

Materials Considered

Exhibit No.	Description
1001	U.S. Patent No. 9,718,852 (“Ju”) – (Claim 1 is an adenine claim)
1002	U.S. Patent No. 9,708,358 (“Ju”) – (Claim 1 is a cytosine claim)
1003	U.S. Patent No. 9,719,139 (“Ju”) – (Claim 1 is a thymine claim)
1004	U.S. Patent No. 9,725,480 (“Ju”) – (Claim 1 is a guanine claim)
1013	WO 91/06678 (“Tsien”)
1014	Prober et al., “A System for Rapid DNA Sequencing with Fluorescent Chain-Terminating Dideoxynucleotides”, Science, 238:336-341 (1987) (“Prober”)
1015	U.S. Patent No. 5,547,839 (“Dower”)
1016	Metzker et al., “Termination of DNA synthesis by novel 3’-modified-deoxyribonucleoside 5’-triphosphates”, Nucleic Acids Research, 22:4259-67 (1994) (“Metzker”)
1018	Sanger et. al., “DNA sequencing with chain-terminating inhibitors”, Proc. Natl. Acad. Sci. USA, 74:5463-5467 (1977) (“Sanger”)
1019	U.S. Patent No. 7,270,951 (“Stemple”)
1021	Pelletier et al., “Structures of Ternary Complexes of Rat DNA Polymerase β , a DNA Template-Primer, and ddCTP”, Science, 264:1891-1903 (1994) (“Pelletier”)
1023	Welch et al., “Syntheses of Nucleosides Designed for Combinatorial DNA Sequencing”, Chem. Eur. J., 5:951-960 (1999) (“Welch”)
1035	Boss et al., “Cleavage of Allyl Ethers with Pd/C”, Angew. Chem. Int. Ed. Engl., 15:558-559 (1976) (“Boss”)

Illumina Ex. 1138
 Illumina v. Columbia
 IPR2018-00291, -00318, -00322,
 -00385, and -00797

Exhibit No.	Description
1036	Qian et al., “Unexpected Enzymatic Fucosylation of the Hindered Tertiary Alcohol of 3-C-Methyl- <i>N</i> -Acetyllactosamine Produces a Novel Analogue of the LeX-Trisaccharide”, <i>Journal of the American Chemical Society</i> , 120:2184-2185 (1998) (“Qian”)
1037	Kamal et al., “A Mild and Rapid Regeneration of Alcohols from their Allylic Ethers by Chlorotrimethylsilane/Sodium Iodide”, <i>Tetrahedron Letters</i> , 40:371-372 (1999) (“Kamal”)
1039	Vollhardt et al., “Organic Chemistry”, Second Edition, W.H. Freeman and Co., New York (1994) (“Vollhardt”)
1046	Gigg et al., “The Allyl Ether as a Protecting Group in Carbohydrate Chemistry Part II”, <i>J. Chem. Soc. (C)</i> , 1903-1911 (1968) (“Gigg”)
1075	U.S. Patent No. 9,868,985 (“Ju”) – (Method claims)
1093	Ruparel and Ju et al., <i>Proc. Natl. Acad. Sci. USA</i> , 102:5932-5937 (2005) (“Ruparel”)
1099	IUPAC, Nomenclature of Organic Chemistry, Eds. Rigaudy et al., International Union of Pure and Applied Chemistry, Organic Chemistry Division, Commission on Nomenclature of Organic Chemistry, Pergamon Press, 1979.
1101	Greene and Wuts, “Protective Groups in Organic Synthesis,” third edition, John Wiley & Sons (1999)
1102	CRC Handbook of Chemistry and Physics, eds. Weast et al., 72nd edition, CRC Press (1991)
1103	McGraw-Hill Dictionary of Chemistry, ed. Parker, McGraw-Hill Book Co., 1984
1104	Solomons, “Organic Chemistry”, Fourth Edition, John Wiley & Sons (1988) (“Solomons”)

Exhibit No.	Description
1105	Morrison et al., “Organic Chemistry,” Third Edition, Allyn and Bacon, Inc. (1973)
1108	Cyclist® Exo ⁻ Pfu DNA Sequencing Kit, Instruction Manual, Stratagene (1998)
1114	Lemaire-Audoire and Genet et al., Tetrahedron Letters, 35:8783-8786 (1994)
1115	Lemaire-Audoire and Genet et al., Journal of Molecular Catalysis A: Chemical, 116:247-258 (1997)
1122	Gardner et al., Nucleic Acids Research, 27:2545-53 (1999)
1126	Kraevskii et al., Molecular Biology 21:25-29 (1987)
1129	Ju et. al., PNAS USA, 103:19635-40 (2006) (“Ju 2006”)
1130	U.S. 5,614,365 to Tabor et al.
1131	U.S. 5,885,813 to Davis et al.
1133	Southworth et al., PNAS USA, 93:5281-85 (1996)
1134	Takahashi et al., Bulletin of the Chemical Society of Japan, 45:230-36 (1972)
1135	Yamamoto et al., Organometallics, 5:1559-67 (1986)
1136	Fields, Methods in Molecular Biology, Volume 35, Peptide Synthesis Protocols, Chapter 2, Humana Press 1994
2098	Kang (1995)
2115	Parshall (1980)
2118	NIH Grant, Evolving Novel Polymerases for Genome Sequencing
2125	Eckert (1991)

Exhibit No.	Description
2131	Metzker, et al. (1998)
	Patent Owner's Response in IPR2018-00291 (Paper 34)