Recent patent applications in drug discovery automation

Patent number	Description	Assignee	Inventor	Priority application date	Publication date
WO 2012026929, EP 2609209, US 20130173503	A computerized method for analysis of compound data used for drug discovery, involving providing a computer having memory, providing to the memory training data from a training data set containing at least one training compound with at least one property value for each training compound and providing to the memory data identifying each training compound as achieving or not achieving the objective (preferably drug discovery objective).	Optibrium (Cambridge, UK), Hashimoto T, Segall M	Hashimoto T, Segall M	8/25/2010	3/1/2012, 7/3/2013, 7/4/2013
US 20130090268	A microarray culture system comprising a microfluidic device with functioning pneumatically controllable valves and enabled to interface with automated robotic systems, where the device is integrated with housing or a holder that facilitates putting reservoirs of fluids in communication with the device, and connects fluid lines and pneumatic controls to the device; useful in drug discovery.	EMD Millipore (Billerica, MA, USA)	Hung PJ, Lee PJ	1/4/2006	4/11/2013
EP 2546644, US 20130014566	An operation optimization method for a liquid chromatography (LC) system whereby a sample is injected from the autosampler to an LC apparatus after transmission of a signal from the LC apparatus to the autosampler when no errors are encountered during autosampler operation; useful in delivering a liquid sample applied to the fields of drug discovery and development, environmental testing and diagnostics.	Thermo Finnegan (San Jose, CA, USA), Marks AN	Marks AN	7/15/2011	1/16/2013, 1/17/2013
JP 2013001460	An automatic storage cabinet for drug discovery sample units, with a cam-groove portion extended along the cam plate driving direction and connected to another cam-groove portion diagonally intersected to the longitudinal direction of the guide rail.	Tsubakimoto Chain (Osaka, Japan)	Tsutsumi K	6/10/2010	1/7/2013
US 20110256630	A monitoring system for conducting automated sampling, sample preparation and/or sample analysis in a multiwell plate assay format, comprising sample collection modules fluidically connected to a detection module, and a plate handling subsystem.	Clinton CM	Clinton CM	4/19/2010	10/20/2011
JP 2011027465	A trace-amount liquid fractionation device with several micro side-flow paths that are arranged at one side of the side-flow paths; useful in drug discovery.	Kyushu University (Fukuoka, Japan)	Yasuda T	7/22/2009	2/10/2011
GB 2472252	A microplate holder for an automated microplate processing system with a platform for inclining the microplate and positioning the microplate at a certain angle range so that one edge is vertically raised relative to another edge of the microplate.	Stafford S	Stafford S	7/31/2009	2/2/2011
GB 2479628, WO 2011128228	A system for automated determination of motion of a biological object that generates a time series of subtractive images, derives measurements from the time series and analyzes the measurements to quantify motion in the time series.	GE Healthcare UK (Little Chalfont, UK)	Thomas N	4/12/2010	10/19/2010, 10/20/2010
US 20100211211, EP 2224248, JP 2010210237	A drug discovery screening apparatus with conveyance arms conveying a plate onto a fixed stage and a plate onto an XY stage so as to allow respective plates to cross each other.	Yokogawa Electric (Tokyo)	Kei T, Nedu T, Suzuki T, Yamamoto K	2/13/2009	8/19/2010, 9/1/2010, 9/24/2010
WO 2009145532, KR 2009122836	A protein separation apparatus for genomic drug discovery with an isoelectric focusing portion that is connected to a flat channel through parallel openings, enabling simultaneously isolating proteins in multichannels, and enhancing protein isolation speed. The proteins can be isolated by pI and molecular weight, and are not denatured by protein isolation. The amphoteric electrolyte used in isoelectric point isolation can be automatically removed.	Yonsei University Industry-Academic Cooperation Foundation (Seoul)	Kim KH, Moon MH	5/26/2008	12/3/2009, 12/1/2009
JP 2009216741	A drug discovery screening device with an information processing unit that emits a drive command with respect to a well plate based on driven information of the well plate and focus error signal between the objective lens and well plate.	Yokogawa Electric (Tokyo)	Jing HZ, Mikuriya K, Niimi T, Yokoyama Y, Kei K	3/7/2008	9/24/2009

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