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TITLE

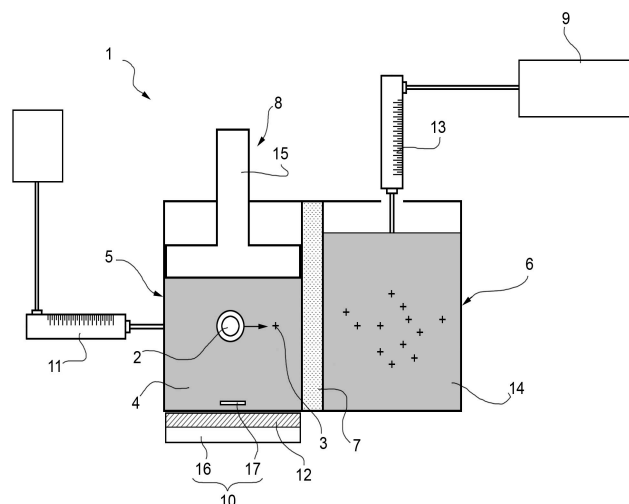
Device and method for determining the dissolution kinetics of colloidal nanoparticles

INVENTORS

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DESCRIPTION

A device is described for determining the dissolution kinetics of colloidal nanoparticles in respective derivation ions in a solution, which comprises a dissolution compartment containing the solution, and feedable with the colloidal nanoparticles; an analysis compartment separate from the dissolution compartment; a fixed filtering membrane which separates the dissolution compartment from the analysis compartment, is selectively permeable to the derivation ion and is adapted to filter the solution, compressing means to induce passage of the solution from the dissolution compartment to the analysis compartment through the filtering membrane; a determination device for determining the quantity of the derivation ion; the device furthermore comprises mixing means associated to the dissolution compartment and distinct from the compressing means and the filtering membrane has pores of size smaller than 10 nm. Relative determination methods for determining the dissolution kinetics and the toxicity of colloidal nanoparticles are also described.



APPLICATIONS

Biotechnologies, cosmetics, pharmaceutical, food packaging, electronic, regulatory entities

KEYWORDS

dissolution kinetics, colloidal nanoparticles

BIBLIOGRAPHIC DATA

Dispositivo e metodo per determinare la cinetica di dissoluzione di nanoparticelle colloidali

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