

Title (en)

Method of producing fine particles.

Title (de)

Verfahren zur Herstellung von feinkörnigen Partikeln.

Title (fr)

Procédé pour la production de particules fines.

Publication

**EP 0298777 A2 19890111 (EN)**

Application

**EP 88306282 A 19880708**

Priority

GB 8716213 A 19870709

Abstract (en)

This invention relates to a method of reducing the particle size of solid particles and is applicable to the production of very fine particles of a wide variety of solids, including relatively hard solids. The method comprises milling a liquid suspension of solid particles in an agitated media mill (13), pumping the milled suspension through a particle size classification device (16) to separate the slurry into a coarse fraction (17) and a fine fraction (18), the particles of the coarse fraction having a greater median particle size than the particles of the fine fraction, recycling the coarse fraction (17) from the particle size classification device to the input of the mill (13), and recycling the fine fraction (18) by pumping (15) it to the classification device, wherein recycling of both coarse and fine fractions are continued until solid particles of the desired reduced particle size are produced. Preferably a single classification device and a single mill can be used, and particles having a median particle size of 0.3 microns or less and a relatively narrow particle size distribution can be produced, even using a hydrocyclone as the classification device.

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