Filed: March 30, 2021

UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD

ILLUMINA, INC., Petitioner,

v.

THE TRUSTEES OF COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
Patent Owner.

IPR2020-01177 (Patent 10,435,742)

PATENT OWNER'S UPDATED EXHIBIT LIST



Pursuant to 37 C.F.R. § 42.63(e), Patent Owner The Trustees of Columbia University in the City of New York hereby provides an updated list of its exhibits in this proceeding.

EXHIBIT LIST

| Exhibit No. | Description |
|-------------|--|
| 2001 | Defendant Illumina, Inc.'s Response to Plaintiffs' Opening Claim Construction Brief |
| 2002 | Metzker, et al., "Elimination of residual natural nucleotides from 3'-O-modified-dNTP syntheses by enzymatic mop-up," BioTechniques, 25:814-817 (1998) |
| 2003 | PCT Publication WO 00/53805 ("Stemple") |
| 2004 | Defendant Illumina, Inc.'s Initial Invalidity Contentions, <i>The Trustees of Columbia University in the City of New York and Qiagen Sciences, LLC v. Illumina, Inc.</i> , 19-cv-01681 (D. Del.) |
| 2005 | U.S. Patent No. 6,087,095 ("Rosenthal") |
| 2006 | Welch & Burgess, "Synthesis of fluorescent, photolabile 3'-O-protected nucleoside triphosphates for the base addition sequencing scheme," Nucleosides & Nucleotides, 18:197-201 (1999) |
| 2007 | Canard & Sarfati, "DNA polymerase fluorescent substrates with reversible 3'-tags," Gene, 148:1-6 (1994) |
| 2008 | IPR2017-02172 Petition for <i>Inter Partes</i> Review of U.S. Patent No. 7,566,537 |
| 2009 | IPR2017-02172 Preliminary Response of Patent Owner Illumina Cambridge Ltd. |
| 2010 | IPR2017-02174 Preliminary Response of Patent Owner Illumina Cambridge Ltd. |
| 2011 | IPR2013-00517 Illumina's Patent Owner Response |



| 2012 | IPR2013-00517 Final Written Decision |
|------|---|
| 2013 | IPR2013-00517 Deposition of Floyd Romesberg, Ph.D., July 8, 2014 |
| 2014 | IPR2018-00291 Petitioner's Reply |
| 2015 | U.S. Patent No. 5,808,045 |
| 2016 | Curriculum Vitae of Kenneth A. Johnson, Ph.D. |
| 2017 | IPR2018-00291, IPR2018-00318, IPR2018-00322, IPR2018- 00385, IPR2018-00797 Illumina's Demonstratives for Oral Hearing |
| 2018 | IPR2018-00291, IPR2018-00318, IPR2018-00322, IPR2018-00385, IPR2018-00797 Illumina's Reply to Patent Owner's Opposition to Motion to Exclude |
| 2019 | IPR2018-00291 Institution Decision |
| 2020 | Reserved |
| 2021 | WO 96/23807 ("Kwiatkowski") |
| 2022 | Ronaghi, et al. "A sequencing method based on real-time pyrophosphate," Science, 281(5375):363-365 (1998) |
| 2023 | Brief of Patent Owner-Appellant Illumina Cambridge Ltd., <i>Illumina Cambridge Ltd. v. Intelligent Bio-Systems, Inc.</i> , D.I. 27, 2015-1123 (Fed. Cir.) |
| 2024 | U.S. Patent No. 5,858,671 ("Jones") |
| 2025 | U.S. Patent No. 6,013,445 ("Albrecht") |
| 2026 | Excerpts from the Prosecution History of U.S. Patent No. 9,718,852 |



