

BERKELEY TECHNOLOGY LAW JOURNAL

VOLUME 38, ISSUE 1

2023

Pages

1-252

Production: Produced by members of the *Berkeley Technology Law Journal*.
All editing and layout done using Microsoft Word.

Printer: Joe Christensen, Inc., Lincoln, Nebraska.
Printed in the U.S.A.
The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Library Materials, ANSI Z39.48—1984.

Copyright © 2023. Regents of the University of California.
All Rights Reserved.



Berkeley Technology Law Journal
University of California
School of Law
3 Law Building
Berkeley, California 94720-7200
editor@btlj.org
<https://www.btlj.org>

BERKELEY TECHNOLOGY LAW JOURNAL

VOLUME 38

ISSUE 1

2023

ARTICLES

ANTIBODY PATENTS: USE OF THE WRITTEN DESCRIPTION AND ENABLEMENT REQUIREMENTS AT THE PATENT & TRADEMARK OFFICE	1
<i>S. Sean Tu & Christopher M. Holman</i>	
A POETICS OF TRADEMARK LAW	51
<i>Alexandra J. Roberts</i>	
MODERATING MONOPOLIES	119
<i>Nikolas Guggenberger</i>	
LIMITING ALGORITHMIC COORDINATION	173
<i>Michal S. Gal</i>	
ARE YOU OUT OF YOUR MIND?: NEUROTECHNOLOGIES AND THE MAKING OF DISEMBODED AGENCY	231
<i>Daniel Levin</i>	

SUBSCRIBER INFORMATION

The *Berkeley Technology Law Journal* (ISSN1086-3818), a continuation of the *High Technology Law Journal* effective Volume 11, is edited by the students of the University of California, Berkeley, School of Law and is published in print three times each year (March, September, December), with a fourth issue published online only (July), by the Regents of the University of California, Berkeley. Periodicals Postage Rate Paid at Berkeley, CA 94704-9998, and at additional mailing offices. POSTMASTER: Send address changes to Journal Publications, Law Library, LL123 South Addition, Berkeley Law, University of California, Berkeley, Berkeley, CA 94720-7210.

Correspondence. Address all correspondence regarding subscriptions, address changes, claims for non-receipt, single copies, advertising, and permission to reprint to Journal Publications, Law Library, LL123 South Addition, Berkeley Law, University of California, Berkeley, Berkeley, CA 94720-7210; (510) 643-6600; JournalPublications@law.berkeley.edu. *Authors:* see section titled Information for Authors.

Subscriptions. Annual subscriptions are \$65.00 for individuals and \$85.00 for organizations. Single issues are \$30.00. Please allow two months for receipt of the first issue. Payment may be made by check, international money order, or credit card (MasterCard/Visa). Domestic claims for non-receipt of issues should be made within 90 days of the month of publication; overseas claims should be made within 180 days. Thereafter, the regular back issue rate (\$30.00) will be charged for replacement. Overseas delivery is not guaranteed.

Form. The text and citations in the *Journal* conform generally to THE CHICAGO MANUAL OF STYLE (16th ed. 2010) and to THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION (Columbia Law Review Ass'n et al. eds., 21st ed. 2020). Please cite this issue of the *Berkeley Technology Law Journal* as 38 BERKELEY TECH. L.J. ____ (2023).

BTLJ ONLINE

The full text and abstracts of many previously published *Berkeley Technology Law Journal* articles can be found at <https://www.btlj.org>. Our site also contains a cumulative index; general information about the *Journal*; the *BTLJ Blog*, a collection of short comments and updates about new developments in law and technology written by BTLJ members; and *BTLJ Commentaries*, an exclusively online publication for pieces that are especially time-sensitive and shorter than typical law review articles.

INFORMATION FOR AUTHORS

The Editorial Board of the *Berkeley Technology Law Journal* invites the submission of unsolicited manuscripts. Submissions may include previously unpublished articles, essays, book reviews, case notes, or comments concerning any aspect of the relationship between technology and the law. If any portion of a manuscript has been previously published, the author should so indicate.

Format. Submissions are accepted in electronic format through Scholastica online submission system. Authors should include a curriculum vitae and resume when submitting articles, including his or her full name, credentials, degrees earned, academic or professional affiliations, and citations to all previously published legal articles. The Scholastica submission website can be found at <https://btlj.scholasticahq.com/for-authors>.

Citations. All citations should conform to THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION (Columbia Law Review Ass'n et al. eds., 21st ed. 2020).

Copyrighted Material. If a manuscript contains any copyrighted table, chart, graph, illustration, photograph, or more than eight lines of text, the author must obtain written permission from the copyright holder for use of the material.

