

Recent patent applications related to drug discovery automation

Patent number	Description	Assignee	Inventor	Priority application date	Publication date
US 20110297546, EP 2407777	Isotachophoresis method for concentrating and isolating charged analytes contained in a sample, where each analyte has an effective electrophoretic mobility. The method involves applying an axial electric field along the longitudinal axis of a separation channel, causing a concentration and separation of the analytes and spacers forming respective focused spacer zones and focused analyte zones that flow along the longitudinal axis; followed by spatial displacement of analytes by selective extraction into extraction channels.	Swissfluidics (Speicherschwendi, Switzerland)	Schoch R	7/6/2010	12/8/2011, 1/18/2012
US 20120010105	A screening system comprising a measurement chamber, automated instruments for microplates and a plate handling system for moving microplates into and out of a screening system; useful for performing label-free assays.	Caracci SJ, Eckelt VHO, Frutos AG, Krol MF, Moore TC, Pastel DA, Shedd GM	Caracci SJ, Eckelt VHO, Frutos AG, Krol MF, Moore TC, Pastel DA, Shedd GM	7/20/2005	1/12/2012
WO 2011131747	A method of high-throughput screening for agents capable of affecting the activity of a G protein-coupled receptor (GPCR) involving exposing a sample of cells to a candidate agent; conducting measurements of light emitted from the sample in an automated manner, where the cells express at least a recombinant nucleotide sequence encoding a chimeric protein.	Addex Pharma (Plan-les-Ouates, Switzerland)	Gjoni T, Gouillier A, Hampe C, Luetjens R, Schelshorn D	4/20/2010	10/27/2011
US 20110256630	A monitoring system for conducting automated sampling, sample preparation and/or sample analysis in a multi-well plate assay format, comprising sample collection modules fluidically connected to a detection module, and a plate handling sub-system.	Clinton CM	Clinton CM	4/19/2010	10/20/2011
US 20110215798	A microfluidic device apparatus for analysis of a sample such as a nucleic acid, comprising magnetic particles connected to the sample, microchip, flow channel and source of oil carrier fluid connected to the channel for moving the sample in the flow channel.	Lawrence Livermore National Security (Livermore, CA, USA)	Beer NR	12/27/2007	9/8/2011
WO 2011102804	An electro-fluidic interface of a multi-well plate used in, e.g., analytical research, with a biasing structure positioned to a sealing portion and an electrode for moving the sealing portion to induce change in pressure in the well.	Agency for Science, Technology and Research (Singapore)	Peng S, Reboud J, Sim PCS, Yobas L	2/22/2010	8/25/2011
US 20110206262	A method for identifying the viscoelastic phase transition of, e.g., human embryonic stem cells to detect Parkinson's disease, involving comparing models of feature dynamics from test cells with models of feature dynamics derived from reference cells.	The Charles Stark Draper Laboratory (Cambridge, MA, USA)	Desai M, Erb TM, Lowry N, Mangoubi R, Sammak PJ	5/13/2004	8/25/2011
WO 2011061548	A method for designing a drug using an evolutionary algorithm for a module of pharmaceutical composition, involving evaluating members of the initial population against achievement objectives, where evaluation includes calculation of vector distance.	University of Dundee (Dundee, UK)	Besnard J, Hopkins AL	11/20/2009	5/26/2011
JP 2011075573	A box-shaped object stocker comprising a rotation cassette stand that is rotated so that a cassette may come above a box-shaped object placing board. A box-shaped object is piled up and accommodated in the cassette through an opening part which exists on the lower part of the cassette with the box-shaped object placing board to be taken out from the box-shaped thief outlet to the cassette upper part, or accommodated in the cassette.	IS Technology Japan Inc. (Tsukuba, Japan), Rorze Corp. (Hiroshima, Japan)	Munakata M, Yamashita S, Yamazaki Y	12/22/2004	4/14/2011

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