IN THE UNITED STATES DISTRICT COURT FOR THE STATE OF MINNESOTA

Susan F. Strohn, Individually, as Special Administrator of the Estate of Steven C. Strohn, Deceased, and as Trustee for the Next of Kin of Steven C. Strohn, Decedent,

Case No. 18-cv-1826-DSD-KMM

Plaintiffs,

AFFIDAVIT OF MARK LANTERMAN

v.

Northern States Power Company, *a Minnesota Corporation doing business as* Xcel Energy; Home Depot U.S.A., Inc.; Garan, LLC; Ploog Electric, Inc.; and XPO Last Mile, Inc.;

Defendants.

I, Mark Lanterman, state as follows:

1. My name is Mark Lanterman. I am the Chief Technology Officer of

Computer Forensic Services ("CFS") located in Minneapolis, Minnesota. CFS and I

have been retained by counsel for Defendants to assist with matters that involve

digital evidence.

Background

2. Our firm specializes in the analysis of digital evidence in civil and criminal litigation. I have over 25 years of experience in computer forensics and cybersecurity. Prior to joining CFS, I was a sworn investigator for the United States Secret Service Electronic Crimes Task Force and acted as its senior computer forensic analyst.

3. I am certified by the United States Department of Homeland Security as a "Seized Computer Evidence Recovery Specialist," as well as certified in computer forensics by the National White-Collar Crime Center. Both federal and state court judges have appointed me as a neutral computer forensic analyst and special master.

4. I graduated from Upsala College in New Jersey with both a Bachelor of Science and a Master's degree in computer science. I completed post graduate work in cyber security at Harvard University.

5. I am currently adjunct faculty of computer science for the University of Minnesota Technological Leadership Institute's Master of Science and Security Technologies program (MSST). I am also faculty at the Mitchell Hamline School of Law and the University of St. Thomas School of Law in Minnesota. I am also faculty for the National Judicial College in Reno, Nevada and the Federal Judicial Center in Washington D.C.

6. I have previously provided training and delivered keynote addresses for the United States Supreme Court; the Eleventh Circuit Federal Judicial Conference; the Eighth Circuit Federal Judicial Conference; the Southern District of Georgia; the

 $\mathbf{2}$

CASE 0:18-cv-01826-KMM Doc. 130 Filed 08/12/19 Page 3 of 26

Western District of Tennessee; and several state judicial conferences. I recently delivered the keynote address at the 2018 Chief Justices' Conference in Newport, Rhode Island. In 2018, I delivered the keynote address at Georgetown Law School's e-discovery conference.

7. I was appointed by the Minnesota Supreme Court to serve as a member of Minnesota's Lawyers' Professional Responsibility Board (LPRB). I was recently appointed to sit on its Opinion Committee.

8. I am a co-author of the Minnesota State Bar's e-Discovery Deskbook, and I also write monthly articles for *Minnesota Bench & Bar* magazine.

9. CFS is the exclusive, contracted computer forensic expert for the Hennepin County Sheriff's Office; the Ramsey County Attorney's Office; the Washington County Attorney's Office in Minnesota; as well as the Metropolitan Airports Commission, also known as the Minneapolis/Saint Paul International Airport. CFS is also partnered with the U.S. Secret Service to assist with its electronic investigations.

10. I have attached as Exhibit A, my CV, a representative list of cases in which I have testified, as well as a list of articles I have written for a number of publications throughout the past 10 years. I am compensated at a rate of \$425 per hour. My compensation is not dependent upon the outcome of this case.

Materials Reviewed

11. I am familiar with the facts as alleged. I have also received and reviewed the following documents in preparing this affidavit:

3

- a. The complaint;
- b. A letter dated June 14, 2019 from Timothy Fetterly to the Court, and Attachments 1 through 3;
- c. Order Concerning Discovery Dispute, entered August 5, 2019;
- d. A letter dated August 2, 2019 from Michael Coyle to the Court concerning ESI, and it associated exhibits;
- e. A letter dated August 2, 2019 from Matthew Sloneker to the Court;
- f. A letter dated August 2, 2019 from Timothy Fetterly to the Court.