SPONSORS

2022–23

The *Berkeley Technology Law Journal* and the Berkeley Center for Law & Technology acknowledge the following generous sponsors of Berkeley Law's Law and Technology Program:

ALLEN & OVERY LLP	AXINN, VELTROP & HARKRIDER LLP
BAKER MCKENZIE	BAKER BOTTS L.L.P.
BOIES SCHILLER FLEXNER LLP	CHARLES RIVER ASSOCIATES
COOLEY LLP	CORNERSTONE RESEARCH
COVINGTON & BURLING LLP	DESMARAIS LLP
DLA PIPER	DURIE TANGRI LLP
FENWICK & WEST LLP	FISH & RICHARDSON P.C.
GENENTECH, INC.	GEN LAW FIRM
GIBSON, DUNN & CRUTCHER LLP	GILEAD SCIENCES, INC.
GREENBERG TRAURIG, LLP	GTC LAW GROUP PC
HAYNES AND BOONE, LLP	HOGAN LOVELLS
IRELL & MANELLA LLP	JINGTIAN & GONGCHENG
JONES DAY	KEKER, VAN NEST & PETERS LLP
KILPATRICK TOWNSEND & STOCKTON LLP	KING & SPALDING LLP

SPONSORS

2022–23

KING & WOOD MALLESONS	KIRKLAND & ELLIS LLP
KNOBBE MARTENS	LATHAM & WATKINS LLP
MARKS & CLERK	MCDERMOTT WILL & EMERY
MICROSOFT	MORGAN, LEWIS & BOCKIUS LLP
MORRISON & FOERSTER LLP	OCEAN TOMO
ORRICK HERRINGTON & SUTCLIFFE LLP	PAUL HASTINGS, LLP
QUALCOMM TECHNOLOGIES, INC.	QUINN EMANUEL URQUHART & SULLIVAN, LLP
ROBINS KAPLAN LLP	ROPES & GRAY LLP
SIDLEY AUSTIN LLP	TENSEGRITY LAW GROUP LLP
VAN PELT, YI & JAMES LLP	VIA LICENSING CORPORATION
WANHUIDA INTELLECTUAL PROPERTY	WEIL, GOTSHAL & MANGES LLP
WESTERN DIGITAL CORPORATION	WHITE & CASE LLP
WILMER CUTLER PICKERING HALE AND DORR LLP	WILSON SONSINI GOODRICH & ROSATI
WINSTON & STRAWN LLP	WOMBLE BOND DICKINSON

BOARD OF EDITORS

2022–23

Executive Board

Editors-in-Chief
 DYLAN HOULE
 JESSICA LI

Managing Editor
 THOMAS MATTES

Sr. Executive Editor
 RYAN CAMPBELL

Sr. Articles Editors
 LUCILLE DAI-HE
 MARIAN LEE
 ROSS MOODY

Sr. Online Content Editors
 AL MALECHA
 KATHERINE WANG

Sr. Student Publications Editors
 SHIH-WEI CHAO
 REBECCA HO

Sr. Scholarship Editor
 WILL KASPER

Sr. Production Editor
 SARAH DAVIDSON

Editorial Board

Articles Editors
 KEATON BLAZER
 BRANDON DAILEY
 BRIGITTE DESNOES
 MATTHEW LUEVANO
 LAWRENCE MYUNG
 ELIZABETH OH
 NIKKI SEICHEPINE
 YUHAN WU
 ROBERT ZHU

Notes & Comments Editor
 NOAH COHEN

Student Publication Editor
 KATE BULGER

Submissions Editors
 ABRAHAM (ABIE)
 BRAUNER
 HYO JIN JEONG
 ANNIE KIM
 KERMIT RODRIGUEZ

Technical Editors
 CHIAGOZIEM
 MARK ANEKE
 ZHUDI HUANG
 CARESSA TSAI
 SOPHIE ZOLLMAN

Alumni Relations Editor
 EVA SPITZEN

External Relations Editor
 PRIMAVERA MARTINEZ

Jr. Production Editors
 SEUNGHAN BAE
 ALEX LE

Podcast Editor
 ISABEL JONES

Jr. Podcast Editor
 ERIC AHERN

BHAVYA SUKHAVASI
 ZOE SUN

Member Relations Editors
 JAEYOUNG CHOI
 PAYTON FONG

Symposium Editors
 MEAGHAN KATZ
 HUNTER KOLON

Web & Technology Editors
 LINDA CHANG
 PETER JOHNSTON

MEMBERSHIP

2022–23

Members

AKSHAT AGRAWAL	NORA AL HENAKI	NOOR ALANIZI
BRIAN ANDERSON	LAURAN BARLAND	HARVINDER (HARRY) BASSI
ANVITA BHANDARI	MARIT BJORN LUND	NICOLE BOUCHER
TIFFANEY BOYD	CARLISLE BOYLE	KATHY BUI
EMMA BURKE	ELLEN CAEN	ANGELICA CAMELO
ADRIANA CRISTINA CASADO BARRAL	JENNIFER CHENG	NIDHI CHIKKERUR
ALEX CHOI	TANISHA CHOUDHARY	WILLIAM CLARK
OWEN COOPER	DAISY CORONA	MAYA DARROW
ADAM DAVID	MAX DAVIS	UDIT DEDHIYA
HEATHER DEMOCKER	MICHELLE D'SOUZA	VERNON ESPINOZA
ASHLEY FAN	JOE FITZPATRICK	LAURA FORERO
BRIONNE FRAZIER	ALEXANDER GONZALEZ-TORRES	DYLAN GOOD
ANAN HAFEZ	LYNN HE	JISOO HONG
ELLEN JIN	CLEA JULLIEN	BRITTA KAJIMURA
SHREYA KAPOOR	PHILIP KATZ	JOHN KAUFFMAN
SHABRINA DEFI KHANSA	JUNG KIM	BEN KING
GULBABIL KOKVER	THELMA CHRISTEL KRISTJÁNSDÓTTIR	CYRUS KUSHA
JENNA KWAK	JESSICA KWOK	KRISTY LAM
JOY LEE	CRYSTAL LEE	MADISON ANN LEE

