



Recent patent applications in laboratory automation

Patent #	Subject	Assignee	Inventor(s)	Priority application date	Publication date
WO 200460534	An automation-compatible laboratory sample process device comprising a surface that includes multiple spatially discrete regions; useful for sample preparation and for enzyme-linked immuno-spot (ELISPOT) assays.	Millipore (Billerica, MA, USA); Clark P; Colman MS; Scott CA	Clark P, Colman MS, Scott CA	12/18/2002	7/22/2004
US 20040115828	A high-throughput, automated method for the collection of liquid contents, e.g., nucleic acid solutions from a microtiter well, by collecting the liquid by moving a pipette tip to a first position in well, aspirating at the first position in the well, moving the pipette tip to a second position in the well, and aspirating at the second position in the well.	Affymetrix (Santa Clara, CA, USA)	Nguyen D, Shirazi M	12/12/2002	6/17/2004
WO 200435834	A nucleic acid hybridization device comprising a solid support material surface comprising indium tin oxide, which has at least one nucleic acid molecule immobilized onto it; useful for accelerating enzymatic reactions in a multiplexed manner compatible with existing laboratory automation components.	Radius Biosciences (Medfield, MA, USA)	Evans DM, Fosdick SW	10/17/2002	4/29/2004
WO 200421248	A biological instrument-integrating system comprising a registry containing protocol information and an application manager that communicates with analysis applications and biological instruments; provides improved automation of biological process runs and permits improved integration of instruments and analysis applications.	Applera (Norwalk, CT, USA); Birkett TE; Fang SH; Frantz CE; Jones BB; Kumar S; Lou Y; Sorenson JM; Suri P; Yung KC	Birkett TE, Fang SH, Frantz CE, Jones BB, Kumar S, Lou Y, Sorenson JM, Suri P, Yung KC	8/28/2002	3/11/2004
DE 10239683	A fully automated liquid chromatography process, with a pre-column and separation apparatus without sample trailing. The assembly has in-process detection cleaning, capillary cleaning and ion sources.	Friedrich G	Friedrich G	8/26/2002	3/11/2004
WO 200399440	A process for transferring molecules, molecule complexes or microparticles in a first flow into a second flow; useful for the automated multistep reaction guiding of biomolecules, molecular diagnostic applications, molecular computing, active ingredient screening and lab-on-a-chip laboratory automation.	Fraunhofer Gesellschaft zur Förderung der Angewandten Forschung (Munich, Germany)	Mathis H, McCaskill JS, Rucker T	5/24/2002	12/4/2003
US 6589789	A robotic device with a processing station disposed between a tube collection or transport device and a fault-tolerant centrifuge, and including a tube adaptor staging area and a dual-function tool; for automating sample processing.	Quest Diagnostics (Teterboro, NJ, USA)	Hubert RM, Miller RD	7/21/1997	7/8/2003
DE 20300998	A composite structure for reaction vessels that has at least one function channel next to one or more reaction vessels, closed off against them. The function channel can contain a permanent magnet and a heating/cooling tine or pin that can induce movement; the structure gives a rapid magnetic separation of sample components, protection against contamination and especially against transfer of magnetic particles between reaction vessels, and simple automation of heating/cooling and vibration of the reaction vessel.	Bienhaus G	Bienhaus G	1/23/2003	3/27/2003
US 20030054545	A cell and tissue culture modeling device comprising a housing with an interior chamber and an inlet and outlet port in fluid communication with the chamber. Its relative flatness makes it modular, making possible the automation of simultaneous permeability determinations of compounds and multiplexing.	Cleveland Clinic Foundation (Cleveland, OH, USA); Janigro D; McAllister MS	Janigro D, McAllister MS	9/19/2001	3/20/2003

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