12. I understand that there are "text messages from Mr. Strohn recently disclosed by a friend of his that relate to one of the time periods most relevant to this lawsuit", but that the messages have not previously been provided throughout the course of discovery. (*See* Court's Order, August 5, 2019 at 1). This fact tends to show that the forensic extraction that was created by Plaintiff's counsel's IT person may be insufficient. In short, there is information that may be available, but is not included in the extraction performed by Fraser Stryker's IT person.

13. In response to the Court's Order of August 5, 2019, I offer this affidavit to support Defendants' position that Mr. Strohn's smartphone hardware (iPhone) be produced for forensic preservation and analysis.¹ This position is supported for two primary reasons, which I will expound upon in this affidavit:

> a. A forensic extraction created using the commercial-available software "Oxygen Forensic®" software inherently does not necessarily contain all

¹ See Court's Order, August 5, 2019 at 1, ("The issue before the Court involves what steps need to be taken to search for relevant electronically stored information on a single cell phone. Specifically, the defendants renewed previously raised concerns regarding whether relevant evidence — primarily text messages, voicemails, and photographs — contained on Steven Strohn's personal cell phone had been extracted from the phone and provided to opposing counsel.")

potentially relevant information. The use of a single software tool is contrary to best practices.²

b. There is no risk of harm or accidental data destruction if the methodologies to extract data from the phone are properly executed.

An "Oxygen" iPhone data extraction, created by an unvetted individual, is not sufficient to determine issues material to the current dispute.

14. Sound data preservation is the first step generally taken by a trained computer forensic examiner. A process known as forensic imaging creates a copy of an electronic storage device's data. The resulting copy is known as a "forensic image." However, not all forensic images are created equally—especially in the case of smartphone and mobile devices. Forensically preserving data from mobile phones, requires different processes and procedures depending on the make, model and software of the phone. There is a stark difference between creating a forensic image of a laptop computer and, for example, an iPhone. For example, when the hard drive from a computer is removed, its data becomes static. This is not the case for iPhone and most mobile devices. The reason for this is simple—smartphone manufacturers develop their products to have an extra layer of security and will often attempt to prevent attempts to forensically preserve data.

15. I understand that Plaintiff's counsel's IT person performed the extraction from Mr. Strohn's iPhone using a commercially-available tool known as

² As of the date of this affidavit, Oxygen Forensic's home website hosts a testimonial that states, in part, "No one software can 'do it all' or does not have technical challenges from time to time." (Available at: https://www.oxygen-forensic.com/en/)

CASE 0:18-cv-01826-KMM Doc. 130 Filed 08/12/19 Page 6 of 26

"Oxygen Forensic®". (See letter dated Aug. 2, 2019 from Michael Coyle to the Court at 1).

16. There are a variety methodologies for extracting data from mobile devices. In the case of the Oxygen Forensic® software, there are two primary types of data extraction: physical and logical.³ (See "Oxygen Forensic® Data Extractor Features", Available at: https://www.oxygen-forensic.com/en/products/oxygen-forensic-extractor, "Oxygen Forensic® software offers both logical and physical methods of device acquisition via a regular USB cable."). Therefore, Oxygen Forensic® itself notes that there are a variety of methods for successfully extracting potentially relevant data from mobile devices.

17. While Oxygen Forensic® is a quality software tool, it inherently does not capture some types of data. For example, in many cases, a phone's settings at the time of the extraction are not captured or even summarized. This is of crucial import as Plaintiff's counsel has represented that "iPhone's have auto-archiving and internal algorithms to manage and store text messages". (*Id.*). While I do not know precisely what Mr. Coyle is referring to, he may be making reference to the fact that the iPhone iOS software has a setting that allow users to choose how long to retain text messages. (*See* Figure 1 below). The user configuration for this setting would not be available from an Oxygen Forensic® data extraction.

³ In essence, a logical extraction captures less information, but is typically faster, and easier to accomplish. Whereas, a physical extraction is one that allows for a more complete data set, including deleted information.

