 2101/30** (2022.01 - EP US)

Citation (search report)

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DE10327365B4; US7618181B2; US6991190B2; EP2106850A1; WO02089961A1; US6530684B1; US6536940B1; US6722780B2

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