UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MYRIAD GENETICS, INC., MYRIAD GENETIC LABORATORIES, INC., BIO-RAD LABORATORIES, INC., and RAINDANCE TECHNOLOGIES, INC.

Petitioners

v.

THE JOHNS HOPKINS UNIVERSITY

Patent Owner

U.S. Patent No. 7,824,889

Case No. *To be assigned*

PETITIONERS' EXHIBIT LIST FOR U.S. PATENT NO. 7,824,889

Myriad Exhibit Number	Description
1001	Vogelstein *et al.*, "Digital Amplification," U.S. Patent No.7,824,889 (filed on Feb. 23, 2007, issued on Nov. 2, 2010, *Ex Parte* Reexamination Certificate Issued: October 31, 2014)
1002	Declaration of Michael L. Metzker, Ph.D.
1003	*Curriculum Vitae* of Michael L. Metzker, Ph.D.
1004	File History for U.S. Patent No. 6,440,706
1005	File History for U.S. Patent No. 7,824,889
1006	File History for U.S. Patent No. 7,915,015
1007	File History for U.S. Patent No. 8,859,206
1008	*Ex Parte* Reexamination File History for U.S. Patent No. 6,440,706
1009	*Ex Parte* Reexamination File History for U.S. Patent No. 7,824,889
1010	*Ex Parte* Reexamination File History for U.S. Patent No. 7,915,015
1011	U.S. Provisional Patent Application No 60/146,792 (Filed: August 2, 1999)
1012	Simmonds *et al.*, *Human Immunodeficiency Virus-Infected Individuals Contain Provirus in Small Numbers of Peripheral Mononuclear Cells and at Low Copy Numbers*, JOURNAL OF VIROLOGY 64 (2): 864-872 (1990)
1013	Sykes *et al.*, *Quantitation of Targets for PCR by Use of Limiting Dilution*, BIOTECHNIQUES 13(3): 444-449 (1992)
1014	Chapter 6 of *PCR: The Polymerase Chain Reaction* 67-88, Kary B. Mullis, Francois Ferre, and Richard A. Gibbs Eds. (1994)

Myriad Exhibit Number	Description
1015	Brown *et al.*, "Method Of Sampling, Amplifying And Quantifying Segment Of Nucleic Acid, Polymerase Chain Reaction Assembly Having Nanoliter-Sized Sample Chambers, And Method Of Filling Assembly," U.S. Patent No. 6,143,496 (filed on April 17, 1997, issued on November 7, 2000)
1016	Kellogg *et al.*, *TaqStart Antibody: 'Hot Start' PCR Facilitated by a Neutralizing Monoclonal Antibody Directed Against Taq DNA Polymerase*, BIOTECHNIQUES 16 (6):1134-1136 (1994)
1017	Vogelstein *et al.*, *Digital PCR*, PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES 96:9236-9241 (1999)
1018	Monya Baker, *Digital PCR hits its stride*, NATURE METHODS 9 (6):541-544 (2012)
1019	Wei *et al.*, *Viral dynamics in human immunodeficiency virus type 1 infection*, NATURE 373:117-122 (1995)
1020	Ho *et al.*, *Rapid turnover of plasma virions and CD4 lymphocyte in HIV-1 infection*, NATURE 373:123-126 (1995)
1021	Coffin, *HIV population dynamics in vivo: Implications for genetic variation, pathogenesis and therapy*, SCIENCE 267:483-489 (1995)
1022	Perelson *et al.*, *HIV-1 dynamics in vivo: virion clearance rate, infected cell life-span, and viral generation time*, SCIENCE, 271:1582-1586 (1996)
1023	*Amneal Pharmaceuticals, LLC v. Supernus Pharmaceuticals, Inc.*, IPR2013-00368, Paper No. 8 at 13 (December 17, 2013)

Myriad Exhibit Number	Description
1024	Heid *et al.*, *Real time quantitative PCR*, GENOME RESEARCH 6:986-994 (1996)
1025	Carteau *et al.*, *Chromosome structure and human immunodeficiency virus type 1 cDNA integration: Centromeric alphoid repeats are a disfavored target*, JOURNAL OF IMMUNOLOGY 72:4005-4014 (1998)
1026	Ruano *et al.*, *Haplotype of multiple polymorphisms resolved by enzymatic amplification of single DNA molecules*, PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES 87:6296-6300 (1990)
1027	Sykes *et al.*, *Limiting dilution polymerase chain reaction*, chapter 8 of *Reverse Transcriptase PCR*, Larrick and Siebert, Eds. (1995)
1028	Birch *et al.*, "Nucleic Acid Amplification Using A Reersibly (*sic*) Inactivated Thermostable Enzyme," U.S. Patent No. 5,677,152 (filed on July 19, 1996, issued on October 14, 1997)
1029	Birch *et al.*, "Nucleic Acid Amplification Using A Reversibly Inactivated Thermostable Enzyme," U.S. Patent No. 5,773,258 (filed on July 11, 1996, issued on June 30, 1998)
1030	Andrew Leigh Brown and Peter Simmonds, *Sequence analysis of virus variability based on the poymerase (sic) chain reaction (PCR)*, Chapter 11 of *1 HIV: A Practical Approach*, Jonathan Karn, Ed. (1995)
1031	Complaint, *Esoterix Genetic Laboratories, LLC and The Johns Hopkins University v. Myriad Genetics, Inc. et al.*, 16-cv-1112, D.I. 1 (M.D.N.C. Sept. 7, 2016)

Myriad Exhibit Number	Description
1032	Supplemental Joint Claim Construction Statement, *Esoterix Genetic Laboratories, LLC and The Johns Hopkins University v. Life Technologies Corporation et al.*, 12-cv-1173-CCE-JEP, D.I. 71 (M.D.N.C. Oct. 29, 2013)
1033	Plaintiffs' Opening Claim Construction Brief, *Esoterix Genetic Laboratories, LLC and The Johns Hopkins University v. Life Technologies Corporation et al.*, 12-cv-1173-CCE-JEP, D.I. 78 (M.D.N.C. Nov. 5, 2013)
1034	'706 Patent File History Excerpt (response to rejection over Ruano) [Response to Office Action, July 12, 2001]
1035	'706 Patent Reexamination File History Excerpt (response to rejections adding "isolated") [Response to Final Office Action, 7/9/2014]
1036	'206 File History Excerpt (rejection over Ruano)[Final Office Action, 6/27/2013]
1037	'206 File History Excerpt (response to rejection over Ruano) [Response to Final Office Action, 9/25/2013]
1038	'206 File History Excerpt (response to rejection over Simmonds) [Office Action, 10/10/2012]
1039	'206 File History Excerpt (response to rejection over Simmonds) [Response to Office Action, 3/11/2013]
1040	Myriad Answer, Affirmative Defenses, and Counterclaims, *Esoterix Genetic Laboratories, LLC and The Johns Hopkins University v. Myriad Genetics, Inc. et al.*, 16-cv-1112, D.I. 22 (M.D.N.C. Nov. 2, 2016)
1041	Zimmermann et al., *Digital PCR: a powerful new tool for noninvasive prenatal diagnosis*? PRENATAL DIAGNOSIS 28:1087-1093 (2008)

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