〈 Messages	Keep Messages	
30 Days		
1 Year		
Forever		\checkmark

Figure 1: iPhone "Keep Messages" setting

18. Second, it is best practice to use several different tools and extraction methodologies in order to extract information from a smartphone for forensic analysis. Different tools can be better for extracting different types of information. For example, some smartphone data extraction tools rely on special hardware, others like Oxygen Forensic®, simply rely on the phone manufacturer's built-in software for creating data backups. Indeed, depending upon how the extraction was done, it is possible, if not likely, that only undeleted text messages are available.

19. For this reason, an Oxygen Forensic® extraction, standing alone, is not sufficient to perform a complete analysis, and search of potentially relevant ESI. Plaintiff has represented that, as to text messages from the relevant time period, "There are none." (*See* letter dated Aug. 2, 2019 from Michael Coyle to the Court at 5). This may be true depending on the content of the forensic image, but deleted messages are not necessarily unrecoverable. Indeed, the relevant data exists

CASE 0:18-cv-01826-KMM Doc. 130 Filed 08/12/19 Page 8 of 26

elsewhere—on Mr. Block's iPhone. It may be possible to extract additional information directly from the phone itself using other tools and methodologies. However, without this attempt, Plaintiff and Defendants cannot determine whether this is possible.

The extraction process does not destroy or wipe all data on a phone, when conducted properly.

20. I understand that during an August 5, 2019 telephonic hearing with the Court, counsel for Plaintiff intimated that the phone's data would be wiped or otherwise destroyed if it were produced for forensic preservation. Indeed, as the Court pointed out "... plaintiffs are concerned that each time the phone is turned on, additional data is lost because the phone automatically overwrites over older information as new actions are taken." (*See* Court's Order, August 5, 2019 at 2).

21. While I do not want to take counsel's comments out of context, a phone is not "wiped" or reset to factory defaults during the data extraction process. It is true, however, that some data is modified during the process. This is inherent to mobile device data extractions simply because of the way their hardware and software is developed. However, producing the phone for forensic preservation would be no different than when Plaintiff undertook to extract the data. Moreover, the process would not destroy the information that is germane to claims and defenses in this ligation (e.g. date and timestamps and text message information). I declare under penalty of perjury pursuant to the laws of the United States of America that the foregoing is true and correct.

Executed on: August 12, 2019

Mahlant

Mark Lanterman

CASE 0:18-cv-01826-KMM Doc. 130 Filed 08/12/19 Page 10 of 26

Exhibit A



Mark Lanterman Chief Technology Officer

Professional Biography

Office 601 Carlson Parkway Suite 1250 Minnetonka, MN 55305

Phone (952) 924-9220

Fax (952)924-9921

Email mlanterman@compforensics.com

Web www.compforensics.com Mark has over 25 years of experience in digital forensics, e-discovery, and has provided education and training to a variety of audiences. Prior to founding Computer Forensic Services in 1998, Mark was a sworn law enforcement investigator with both state and federal law enforcement agencies including the United States Secret Service Electronic Crimes Task Force. Both federal and state court judges have appointed Mark as a neutral computer forensic analyst.

Mark is a member of the Minnesota Lawyers Professional Responsibility Board and serves on its Opinion Committee.

Mark frequently provides training within the legal community, including presentations for the United States Supreme Court, Georgetown Law School, the 11th Circuit Federal Judicial Conference, the 8th Circuit Federal Judicial Conference, the American Bar Association, the Federal Bar Association, and the Department of Homeland Security, among others.

As a member of its faculty, Mark has presented to the entire Federal Judiciary through the Federal Judicial Center. Mark is faculty at the National Judicial College in Reno, Nevada, Mitchell Hamline School of Law, the Saint Thomas School of Law. Mark is an adjunct instructor in the University of Minnesota's MSci Security Technologies program.

Mark provides frequent commentary about cyber security issues for national print and broadcast media, including ABC, Bloomberg, BusinessWeek, CBS, Fox News, NBC, *The New York Times*, NPR, and the *Wall Street Journal*.

