UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Thermo Fisher Scientific Inc., Petitioner

v.

The Regents of the University of California, Patent Owner

> Case IPR2018-01347 Patent No. 9,085,799

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 9,085,799

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Petition for Inter Partes Review of U.S. Patent No. 9,085,799

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	C.	The limited disclosure in the First and Provisional Applications is insufficient to provide written description of the full scope of "greater than 4 fold increase in emission in the absence of the polymer"	.30	

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EXHIBIT LIST

Thermo Fisher Scientific Exhibit #	Description
1001	Bazan, "Methods and Compositions For Detection and Analysis of Polynucleotides Using Light Harvesting Multichromophores," U.S. Patent No. 9,085,799 (filed August 14, 2014; issued July 21, 2015)
1002	Declaration of Kirk S. Schanze, Ph.D.
1003	Provisional application 60/406,266, filed August 26, 2002
1004	File History of U.S. Application No. 10/648,945, filed August 26, 2003
1005	Bazan, "Methods and Compositions For Detection and Analysis of Polynucleotides Using Light Harvesting Multichromophores," U.S. Patent No. 7,270,956 (filed August 26, 2003; issued September 18, 2007)
1006	File History of U.S. Application No. 11/854,365, filed September 12, 2007
1007	Bazan, "Compositions For Detection and Analysis of Polynucleotides Using Light Harvesting Multichromophores," U.S. Patent No. 7,629,448 (filed September 12, 2007; issued December 18, 2009)
1008	File History of U.S. Application No. 12/632,734, filed December 7, 2009
1009	Bazan, "Methods and Compositions For Detection and Analysis of Polynucleotides Using Light Harvesting Multichromophores." U.S. Patent No. 8,227,187 (filed December 7, 2009; issued July 24, 2012)
1010	File History of U.S. Application No. 13/544,303, filed July 9, 2012
1011	Bazan, "Methods and Compositions For Detection and Analysis of Polynucleotides Using Light Harvesting Multichromophores," U.S. Patent No. 8,617,814 (filed July 9, 2012; issued December 31, 2013)
1012	File History of U.S. Application No. 14/086,532, filed November 21, 2013

Thermo Fisher Scientific Exhibit #	Description
1013	Bazan, "Methods and Compositions For Detection and Analysis of Polynucleotides Using Light Harvesting Multichromophores," U.S. Patent No. 8,841,072 (filed November 21, 2013; issued September 23, 2014)
1014	File History of U.S. Application No. 14/460,245, filed August 14, 2014
1015	Kool, "Fluorescent Nucleoside Analogs and Combinatorial Fluorophore Arrays Comprising Same," International Publication No. WO 01/044220 (filed December 13, 2000; published June 21, 2001)
1016	Kang, T., <i>et al.</i> , "Photoluminescence properties of various polythiophene derivatives," <i>Synthetic Metals</i> 69: 377-378 (1995)
1017	Glazer <i>et al.</i> , "Dyes Designed For High Sensitivity Detection of Double-Stranded DNA," U.S. Patent No. 5,783,687 (filed September 5, 1996; issued July 21, 1998)
1018	De Angelis, D., "Why FRET over genomics?" <i>Physiological Genomics</i> 1: 93-99 (1999)
1019	Didenko, V., "DNA Probes Using Fluorescence Resonance Energy Transfer (FRET): Designs and Applications," <i>Biotechniques</i> 31: 1106–1121 (2001)
1020	Burgess <i>et al.</i> , "Through Bond Energy Transfer In Fluorescent Dyes For Labelling Biological Molecules," U.S. Patent No. 6,340,750 (filed December 14, 1999; issued January 22, 2002)
1021	Wang, J., <i>et al.</i> , "Photoluminescence of Water-Soluble Conjugated Polymers: Origin of Enhanced Quenching by Charge Transfer," <i>Macromolecules</i> 33: 5153-5158 (2000)
1022	Liu, B., <i>et al.</i> , "Synthesis of a novel cationic water-soluble efficient blue photoluminescent conjugated polymer," <i>Chem.</i> <i>Comm.</i> 551-552 (2000)
1023	Gaylord, B., <i>et al.</i> , "DNA detection using water-soluble conjugated polymers and peptide nucleic acid probes" PNAS 99: 10954-10957 (2002)
1024	The Nobel Prize in Chemistry 2000, Conductive Polymers, The Royal Swedish Academy of Sciences

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