

Title (en)

Method and apparatus for providing finely divided powder.

Title (de)

Verfahren und Vorrichtung zur Herstellung von feinverteiltem Pulver.

Title (fr)

Procédé et appareil pour la production de poudre finement divisée.

Publication

EP 0211117 A2 19870225 (EN)

Application

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Priority

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Abstract (en)

A no-moving parts pulverizer (19) and classifier system (15) reduces materials to one hundred fifty microns to less than ten microns using superheated steam or any gas capable of being compressed and expanded thru machined orifices. The resultant size reduction depends upon the classifier gas rate and pressure, the pulverizer gas rate and its pressure. These combinations control and regulate maximum particle size, average particle size and the mix of gas and solids in process. The feedstock enters the classifier chamber (15) by auger (12) or similar manner as long as the feeder maintains a positive seal. The classifier chamber (15) separates the feedstock by size and particles of a predetermined size exit (32) the system in a specific ratio of gas and solids. The feedstock larger than specified exit the base of the classifier (15), split into two equal streams (20A, 20B) and accelerate thru the pulverizer (19). The reduced feedstock exits (13) the pulverizer (19), mixes with incoming feedstock (10) and again enters the classifier (15). The system is controlled using pressure, temperature, feedrate or any combination of the three. Other control methods can be used if any one of the three are part of the control circuit.

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CPC (source: EP)

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Cited by

WO2009048592A1; DE3943733C2; CN117816325A; DE4431534A1; DE4431534B4; US8394189B2; US8047458B2; US8177149B2; WO2007131502A1; US8247527B2; US8322642B2

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