Education and Certifications

Upsala College - B.S. Computer Science; M.S. Computer Science

Harvard University - Cybersecurity

Department of Homeland Security – Federal Law Enforcement Training Center Seized Computer Evidence Recovery Specialist

National White-Collar Crime Center - Advanced Computer Forensics

Publications

Co-author of the Minnesota State Bar E-Discovery and Forensic Desk Book

Regular columnist for Bench & Bar of Minnesota, Minnesota Lawyer, and Lawyerist



Representative Previous Testimony List – Mark Lanterman

- Edgewell Personal Care Company, Plaintiff v. Michael O'Malley, Defendant (Superior Court (Judicial District of Ansonia at Milford) No. AAN-CV-176025160-S)
- East Coast Test Prep, L.L.C. d/b/a Achieve Test Prep and Mark Olynyk, v. Allnurses.com, Inc., and David R. Smits, as Administrator of the Estate of Brian Short, ABC Companies 1-10 and John Does 1-10, Case No.: 0:15-cv-03705-JRT-SER (D. Minn.)
- DTN, LLC, v. Matthew Walsh, Case No. 0:17-cv-5206(SRN)(HB) (D. Minn.)
- In Re the Matter of: Wainaina Kamau and Ruth Marionya Kamau, Court File No: 27-DA-FA-18-5521 (Dist. Ct. Hennepin County, Minn.).
- Nagios Enterprises, LLC, vs. Mary Starr, et al. Court File No: 62-CV-16-3280, (Dist. Ct. Ramsey County, Minn.)
- Larry Novack Plaintiff, v. David Rios and United Parcel Service, Inc. Defendants (TX Dist. CT., 57th Dist. (Bexar County, Texas) No. 2016-CI-12388)
- Mylan Pharmaceuticals Inc., Petitioner v. Sanofi-Aventis Deutschland GMBH Patent Owner (United States Patent and Trademark Office) U.S. Patent Nos. 7,476,652 and 7,713,930-IPR2017-01526/IPR2017-01528)
- Elisabeth Ostendorf, an incapacitated adult by her Guardian and Conservator, Sebastian Kuhlgert, Plaintiff, v. Michigan State University and the Board of Trustees of Michigan State University, Defendants. (State of Michigan (In the court of claims) No. 15-47-MZ)
- Elyse Puklich, Petitioner, v. Blayne Puklich, Respondent, and Blayne Puklich, individually and derivatively as a shareholder of Puklich Chevrolet.: and BE Bismark Limited & B+E Reinsurance Limted, Plaintiff, v. Elyse Puklich, ELP Performance Limited, a Nevis Corporation and Puklich Ketterling, Inc., a North Dakota Corporation, Defendants. (Dist. Court (Burleigh Cty) State of North Dakota) No. 08-2014-CV-00029)
- Miles Construction, Inc. Plaintiff and Counterclaim Defendant, v. Andrea Weisberg and Daniel Rutman, Defendants and Counterclaim and Third-Party Plaintiffs, v. David Miles, Third-Party Defendant (MN Dist. CT., 4th Dist. (Hennepin Co.) No. 29-cv-16-14404)

