

Recent patent applications in drug discovery automation

Patent #	Subject	Assignee(s)	Inventor(s)	Priority application date	Publication date
JP 2008020275	An automatic solid phase extractor consisting of a vibration excitation device that provides vibration to a container filled with liquid, such as a pharmaceutical liquid; for use during drug discovery screening.	Hitachi Koki (Tokyo)	Toi H	7/12/2006	1/31/2008
WO 2007148130	A <i>de novo</i> iterative synthesis method for drug discovery that selects a compound having the desired pharmacophoric fit with a seed structure and synthesizing, assaying and comparing the compound to the structure to determine whether the compound has synthetically desirable properties.	Cresset Biomolecular Discovery (Letchworth, UK), Cresset Therapeutics (Philadelphia, PA, USA)	Mackay M, Vinter J, Warrington B	6/19/2006	12/27/2007
EP 1859866, US 20070274871	A well plate of non-unitary construction with side walls containing surface energy that provides a specific contact angle for aqueous solution contained in the well in an ambient environment to suppress meniscus formation; for growing cells and handling liquid samples in fields such as gene sequencing, combinatorial chemistry, drug discovery and proteomics, in automated and integrated systems.	Genetix (New Milton, UK)	Jiang Y	5/23/2006	11/28/2007, 11/29/2007
US 7292263	A robotic charge coupled device microscope for crystal recognition with a lighting system comprising a cluster of high brightness white LEDs; useful in structural, rational drug discovery, etc.	University of California (Oakland, CA, USA)	Segelke BW, Toppani D	3/16/2005	11/6/2007
JP 2007161453	An automatic storage apparatus for use in a drug discovery research environment, with a hand plate that moves in contact with the surrounding walls of the storage rack to obtain positional information of the storage rack in all directions.	Tsubakimoto Chain Co. (Osaka, Japan)	Oshimo J, Shibata N	12/15/2005	6/28/2007
WO 2006036737, US 20060094059, EP 1797427	A high-throughput, completely automated method of identifying a new therapeutic use for a test entity, e.g., a drug or drug candidate, involving testing the activity of the test entity against a protein complex in a cell and using the results obtained to identify new activity of the test entity; useful for large-scale drug discovery.	Odyssey Thera (San Ramon, CA, USA)	MacDonald ML, Michnick SW, Owens S, Westwick JK, Yu H	9/22/2004	4/6/2006, 5/4/2006, 6/20/2007
JP 2007046956	A dispensing apparatus comprising a chip remover arranged at the back of the dispensing mechanism to remove the used chip from the dispensing head and a chip holder to hold the unused chip; useful for drug discovery.	Juki Corp. (Tokyo)	Okubo K	8/8/2005	2/22/2007
WO 2006133555, US 20060292549	A system for testing the psychotropic activity of a compound comprising a silicon die having a surface for the growth of a neuronal network; useful for the automated screening of a compound in the field of drug discovery and neuroscience.	Neurosilicon (Calgary, Canada)	Colicos MA	6/15/2005	12/21/2006, 12/28/2006
EP 1653235	A method of controlling the usage of reservoirs in a liquid handling area of an automated liquid handling system, involving determining and removing the content of a reservoir where the reagent is not expected to be used within a predetermined time interval; useful in drug discovery and development.	Automation Partnership Cambridge (Royston, UK)	Grant PS, Oakeshott RBS	10/27/2004	5/3/2006
JP 2005348615	A sample thawing apparatus that uses a sequence of several acicular nozzles to eject warm water to thaw a sample sealed in a container, such as deep-well plates or micro-tubes; for use in drug discovery research.	Tsubakimoto Chain Co. (Osaka, Japan)	Oshimo J, Shibata N, Komada M	6/8/2004	12/22/2005

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