

Title (en)

METHOD AND DEVICE FOR PARTICLE SEPARATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR PARTIKELTRENNUNG

Title (fr)

PROCEDE ET DISPOSITIF DE SEPARATION DE PARTICULES

Publication

**EP 1226419 A1 20020731 (DE)**

Application

**EP 00975936 A 20001027**

Priority

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Abstract (en)

[origin: DE19952322A1] The invention relates to methods and devices for particle separation, according to which, in a fluidic microsystem consisting of a particle mixture (1), target particles (2) with predetermined characteristics are separated from residual particles (3) in a plurality of particles. Said procedure consists of the following steps: the particles of the particle mixture (1) are positioned in observation fields on functional elements (30) in at least a first receiving structure (10) of the microsystem (100), the functional elements being configured to hold the particles at least temporarily; the particles are measured in the observation fields in order to determine the particle characteristics and the observation fields which contain the target particles (2) or the residual particles (3) are recorded; optical cages are created on the observation fields which contain the target or residual particles using at least one light modulator that allows at least one optical cage to be switched on or off and the target or residual particles are simultaneously or successively transferred from their respective observation fields into at least a second receiving structure (20) of the microsystem, with optical forces of the optical cages interacting with forces of the functional elements (30).

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