- Jeffrey Ketchum and Anniken Ketchum, Plaintiffs, vs. Home-Owners Insurance; D & L Janitorial Supply, Inc., Defendants. (MI 47th Circuit Court (Delta Co.) No. 15-22960-CB)
- Parsons Electric L.L.C, Plaintiff, vs. Integrated Building Solutions L.L.C., Paul Kelly, Kristopher Kelly, Troy Stanislawski, and Jack Tucker, Defendants. (MN Dist. CT., 10th Dist. (Anoka Co.) No. 02-CV-16-2644)
- State of Minnesota, Plaintiff, vs. Erin Marie Hennessey, Defendant. (MN Dist. CT., 10th Dist. (Washington Co.) No. 82-CR-16-2208)
- The Hays Corporation, Plaintiff, vs. Barry Peters, et al. Defendants. (In The Circuit for Montgomery Cty, Maryland)
- International Chemtex Corporation, Plaintiff, vs. Jennifer Lassiter, John Hofstad, and Sustainable Water Treatment, LLC, Defendant. (United States Dist. Court (Dist. of MN)
- David Rubenzer and La La La, LLC, Plaintiff, vs. City of Burnsville, Defendant. (MN Dist. CT., 1st Dist. (Dakota Co.) No. 19HA-CV-15-3743)
- State of Minnesota, Plaintiff, vs. John Frederick Thorene, IV, Defendant. (MN Dist. Ct., 6th Dist. St. Louis Co.) No. 69DU-CR-15-3038)
- Nu-Look Exteriors, Inc., Plaintiff, vs. Brett A. Looney, Mark A. Peare, Julie A. Young, f/k/a Julie A. Strot, Stephen B. Martin, and 4 Corner Architectural Sheet Medal, Inc., Defendants. (MN Dist. CT., 1st Dist. (Dakota Co.) No. 19HA-CV-15-432)
- Brook Mallak, Plaintiff, v. Aitkin County, et al, Defendant (United States District Court of Minnesota (Hennepin Co.) No. 13-CV-02119 DWF/LIB)
- Jonathan Scarborough, Plaintiff, v. Federated Mutual Insurance Company, Defendant. (United States District Court (Dist. of MN) No: 0:15-cv-01633 -DWF/FLN)
- Future Motion, Inc., Plaintiff, vs. Changzhou First International Trade Co., LTD., Defendant. (United States District Court (Dist. of NV) No. 2:16-cv-00013-MMD-CWH)
- In re the Marriage of: Catherine Ann Ivey, Petitioner, v. John Raymond Ivey, Respondent (State of Minnesota (Hennepin Co.) No. 27-FA-15-7650)
- United States of America, Plaintiff, v. Khaalid Adam Abdulkadir, Defendant. (United States District Court (Dist. of MN) No: 15-mj984 KES)
- Kimberly Kay Seidel, Petitioner, and Trevor Carlton Seidel, Respondent. (MN Dist. Ct., 10th Dist. (Anoka Co.) No. 02-FA-15-2022)
- Dexon Computer, Inc., Plaintiff, v. Modern Enterprise Solutions, Inc., Timothy Durant, and Andrew Uzpen, Defendants (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-15-17171)

- Golden Supply, Inc., a Minnesota Corporation, Plaintiff, v. Jeffrey Hunt and Ken Aronckes, Defendants (MN Dist. Ct. 4th Dist. (Hennepin Co.) No. 27-CV-15-1625)
- Jerry Wilkinson and Karen Wilkinson, Plaintiffs, v. State Farm Fire and Casualty Company, Defendant. (United States Dist. Court (Eastern District of Wisconsin) Case No. 14 CV 1187)
- Greiner Construction, Inc., Plaintiff, vs. Bert Westerman and Gardner LLC d/b/a Gardner Brothers, Defendants. (MN Dist. Ct., 4th Dist. (Hennepin Co.)
- Samantha Orduno, Individually and On Behalf of all Others Similarly Situated, Plaintiff v. Richard Pietrzak, in his individual capacity as the Chief of Police of the City of Dayton; City of Dayton; John and Jane Does (1 – 120) acting in their individual capacity as supervisors in the City of Dayton; Michael Campion, in his individual capacity as Commissioner of the Minnesota Department of Public Safety; Mona Dohman, in her individual capacity as Commissioner of the Minnesota Department of Public Safety, John and Jane Doe Employees of the Minnesota Department of Public Safety in their individual capacities as officers, supervisors, staff, employees, independent contractors or agents of the Minnesota Department of Public Safety, Defendants. (United States District Court (Dist. of MN) No. 0:14-cv-01393-ADM-JSM)
- Zimmer, Inc., Plaintiff, v. Stryker Corporation; Howmedica Osteonics Corp. d/b/a Stryker Orthopedics; and Cody Stovall, Defendants. (United States District Court (Northern District of Indiana of Indiana South Bend Division) Case No. 3:14-cv-00152-JD-Can)
- Robert Half International Inc., a Delaware corporation, Plaintiff, v. Donna Farrugia, an individual; Brian Gabrielson, an individual; Abraham Klatt, an individual; Gary D. Nelson Associates, Inc., d/b/a Nelson Family of Companies, a California corporation; and Does 1-20, Defendants. (Superior court of State of California (San Francisco Co.) No. CGC-14-539338)
- In the matter of: Jeff Hiser and the Shenandoah Community School District. (Shenandoah Community School District Board of Directors (Hennepin Co.) DIA Docket NO. 14SCD001)
- Emergent Systems Exchange, L.L.C. Plaintiff, vs. Daniel Ray McGinnis, individually, and Boardroom Technologies, L.L.C., Defendants (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-147338)

