

Title (en)  
DEVICE FOR TRAPPING PARTICLES

Title (de)  
EINRICHTUNG ZUM EINFANGEN VON TEILCHEN

Title (fr)  
DISPOSITIF DE PIÉGEAGE DE PARTICULES

Publication  
**EP 2297745 A1 20110323 (FR)**

Application  
**EP 09753842 A 20090525**

Priority  
• EP 2009056274 W 20090525  
• FR 0853414 A 20080526

Abstract (en)  
[origin: WO2009144187A1] The invention relates to a device for trapping particles contained in a liquid (L) placed in a tank (4), characterized in that it comprises a substrate (2) that is transparent at a working wavelength, a thin layer (1) of material with non-linear optical properties that are reversible at the working wavelength and which is fixed to a first face of the transparent substrate (2) to form all or part of at least one wall of the tank (4), a device for forming an optical trap which comprises a laser source which emits a laser beam and means for forming a waist of the laser beam, the laser beam being incident upon that face of the transparent substrate that lies on the opposite side to the first face and the waist of the laser beam being formed in the thin layer (1), an evanescent electromagnetic field forming at the surface of the thin layer (1).

IPC 8 full level  
**G21K 1/00** (2006.01)

CPC (source: EP US)  
**G02B 21/32** (2013.01 - EP US)

Citation (search report)  
See references of WO 2009144187A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**WO 2009144187 A1 20091203**; EP 2297745 A1 20110323; FR 2931582 A1 20091127; FR 2931582 B1 20100910; US 2011101211 A1 20110505; US 8237104 B2 20120807

DOCDB simple family (application)  
**EP 2009056274 W 20090525**; EP 09753842 A 20090525; FR 0853414 A 20080526; US 99444709 A 20090525