DESMARAIS LLP

Kurt Fredrickson Ph.D.

Associate, San Francisco

PHONE: 415-573-1928 FAX: 415-573-1901
kfredrickson@desmaraisllp.com

Dr. Fredrickson's practice focuses on intellectual property litigation and counseling. Before law school, Dr. Fredrickson received his PhD and conducted computational physics and chemical engineering research for semiconductor processing and clean energy applications. Dr. Fredrickson previously worked as a chemical engineer in semiconductor processing, receiving a patent for his work. As a patent agent, Dr. Fredrickson prepared patent applications for consumer electronics and clean energy companies.

At Berkeley Law, Dr. Fredrickson was an Articles Editor for the Berkeley Law and Technology Journal and worked at the Samuelson Law, Technology & Public Policy Clinic. Dr. Fredrickson is a member of the Order of the Coif and received an IP & Technology Certificate through his completion of IP-related course work. Dr. Fredrickson received the American Jurisprudence Award (highest grade) in Evidence and participated in the McBain Honors Moot Court competition. Dr. Fredrickson's note, "'Otherwise Available to the Public': Using § 102 to Avoid the Supreme Court's Patent-Eligibility Quagmire" received the Aldo J. Test Award for Best Berkeley Law Submission to the Berkeley Technology Law Journal and the George Hutchinson Writing Award from the Federal Circuit Bar Association and has been accepted for publication in the Federal Bar Association Journal.

Prior Experience

- Summer Associate, Desmarais LLP, San Francisco, CA, 2022
- Technical Advisor/Patent Agent, Patterson+Sheridan, LLP, San Jose, CA, 2018-2020
- Computational Chemist, Applied Materials, Sunnyvale, CA, 2017-2018
- Visiting Scholar, Chemical Engineering Department, University of Pennsylvania, Philadelphia, PA, 2016-2017
- Postdoctoral Scholar, Chemical Engineering Department, Stanford University and SLAC National Accelerator Laboratory, Palo Alto, CA, 2015-2017

Clerk & Government Experience

- Judicial Extern to the Hon. Janis Lynn Sammartino, United States

EDUCATION

University of California, Berkeley, School of Law, 2023; Articles Editor, *Berkeley Technology Law Journal*; Member, *La Alianza Law Students of Latin American Descent*; Member, *Samuelson Law, Technology & Public Policy Clinic*

The University of Texas at Austin, Ph.D., Physics, 2015

University of California, Davis, B.S., Physics, 2009

ADMISSIONS

2023, California

Registered to practice before the United States Patent and Trademark Office

District Court for the Southern District of California, 2021

Courts

- United States District Court for the Western District of Washington
- United States District Court for the Eastern District of Texas

Other Distinctions

- George Hutchinson Writing Award, Federal Circuit Bar Association
- Order of the Coif, UC Berkeley Law
- IP & Technology Law Certificate, UC Berkeley Law
- Aldo J. Test Award, Berkeley Technology Law
- Professional Development Award, University of Texas at Austin
- Ovshinsky Travel Award, American Physical Society
- Dean's List, UC Davis
- Sigma Pi Sigma Physics Honor Society, UC Davis

Memberships & Affiliations

- American Bar Association
- San Francisco Bay Area Intellectual Property Inn of Court

Publications

- Kurt Fredrickson, Note, *"Otherwise Available to the Public": Using § 102 to Avoid the Supreme Court's Patent-Eligibility Quagmire*, Fed. Cir. Bar J. (forthcoming 2024).
- *Methods and Precursors for Selective Deposition of Metal Films*, U.S. Patent No. 11,515,151 (2022) See Article
- *MXene Materials for the Electrochemical Nitrogen Reduction*, ACS Catalysis 10, 253 (2019) See Article
- *First-Principles Modeling of Interface Effects in Oxides*, in *Handbook of Material Modeling* (2018) See Article
- *Strain Enhancement of the Electro-optical Response in $BaTiO_3$ Films Integrated on Si(001)*, Physical Review B 98, 075136 (2018) See Article
- *Robust and Conductive Two-Dimensional Metal−Organic Frameworks with Exceptionally High Volumetric and Areal Capacitance*, Nature Energy 3, 30 (2018) See Article
- *Tuning the Basal Plane Functionalization of Two-Dimensional Metal Carbides to Control Hydrogen Evolution Activity*, ACS Applied Energy Materials 1, 173 (2017) See Article
- *Recent Studies of Oxide-Semiconductor Heterostructures Using Aberration-Corrected Scanning Transmission Electron Microscopy*, Journal of Materials Research 32, 912 (2016) See Article
- *Two-Dimensional Molybdenum Carbide as an Efficient Electrocatalyst for Hydrogen Evolution*, ACS Energy Letters 1, 589 (2016) See Article
- *Effects of Applied Potential and Water Intercalation on the Surface Chemistry of Ti_2C and Mo_2C MXenes*, Journal of Physical Chemistry C 120, 28432 (2016) See Article
- *Mechanism of Oxidation Protection of the Si(001) Surface by Sub-Monolayer Sr Template*, Journal of Applied Physics 120, 065301 (2016) See Article

- *Spin-Polarized, Orbital-Selected Hole Gas at the EuO/Pt Interface*, Journal of Applied Physics 119, 095309 (2016) See Article
- *Surface-Hydrogen-Induced Metallization and Rumpling in Thin $BaTiO_3$ Films*, Physical Review B 94, 245425 (2016) See Article
- *Theoretical Modeling and Experimental Observations of the Atomic Layer Deposition of SrO Using a Cyclopentadienyl Sr Precursor*, Journal of Chemical Physics 145, 064701 (2016) See Article
- *Theoretical Study of Negative Optical Mode Splitting in $LaAlO_3$*, Physical Review B 93, 134301 (2016) See Article
- *Two-Dimensional Electron Gas at Oxide Interfaces*, in *Oxide Materials at the Two-Dimensional Limit* (2016) See Article
- *First Principles Studies of Perovskite Thin Films and Heterostructures*, PhD Thesis, University of Texas at Austin (2015) See Article
- *Carrier Density Modulation in a Germanium Heterostructure by Ferroelectric Switching*, Nature Communications 6, 6067 (2015) See Article
- *Integrated Films of Transition Metal Oxides for Information Technology*, Microelectronic Engineering 147, 285 (2015) See Article
- *Switchable Conductivity at the Ferroelectric Interface*, Physical Review B 91, 115126 (2015) See Article
- *Atomic and Electronic Structure of the Ferroelectric $BaTiO_3$/Ge(001) Interface*, Applied Physics Letters 104, 242908 (2014) See Article
- *Surface Electronic Structure for Various Surface Preparations of Nb-Doped $SrTiO_3$(001)*, Journal of Applied Physics 114, 103710 (2013) See Article
- *Wetting at the $BaTiO_3$/Pt Interface,* Journal of Applied Physics 113, 184102 (2013) See Article