- Tristan Connor Damron, by and through his father and next friend, Christopher Scott Damron, Plaintiff v. John E. Norris, individually, et. al., Defendants (AL Circuit Court (Elmore Co.) No. CV11-900259.00)
- Curtis Trude, an individual, and J.B.I., LLC, a/k/a JBI, LLC, a Minnesota limited liability company, Plaintiffs, v. Glenwood State Bank, a Minnesota banking corporation, Defendant, Counterclaimant, and Third Party Plaintiff, v. Peterson Earth Movers, Inc., a Minnesota corporation, Lavern D. Peterson a/k/a Bud Peterson, an individual, Golden West LLC, a Minnesota limited liability company, LaDon Peterson, an individual, and Charles D. Peterson, an individual, Third-Party Defendants. (MN Dist. Ct., 8th Dist. (Meeker Co.) No. 47-CV-12-176)
- Pioneer Home, Inc. aka, Pioneer Homes aka, Pioneercare aka, Pioneer Cottages, Plaintiff, v. American Federal Bank, Defendant. (MN Dist. Ct., 7th Dist. (Hennepin Co.) No. 56-CV-13-3353)
- Prosthetic Laboratories of Rochester, Inc., Plaintiff, v. Brandon Sampson, Daniel Tellijohn, Brian Green, John Doe, Jane Doe and XYZ Corporation, Defendants. (MN Dist. Ct. 3rd Dist. (Hennepin Co.) No. 55-CV-133625)
- Jenine Ellison, as the Personal Representative of the Estate of Lee Carter, deceased, Plaintiff v. Advanced Surgery Center of Palm Beach Count, LLC, a Flordia Limited Liability Corporation, Defendant. (15th Circuit Court (Palm Beach County), Florida. No: 502011CA020861XXXXMB.)
- JIT Companies, Inc., Plaintiff, v. Erik Edwin Swanson, Defendant. (MN Dist. Ct., 3rd Dist. (Hennepin Co.) No. 66-CV-132532)
- Brian Hamernick, Plaintiff, v. Bruce Carson and Blue Rock Refinishing Solutions, LLC, Defendants/Blue Rock Refinishing Solutions, LLC, Third Party Plaintiff, v. Pro Paint, Inc. and Pro Paint Metro, Inc., Third Party Defendants (MN Dist. Ct., 2nd Dist. (Ramsey Co.) No. 62-CV-136579)
- Asset Marketing Services, Inc. and New York Mint, LLC, Plaintiffs, v. Manifest Marketing, LLC d/b/a Western Mint, Steven Von Schmidt, and John and/or Jane Doe(s) Defendants. (MN Dist. Ct., 1st Dist. (Dakota Co.) No. 19HA-CV-13-1186)
- Crown Bank, Plaintiff, v. Landmark Community Bank, N.A., Puckmaster, LLC, Charles Arnold, Synergy Resource Group, Inc., John Does 1-10, and ABC Entities 1-10, Defendants. (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-13-2022)
- Michael David Jerome Schooler, Petitioner, v. Norah Claire Wallace, Respondent. (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-PA-FA-13120)
- Jeanette Wallis. Plaintiff v. BNSF Railway Company, Defendant (United States District Court Western District of Washington at Seattle (Hennepin Co.) No. 2:13-CV-0040-TSZ)

