

Recent patent applications in metabolomics

Patent Number	Description	Assignee	Inventor	Priority application date	Publication date
US 20120143622	A method for preventing an adverse drug event associated with drug-drug interaction, drug-substance interaction, drug-gene interaction, drug-phenotype interaction and substance-factor interaction, involving displaying warning of a victim-culprit interaction and level of severity on a graphical user interface.	Genelex (Seattle, WA, USA)	Coleman H, Oesterheld J, Patterson R	2/14/2007	6/7/2012
CN 102478563	A method for researching metabolic differences between transgenic rice and non-transgenic rice, involving analyzing rice seed extracted by a liquid phase chromatography-mass spectrometry technology for obtaining a rice metabolic profile spectrum.	Dalian Institute of Chemical Physics, Chinese Academy of Science (Dalian, China)	Chang Y, Lu X, Xu G, Zhao C, Zhao Y, Zhou J	11/25/2010	5/30/2012
US 20120119080, WO 2012068217	A method for establishing an unbiased model using the metabolic profile, phenotypic profile and trait profile of two groups of plants, involving separating extracting metabolites from two groups of plants by chromatography to generate a data set and comparing to another data set generated using mass spectrometry.	Pioneer Hi-Bred (Johnston, IA, USA)	Hazabroek J, Janni J, Lightner J	11/17/2010	5/17/2012, 5/24/2012
WO 2012061105	Human HCT116 colorectal cancer cells that comprise IDH1R132H and wild-type isocitrate dehydrogenase 1 (IDH1) alleles, which can be used to determine the effect of IDH1R132H on cell biology, tumorigenesis and cellular metabolic profiles.	Duke University (Durham, NC, USA)	Bigner D, Duncan C, Yan H	10/25/2010	5/10/2012
WO 2012051463	A method of identifying the presence or level of kidney disease in a subject, involving determining the level of organic acid, e.g., glycolic acid, comparing the level of organic acid with a reference level and identifying kidney disease.	Regents of the University of California (Oakland, CA, USA)	Naviaux RK, Sharma K	10/14/2010	4/19/2012
US 20120040383	A method of diagnosing colorectal cancer in a subject involving obtaining a sample from the subject, determining a metabolite profile for the subject's sample by measuring the amount of at least one metabolite biomarker, comparing the subject's metabolite profile to a healthy control metabolite profile for the same metabolite biomarkers, and identifying differences between the subject's metabolite profile and the healthy control metabolite profile.	Jia W, Qiu Y	Jia W, Qiu Y	8/12/2010	2/16/2012
IN 200900390	A method of extraction, separation and characterization of metabolite biomarkers for identification of diseases in human plasma using a metabolomics approach.	Avesthagen (Bangalore, India)	Jain R, Patel VM, Shinde M	2/24/2009	2/3/2012
CN 102324001	A method for predicting cancer based on high-performance liquid chromatography/mass spectrometry metabolomics data analysis, involving performing ultra performance liquid chromatography (UPLC)-MS detecting technology to obtain data, extracting data, aligning and normalizing the data, subjecting the data to multidimensional statistical analysis process, differentiating the metabolite, establishing orthogonal projections to latent structures-discriminant analysis cooperation model and verifying the model.	Shanghai Julei Biotechnology Co. (Shanghai)	Liu Y	11/15/2010	1/18/2012
US 20110307180	A verification and confirmation method for analyzing metabolomics data, involving determining an identity confidence measure associated with the selected metabolites by comparing data sources with respect to the selected metabolites.	Metabolon (Durham, NC, USA)	Alexander DC, Barrett TH, DeHaven CD, Tanikella S	8/8/2005	12/15/2011

Source: Thomson Scientific Search Service. The status of each application is slightly different from country to country. For further details, contact Thomson Scientific, 1800 Diagonal Road, Suite 250, Alexandria, Virginia 22314, USA. Tel: 1 (800) 337-9368 (<http://www.thomson.com/scientific>).