Patent number	Description	Assignee	Inventor	Date
US 9,752,185	Methods and devices for the interfacing of microchips to various types of modules. The technology can be used as sample preparation and analysis systems for various applications, such as DNA sequencing and genotyping, proteomics, pathogen detection, diagnostics and biodefense.	IntegenX (Pleasanton, CA, USA)	Boronkay A, Jovanovich SB, Blaga II	9/5/2017
US 9,598,717	An enzyme treatment apparatus for proteins using a hollow- fiber membrane and an on-line proteomics method using same. The apparatus can increase a recovery rate of peptides and can also reduce a time for purification and provide higher yield by performing separation and purification through a single step.	Korea Research Institute of Standards and Science (Daejeon, South Korea)	Kang DJ, Park SR, Kim S-K	3/21/2017
US 9,598,355	Diacylhydrazine ligands and chiral diacylhydrazine ligands for use with ecdysone receptor-based inducible gene expression systems; useful for applications such as gene therapy, large-scale production of proteins and antibodies, cell-based screening assays, functional genomics, proteomics, metabolomics, and regulation of traits in transgenic organisms, where control of gene expression levels is desirable.	Intrexon (Blacksburg, VA, USA)	Hormann RE, Li B	3/21/2017
US 9,526,800	Proteomic methods for identifying cancer-related proteins and related products and kits. Also, panels or signature sets of proteins useful in the detection, diagnosis and treatment of cancers as well as monitoring therapeutic progress in a cancer patient, along with methods for their detection and for their use in targeting imaging and/or therapeutic agents to the tumors via binding to the specified proteins.	Massachusetts Institute of Technology (Cambridge, MA, USA), The General Hospital Corporation (Boston), The Broad Institute (Cambridge, MA, USA)	Hynes RO, Naba A, Clauser K, Carr SA, Tanabe K	12/27/2016
US 9,512,148	Boron-containing diacylhydrazines having a specified formula and their use in ecdysone receptor-based inducible gene expression systems; useful for applications such as gene therapy, treatment of disease, large-scale production of proteins and antibodies, cell-based screening assays, functional genomics, proteomics, metabolomics, and regulation of traits in transgenic organisms, where control of gene expression levels is desirable.	Intrexon (Blacksburg, VA, USA)	Chellappan SK, Hormann RE, Shulman I	12/6/2016
US 9,481,945	A snap chip assembly for the transfer of a microarray of reagents within semi-spherical liquid droplets on a transfer chip to a target assay microarray on an assay chip following assembly of the two chips and physical contact of the droplets with the target array; useful in the rapid and specific detection of biological cells and biomolecules important to biological assays across diverse fields including genomics, proteomics, diagnoses, and pathological studies.	The Royal Institution for the Advancement of Learning/McGill University (Montreal, QC, Canada)	Juncker D, Li H	11/1/2016
US 9,435,778	A method of the analysis of compounds with mass spectrometry and to instruments, substances, and methods for polypeptide analysis, in particular in targeted proteomics applications and based on indexed retention times as peptide specific property.	BiognoSYS (Schlieren, Switzerland)	Escher C, Ossola R, Rinner O, Reiter L	9/6/2016
US 9,366,678	Mass spectrometry methods, compositions and systems which enable a unique platform for analyte quantitation accessing very high degrees of multiplexing and accurate quantification, particularly well-suited for a range of quantitative analysis for proteomics applications. Embodiments of the methods and systems combine isotopic coding agents characterized by very small differences in molecular mass with mass spectrometry methods providing large resolving power to provide relative or absolute analyte quantification in a large number of samples.	Wisconsin Alumni Research Foundation (Madison, WI, USA)	Coon JJ, Hebert A	6/14/2016
US 9,194,005	Methods and biomarkers for evaluating cancer metastasis, pharmaceutical compositions for inhibiting cancer metastasis, and methods for analyzing the secretome. By combining a hollow-fiber cartridge culture system with quantitative proteomics technology, cancer-metastasis-related secrectomes can be found.	National Cheng Kung University (Tainan, Taiwan)	Liao P-C, Chang Y-H, Lee S-H, Chang H-C, Tseng Y-L, Lai W-W	11/24/2019
US 9,097,723	Methods and apparatuses that allow a protein sample to undergo reduction, alkylation, and digestion in a continuous flow process carried out within a microfluidic device; can be employed as part of an automated proteomics analysis carried out in an integrated proteomics system.	Caliper Life Sciences (Hopkinton, MA, USA)	Fathollahi B, Farinas JA, Chow AW, Mouradian S	8/4/2015