- Keeley and Grabanski Land Partnership Debtor(s) (U.S. Bankruptcy Court (ND District) Bky. Case No. 1031482-Chapter 11)
- Inter Faculty Organization (on behalf of Todd Hoffner) Union, And Minnesota State Colleges and Universities (on behalf of Minnesota State University Mankato) Employer. Before Arbitrator Gerald Wallin (IFO Case No. 13MK09/MnSCU Case Nos. 13-0075)
- Fasteners for Retail, Inc., Plaintiffs, v. Michael A. DeJohn, et al., Defendants. (In the Court of Common Pleas, Ohio (Hennepin Co.) No. CV-12-786894)
- Jason Ripley and Garage Floor Coating of MN, LLC, Plaintiffs, v. Steve Niebeling and Joseph Ciccarelli, also know as Joseph Franke, Defendants. (Dist. Ct., 2nd Judicial District (Ramsey Co.) No. 62-CV-13-489)
- Push Pedal Pull, Inc., formerly known as The R.D. Rogers Company, Plaintiff vs. Kent Casperson, individually, and 2nd Wind Exercise Equipment, Inc., Defendants. (SD Circuit Court-2nd Judicial Court (Minnehaha Co.) No. 49 CIV13-001299)
- State Farm Mutual Automobile Insurance Company and State Farm Fire and Casualty Company, Plaintiffs, v. Metro Injury, LLC, Lisa K. Huseboe, D.C., Sergio M. Triana, D.C., Mark Cereceda, D.C., and Robert Lewin, D.C., Defendants. (United States District Court of Minnesota (Hennepin Co.) No. 12-CV-01087 DSD/SER)
- Lifetouch Church Directories & Portraits, Inc., Plaintiff, v. Colleen Ingalsbe, MyChurch Family Album, and Mark Erwin, Defendants. (Jefferson County District Court (Jefferson Co.) No. 2012CV2304)
- Federated Mutual Insurance Company vs. Chad Patzke, an individual (Dist. Ct. State of Oklahoma (Oklahoma Co.) No. CJ-2011-2507)
- Voces De La Frontera, Inc., Ramiro Vara, Olga Wara, Jose Perez, and Erica Ramirez, Plaintiffs v. Members of the Wisconsin Government Accountability Board, each only in his official capacity: Michael Brennan, David Deininger, Gerald Nichol, Thomas Cane, Thomas Barland, and Timothy Vocke, and Kevin Kennedy, Director and General Counsel for the Wisconsin Government Accountability Board, Defendants. . (US District Court-Eastern District of Wisconsin. No. 11-CV-1011 JPS-DPW-RMD)
- Brian Honn and H. Design Salon, Inc., Plaintiffs, v. Best Buy Co., Inc., Best Buy Stores, LP, BBY Solutions, Inc., d/b/a Geek Squad, and SupportSpace, Inc., Defendants. (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-11-24099)
- John Diekman vs. Hotel Connections LTD. and Kenneth Shanley (Superior Court. New Jersey (Hudson Co.) No. HUD-L-5230-12)

- State of Minnesota vs. Alexander Steven Pipp (Dist. Ct. 2nd Judicial District (Ramsey Co.) D.C. No. 62-CR-127607/C.A. No. 2115339)
- State of Minnesota, Plaintiff, vs. Gohar Yesayan, Defendant, 6927 Hazelton Ave D, Van Nuys, CA 91405 (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CR-12-20406)
- State of Minnesota, Plaintiff, vs. Sarkis Mkhsyan, Defendant, 6927 Hazelton Ave D, Van Nuys, CA 91405 (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CR-12-20406)
- Multifeeder Technology, Inc. vs. British Confectionery Company Limited (Civil No. 09-1090)
- Dr. Sining Mao, Western Digital Corporation, and Western Digital Technologies, Inc., vs. Seagate Technology LLC (No. 65 160 00129 07)
- Boston Scientific Corporation vs. Edwards Lifesciences LLC and Kristen M. Skelton, and Louise Duckworth (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-11-5878)
- Boston Scientific Corporation vs. Carolyn Giles and Edwards Lifesciences LLC (Ct. of Common Pleas- South Carolina-Richland Co.)
- Boston Scientific Corporation vs. Edwards Lifesciences LLC and Vincent Barrese (Supreme Ct. State of New York-Saratoga Co.)
- Boston Scientific Corporation vs. Patrick Brady and Edwards Lifesciences LLC (Dist. Ct. Michigan-Kent Co.)
- Boston Scientific Corporation vs. Roger Riggs and Edwards Lifesciences LLC (Dist. Ct. Colorado-Douglas Co.)
- Boston Scientific Corporation vs. Richard Carey and Edwards Lifesciences LLC (Commonwealth of Massachusetts-Superior Ct. Depart. of Trial Court)
- SEC vs. Trevor G. Cook, Patrick J. Kiley, ET AL (Case No. 09 CV 3333-D. Minn., Filed November 23, 2009)
- Letici Zuniga Escamilla vs. SMS Holdings Corporation, et al. (U.S. Dist. Ct. File 09-CV-2120)
- Bradley Richard Malmgren vs. Commissioner of Public Safety (MN Dist. Ct., 1st Dist. (Dakota Co.), 19-HA-CV-09-2371).
- State of Minnesota vs. Chris Boudreau (MN Dist. Ct., 3rd Dist. (Steele Co.), 74-CR-08-2538).
- Mayer Hoffman McCann P.C. vs. Thomas L. Barton, et al. (US Dist. Ct., MO, 08-CV-00574).
- CBIZ, Inc. and CBIZ BVKT, LLC vs. Thomas L. Barton, et al. (OH, Court of Common Pleas, Cuyahoga Co., CV-08-667264).