MEMBERSHIP

2022–23

Members (continued)

YAOQI LI	YU-JEN LIU	ANGELA MA
MARLEY MACAREWICH	MAHIMA MADAN	HARSHINI MALLI
BAILEY MALVEAUX	ANYA MANSOOR	ROBIN MARSHALL
GARRETH MCCRUDDEN	EDLENE MIGUEL	JOSH MIMURA
SUMAN MISHRA	JOHN MOORE	KEVIN NAVI
KAYLA NGUYEN	ANDREW OLIVEI	OLUWAPELUMI (PELUMI) OMONIYI
DAMILOLA OYEBAYO	HYEMI PARK	BEN PEARCE
ALESSANDRA POTINI	RUOYIN QI	JAANVI RATHI
KRITI RATHI	SAYAKA REED	SAMUEL REISS
JOE ROSS	CHRIS ROZOLIS	BANI SAPRA
RIDHIMA SAXENA	SIMONE SCHÜRCH	MASON SEDEN-HANSEN
SAKSHI SHARM	PAVANA SHIVAKUMAR UDASI	AISHWARYA SIHAG
ELIZABETH BASANA VALERIE SIMANJUNTAK	IAN SMITH	ANDREA SOTELO GASPERI
UTKARSH SRIVASTAVA	SANDEEP STANLEY	ANDREW STONE
CEM TEBER	SANSERN TEJSIHADHANANANDA	YAVUZ USAKLIOGLU
PEINING WANG	EMILY WELSCH	DOMINICK WILLIAMS
YIPING XU	YING (ELECTRA) YAO	JJ YOUNG
ENID YU	NICOLE ZEINSTR	YICHEN ZHANG
NINA ZHANG	BOJUN ZHAO	

BERKELEY CENTER FOR LAW & TECHNOLOGY

2022–23

Executive Director

WAYNE STACY

Staff

MARK COHEN
*Sr. Fellow & Director,
BCLT Asia IP Project*

ALLISON SCHMITT
*Fellow & Director,
BCLT Life Sciences Project*

JANN DUDLEY
Associate Director

RICHARD FISK
*Assistant Director,
Events & Communications*

IRYS SCHENKER
Office Administrator

JUSTIN TRI DO
Media Coordinator

ABRIL DELGADO
Events Specialist

Fellow

YUAN HAO
Senior Fellow

KATHRYN HASHIMOTO
Copyright Law Fellow

RAMYA CHANDRASEKHAR
Biometric Regulatory Fellow

ROBERT BARR
Executive Director Emeritus

BERKELEY CENTER FOR LAW & TECHNOLOGY

2022–23

Faulty Directors

KENNETH A. BAMBERGER
*The Rosalinde and
Arthur Gilbert Foundation
Professor of Law*

CATHERINE CRUMP
*Robert Glushko Clinical
Professor of Practice in
Technology Law and Director,
Samuelson Law, Technology
and Public Policy Clinic*

CATHERINE FISK
*Barbara Nachtrieb Armstrong
Professor of Law*

CHRIS JAY HOOFNAGLE
Professor of Law in Residence

SONIA KATYAL
*Roger J. Traynor
Distinguished Professor of Law
and Associate Dean, Faculty
Development and Research*

ORIN S. KERR
*William G. Simon
Professor of Law*

PETER S. MENELL
Koret Professor of Law

ROBERT P. MERGES
*Wilson Sonsini Goodrich &
Rosati Professor of Law*

DEIRDRE K. MULLIGAN
*Professor in the
School of Information*

TEJAS N. NARECHANIA
*Robert and Nanci Corson
Assistant Professor of Law*

OSAGIE K. OBASOGIE
*Haas Distinguished Chair,
Professor of Law, and
Professor of Bioethics*

ANDREA ROTH
Professor of Law

PAMELA SAMUELSON
*Richard M. Sherman
Distinguished Professor of Law*

PAUL SCHWARTZ
*Jefferson E. Peyser
Professor of Law*

ERIK STALLMAN
*Assistant Clinical Professor
and Associate Director,
Samuelson Law, Technology &
Public Policy Clinic*

JENNIFER M. URBAN
*Clinical Professor of Law
and Director, Samuelson
Law, Technology &
Public Policy Clinic*

MOLLY VAN HOUWELING
*Harold C. Hobbach
Distinguished Professor of
Patent Law and
Intellectual Property*

REBECCA WEXLER
Assistant Professor of Law