

Recent patents in nanotechnology

Patent #	Subject	Assignee	Inventor(s)	Priority application date	Publication date
WO 200291028	A system using nanoscale colloidal particles to realize photonic and microfluidic devices, including two-way, three-way, multidimensional, or check valves, and peristaltic, rotary, vane, or two-lobe gear pumps; useful for interfacing integrated-circuit techniques with chemical and/or biological systems on micro-patterned substrates, to produce 'lab-on-a-chip' devices for bioanalysis, medical diagnosis, and therapeutic treatment.	Colorado School of Mines (Golden, CO)	Gong T, Marr DWM, Oakey J, Terray AV	5/8/2001	11/14/2002
WO 200290770	A microfluidic distribution unit having two reaction chambers, into which a fluid can be pushed using non-mechanically induced volumetric changes; used for the propulsion of a liquid in a nanoscale device.	NanoLab (Watertown, MA)	Kaplan S, Shacham A	5/7/2001	11/14/2002
US 20020153046	A fluid flow splitting device for a multi-stream microfluidic device; ensures precise division of established flows of fluids, thus enabling passive control of the fluid flow through the microfluidic channel.	Nanostream (Pasadena, CA)	Dantsker E, Hobbs SE, Karp CD, Patel PP, Pezzuto M	9/25/2001	10/24/2002
WO 200280365	A molecular device with an internal charge transfer carrier; useful for performing memory or logic functions in electronic and optoelectronic systems using molecular electrostatic potential created based on the perturbation of molecules.	Penn State Univ. Research Foundation (University Park, PA)	Jackson TN	3/30/2001	10/10/2002
WO 200280194	A quantum nanowire that comprises a macromolecular matrix (comprising dipoles, dopant, and free electrons); useful in microelectronics, optoelectronics, or biomedicine, preferably for the manufacture of semiconductor devices, temperature and pressure sensors, switches, diodes, motors, optical switches, piezoelectric devices, trinary computer devices, optical detectors, or other devices for which small size and low power consumption are desirable features.	Quantum Polymer Technologies (Santa Rosa, CA)	Grigorov LN, Talroze R	1/23/2001	10/10/2002
WO 200277604	A stabilized cell for use as an internal control in methods for isolating and identifying rare cells (for example, cancer cells). The method involves obtaining a blood sample suspected of containing the rare cells from a test subject and mixing the sample with coated magnetic nanoparticles coupled to a ligand that reacts specifically with a determinant of the rare cells to the substantial exclusion of other sample components.	Immunivest (Wilmington, DE)	Liberti PA, Rao GC, Rutner H, Terstappen LWMM	3/8/2001	10/3/2002
WO 200275273	A screening and diagnostic method of an agonist or antagonist for a calcium-coupled receptor; involves incubating one or more cells expressing apoaequorin to reconstitute active aequorin, contacting the cells with the agonist or antagonist, and measuring the light emitted by the cells on a solid support. This high-throughput method facilitates a functional screen using very few (down to 100) cells per measurement due to the high sensitivity of charge-coupled device (CCD)-cameras present in the luminometer.	Euroscreen (Brussels, Belgium)	Dupriez V, Parmentier M	3/20/2001	9/26/2002
WO 200274431	A process for preparing coated particles comprises coating template particles with single- or multi-layers of polymers and/or polyelectrolytes, and exposing the coated particles to an organic molecular precursor. Coated particles can contain an active agent such as a pharmaceutical, contrasting agent, herbicide, pesticide, catalyst, or pigment.	Max Planck Society for the Advancement of Science (Munich, Germany)	Caruso F	3/21/2001	9/26/2002
WO 200260812	A method of producing a solution of single-wall carbon nanotubes comprising the derivatization of single-wall carbon nanotubes followed by the dispersing of the derivatized nanotubes in a solvent; useful in making a polymer material.	Rice University (Houston, TX)	Bahr JL, Tour JM, Yang J	8/31/2001	8/8/2002

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