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| 2027 | |
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| 2027 | Complaint for Patent Infringement, The Trustees of Columbia |
| | University in the City of New York and Qiagen Sciences, LLC v. |
| | Illumina, Inc., D.I. 1, 19-cv-01681 (D. Del.) |
| 2028 | Reserved |
| | |
| 2029 | Amended Complaint for Patent Infringement, <i>The Trustees of</i> |
| | Columbia University in the City of New York and Qiagen |
| | Sciences, LLC v. Illumina, Inc., D.I. 12, 19-cv-01681 (D. Del.) |
| 2030 | Exhibit 7 to Complaint for Patent Infringement, <i>The Trustees of</i> |
| | Columbia University in the City of New York and Qiagen |
| | Sciences, LLC v. Illumina, Inc., D.I. 1-7, 19-cv-01681 (D. Del.) |
| 2031 | Exhibit 8 to Complaint for Patent Infringement, <i>The Trustees of</i> |
| 2001 | Columbia University in the City of New York and Qiagen |
| | Sciences, LLC v. Illumina, Inc., D.I. 1-8, 19-cv-01681 (D. Del.) |
| 2032 | Docket, The Trustees of Columbia University in the City of New |
| 2032 | York and Qiagen Sciences, LLC v. Illumina, Inc., 19-2302 (Fed. |
| | Cir.) |
| 2033 | Zhu, Z., et al., "Directly labeled DNA probes using fluorescent |
| 2033 | nucleotides with different length linkers," Nucleic Acids Res., |
| | 22:3418-3422 (1994) |
| 2034 | IPR2018-00291, Petition for <i>Inter Partes</i> Review of U.S. Patent |
| 2034 | No. 9,718,852 |
| | |
| 2035 | U.S. Patent No. 7,566,537 |
| | |
| 2036 | Joint Claim Construction Brief, The Trustees of Columbia |
| | University in the City of New York and Qiagen Sciences, LLC v. |
| | Illumina, Inc., D.I. 54, 19-cv-01681 (D. Del.) |
| 2037 | Excerpts of Joint Claim Construction Appendix (Declaration of |
| | John Kuriyan, Ph.D. in Support Of Plaintiffs' Opening Claim |
| | Construction Brief; Expert Declaration of Dr. Floyd Romesberg in |
| | Support of Illumina's Response to Plaintiffs' Opening Claim |
| | Construction Brief), The Trustees of Columbia University in the |
| | City of New York and Qiagen Sciences, LLC v. Illumina, Inc., D.I. |
| | 55, 19-cv-01681 (D. Del.) |
| 2038 | Reserved |
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| 2039 | IPR2012-00007 Illumina Reply |
|-----------|--|
| 2040 | IPR2012-00007 Illumina Expert Declaration |
| 2041 | IPR2012-00007 Illumina Petition |
| 2042 | Claim Construction Order, <i>The Trustees of Columbia University in the City of New York and Qiagen Sciences, LLC v. Illumina, Inc.</i> , D.I. 60, 19-cv-01681 (D. Del.) |
| 2043 | Plaintiffs' Motion for Reconsideration of the Court's Claim Construction Order, <i>The Trustees of Columbia University in the</i> <i>City of New York and Qiagen Sciences, LLC v. Illumina, Inc.</i> , D.I. 63, 19-cv-01681 (D. Del.) |
| 2044 | Defendant Illumina, Inc.'s Answer to Plaintiffs' Motion for Reconsideration of the Court's Claim Construction Order, D.I. 64, 19-cv-01681 (D. Del.) |
| 2045 | Docket, <i>The Trustees of Columbia University in the City of New York and Qiagen Sciences, LLC v. Illumina, Inc.</i> , 19-cv-01681 (D. Del.) (printed 10/2/2020) |
| 2046 | Protective Order, <i>The Trustees of Columbia University in the City of New York and Qiagen Sciences, LLC v. Illumina, Inc.</i> , 19-cv-01681 (D. Del.) |
| 2047 | Reserved |
| 2048 | Declaration of Kenneth A. Johnson |
| 2049-2053 | Reserved |
| 2054 | Excerpts from the Ex Parte Reexamination History of U.S. Patent No. 5,808,045 |
| 2055-2058 | Reserved |
| 2059 | Tabor, S. & C. C. Richardson, "A single residue in DNA polymerases of the Escherichia coli DNA polymerase I family is critical for distinguishing between deoxy- and |



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