Paper No. \_\_\_\_\_ Filed: June 21, 2018

## 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.

> Case IPR2018-00322 Patent 9,708,358

COLUMBIA'S EXHIBIT LIST NO. 3 UNDER 37 C.F.R. § 42.63(e)

## COLUMBIA'S EXHIBIT LIST NO. 3 UNDER 37 C.F.R. §42.63(e)

Pursuant to 37 C.F.R. § 42.63(e), Columbia hereby submits a current list of

exhibits.

Exhibit No.	Description
2001	Declaration of Robert S. Schwartz in Support of Patent Owner's Motion for Admission Pro Hac Vice Under 37 C.F.R. §42.10
2002	U.S. Patent No. 7,790,869
2003	U.S. Patent No. 7,713,698
2004	U.S. Patent No. 8,088,575
2005	Exhibit number not used.
2006	Excerpts from the Prosecution History of U.S. Patent No. 9,725,480 not included in Ex-1038
2007	IPR2013-00517, Ex. 2011, Declaration of Floyd Romesberg, Ph.D. (May 5, 2014)
2008	IPR2013-00517, Paper 32, Illumina's Patent Owner Response (May 5, 2014)
2009	Excerpts from the <i>Ex Parte</i> Reexamination History of U.S. Patent No. 5,808,045
2010	Assignment data in connection with U.S. Patent No. 5,808,045
2011	PCT Publication WO 98/33939 ("Anazawa") (English translation)
2012	Metzker, et al., "Elimination of Residual Natural Nucleotides from 3'-O-Modified-dNTP Syntheses by Enzymatic Mop-Up," BioTechniques, 25:814-817 (1998)
2013	PCT Publication WO 00/53805 ("Stemple")

Case IPR2018-00322 Patent No. 9,708,358

2014	Metzker, et al., "Stop-Start DNA Synthesis in the Base Addition Sequencing Scheme (BASS)," Genome Mapping & Sequencing (1994)
2015	U.S. Patent No. 7,541,444
2016	U.S. Patent No. 7,771,973
2017	U.S. Patent Application Publication No. 2007/0166705
2018	Boons, et al., "A New Procedure for the Isomerisation of Substituted and Unsubstituted Allyl Ethers of Carbohydrates," Chemical Communications, 141-142 (1996)
2019	Ochiai, et al., "Hypervalent ( <i>tert</i> -Butylperoxy)iodanes Generate Iodine-Centered Radicals at Room Temperature in Solution: Oxidation and Deprotection of Benzyl and Allyl Ethers, and Evidence for Generation of α-Oxy Carbon Radicals," J. Am. Chem. Soc., 118:7716-7730 (1996)
2020	Olivero & Dunach, "Nickel-catalysed Electrochemical Reductive Deprotection of Ally1 Ethers," J. Chem. Soc., Chem. Commun., 2497-2498 (1995)
2021	U.S. Patent No. 6,232,465
2022	Excerpts from the <i>Ex Parte</i> Reexamination History of U.S. Patent No. 6,232,465
2023	Solexa, Inc.'s Fed. R. Civ. P. 7.1 Statement (Feb. 19, 2010)
2024	Solexa, Inc.'s Schedule 13D-A Submission to the United States Securities and Exchange Commission (Feb. 2, 2007)
2025	Litosh, et al., "Improved Nucleotide Selectivity and Termination of 3'-OH Unblocked Reversible Terminators by Molecular Tuning of 2-Nitrobenzyl Alkylated HOMedU Triphosphates," Nucleic Acids Research, 39:1-13 (2011)
2026	IPR2017-02172, Paper 6, Preliminary Response of Patent Owner Illumina Cambridge Ltd. (January 23, 2018)
2027	IPR2017-02174, Paper 6, Preliminary Response of Patent Owner Illumina Cambridge Ltd. (January 23, 2018)

Case IPR2018-00322

Patent No. 9,708,358

1 atom 1 (0. <i>)</i> ,7	
2028	U.S. Patent No. 7,566,537
2029	No. 2015-1123 (CAFC), Brief of Patent Owner-Appellant Illumina Cambridge Ltd., D.I. 27 (March 10, 2015)
2030	IPR2013-00266, Paper 39, Patent Owner Illumina's Reply to Petitioner's Opposition to Illumina's Motion to Amend (March 21, 2014)
2031	Canard & Sarfati, "DNA Polymerase Fluorescent Substrates with Reversible 3'-Tags," Gene, 148:1-6 (1994)
2032	IPR2013-00517, Paper 84, Oral Hearing Transcript (February 2, 2015)
2033	IPR2013-00517, Paper 64, Illumina's Motion for Observations on the Cross-Examination Testimony of Bruce Branchaud, Ph.D. and Michael Metzker, Ph.D. (September 2, 2014)
2034	IPR2012-00007, Paper 5, Petition for <i>Inter Partes</i> Review of U.S. Pat. No. 7,790,869 (September 16, 2012)
2035	IPR2013-00517, Exhibit 1025, Deposition of Floyd Romesberg, Ph.D. (July 28, 2014)
2036	IPR2012-00007, Paper 38, Decision on Petition for <i>Inter Partes</i> Review (March 12, 2013)
2037	Assignment data in connection with U.S. Patent Application Publication No. 2007/0166705 and U.S. Patent No. 7,541,444
2038	Assignment data in connection with U.S. Patent No. 6,232,465
2039	PCT Publication WO 98/33939 (Japanese language version of Anazawa)
2040	Translation Affidavit for Anazawa
2041	Welch & Burgess, "Synthesis of Fluorescent, Photolabile 3'-O- Protected Nucleoside Triphosphates for the Base Addition Sequencing Scheme," Nucleosides & Nucleotides, 18:197-201 (1999)
2042	IPR2013-00517, Paper 68, Illumina's Opposition to IBS Motion To Exclude Evidence

Case IPR2018-00322 Patent No. 9,708,358

1 atent 1 (0: ),	
2043	Excerpts from the Prosecution History of U.S. Patent No. 7,771,973
2044	Exhibit number not used.
2045	Excerpts from the Prosecution History of U.S. Patent No. 9,708,358 not included in Ex-1065
2046	Froehler, et al. "Oligodeoxynucleotides Containing C-5 Propyne Analogs of 2'-Deoxyuridine and 2'-Deoxycytidine," Tetrahedron Letters, 33:5307-5310 (1992)
2047	Exhibit number not used.
2048	Exhibit number not used.
2049	Exhibit number not used.
2050	Declaration of Zachary L. Garrett in Support of Patent Owner's Motion for Admission <i>Pro Hac Vice</i> Under 37 C.F.R. § 42.10

Respectfully submitted,

Dated: June 21, 2018

By: <u>/John P. White/</u> John P. White (Reg. No. 28,678) Customer No. 23432

Lead Counsel for Patent Owner Cooper & Dunham LLP 30 Rockefeller Plaza 20<sup>th</sup> Floor New York, New York 10112 Telephone: (212) 278-0400 Facsimile: (212) 391-0525 jwhite@cooperdunham.com Case IPR2018-00322 Patent No. 9,708,358

## **CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing COLUMBIA'S

EXHIBIT LIST NO. 3 UNDER 37 C.F.R. §42.63(e) is being served on June 21,

2018, via email to Counsel for Petitioner, Kerry Taylor and Michael L. Fuller, at:

BoxIllumina@knobbe.com

Dated: June 21, 2018

By: <u>/Brittany N. Internoscia/</u> Brittany N. Internoscia Law Clerk Cooper & Dunham LLP