

Title (en)

DEVICE FOR MEASURING, BY DIFFRACTION, THE SIZE OF SUBSTANTIALLY SPHERICAL PARTICLES, IN PARTICULAR OPAQUE DROPS

Title (de)

VORRICHTUNG ZUR MESSUNG DURCH BEUGUNG DER GRÖSSE VON IM WESENTLICHEN SPHÄRISCHEN TEILCHEN, INSBESONDERE UNDURCHSICHTIGEN TROPFEN

Title (fr)

DISPOSITIF DE MESURE, PAR DIFFRACTION, DE TAILLES DE PARTICULES SENSIBLEMENT SPHERIQUES, NOTAMMENT DE GOUTTES OPAQUES

Publication

EP 1240496 A1 20020918 (FR)

Application

EP 09985341 A 20001128

Priority

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Abstract (en)

[origin: WO0140766A1] The invention concerns a device for measuring, by diffraction, the size of substantially spherical particles, in particular opaque drops. Said device comprises means (46, 49, 50, 51) for receiving light diffracted by the particles (12) illuminated with a light beam, for separating said diffracted light into concentric annular zones and concentrating the parts of diffracted light, corresponding to said zones, into points (24, 26, 28) different from one another. Levels of luminous intensity are detected corresponding to said points and the size of the particles are determined on the basis of said levels of luminous intensity. The angular pattern of the concentric zones is selected in accordance with a distribution optimising the discrimination between the dimensions of the drops.

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