

Title (en)

DEVICE AND METHOD FOR CREATING SPHERICAL PARTICLES OF UNIFORM SIZE

Title (de)

VORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG VON KUGELFÖRMIGEN TEILCHEN EINHEITLICHER GRÖSSE

Title (fr)

DISPOSITIF ET PROCEDE POUR CREER DES PARTICULES SPHERIQUES DE TAILLE UNIFORME

Publication

EP 1037858 A1 20000927 (EN)

Application

EP 98960045 A 19981217

Priority

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- IB 9802052 W 19981217
- US 19217498 A 19981113

Abstract (en)

[origin: WO9931019A1] Spherical particles having a size on the order of 0.1 to 100 microns in size are created by systems and devices of several types. The device includes a source of a stream of gas which is forced through a liquid held under pressure in a pressure chamber with an exit opening therein. The stream of gas surrounded by the liquid in the pressure chamber flows out of an exit orifice of the chamber into a liquid thereby creating a monodispersion of bubbles with substantially uniform diameter. The bubbles are small in size and produced with a relatively small amount of energy relative to comparable systems. Small particles of liquid may also be produced. Applications of the technology range from oxygenating sewage with monodispersions of bubbles to inhalation therapy with monodisperse aerosol dispersions of pharmaceutically active drugs.

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