- Federated Mutual Ins. Co. vs. Chris Boudreau (MN Dist. Ct., 3rd Dist. (Steele Co.), 74-CV-08-2234).
- State of Minnesota, by Michael Campion, its Commissioner of Public Safety, vs. CMI of Kentucky, Inc., (US Dist. Ct., MN, 08-CV-603).
- GJ&M Development, Inc. vs. City of Afton (MN Dist. Ct., 10th Dist. (Washington Co.), 82-C1-07-2637).
- Go Radio Broadcasting, LLC, et al. vs. Nancy Odney (ND Dist. Ct., Cass Co., 09-07-C-00312).
- Ryan C. Henry, et al. vs. Quicken Loans, Inc., et al. (US Dist. Ct., MI, 04-CV-40346).
- Three Angels Broadcasting Network, Inc., et al. vs. Gailon Arthur Joy and Robert Pickle (US Dist. Ct., Mass., 4:2008mc40019).
- ReliaStar Life Insurance Company and ReliaStar Life Insurance Company vs. KMG America Corporation, Kanawha Insurance Company (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-05-002563).
- Eaton Corporation, et al. vs. Jeffrey D. Frisby, et al. (MS, Hinds County, 254-04-642 CIV).
- Claudia Roberts vs. Canadian Pacific Railway, et al. (US Dist. Ct., MN, 06-CV-1960).
- Northwest publications, LLC d/b/a St Paul Pioneer Press vs. The Star Tribune Company, et al. (MN Dist. Ct., 2nd Dist. (Ramsey Co.), 62-C6-07-003489).
- Kevin Bores et al. vs. Domino's Pizza, LLC (US Dist. Ct., MN, 05-CV-2498).
- Bic Corporation and Sheaffer Manufacturing Co., LLC vs. Ted B. Sharpe (US Dist. Ct., IA).
- Steven B Schwartz, MD vs. Larry Teuber, MD and The Black Hiss Surgery Center (SD 7th Cir., CIV 02-986) Court appointed neutral expert.
- Eaton Electrical Inc. vs. J.T. Packard & Associates (US District Court, Northern District of Illinois-Eastern Division No. 05 C 3545).
- Francisca Sandoval, et al vs. American Building Maintenance Industries, Inc. (US Dist. Ct., MN, 06-CV-01772).
- Energy and Moisture Control Company, LLC vs. Anne Erickson, Richard Buendorf, John Doe, Jane Doe, and Companies X, Y, and Z (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-06-16626).
- Lindquist & Vennum, P.L.L.P. vs. Tamie P. Speciale and Dispute Resolution Management, Inc. (US Dist. Ct., MN, 05-CV-597).
- Tiffany Bentford vs. Eagle Employment Agency and The National Marrow Donor Program (US Dist. Ct., MN, CV-05-2542).

- Sarah Tooker Htoutou and Mohamed Htoutou vs. Shiba Investments Inc., d/b/a Radisson Hotel et al (US Dist. Ct., SD, CV-06-5019).
- State of Minnesota vs. Eric Wayne Roggenkamp (MN Dist. Ct., 7th Dist., K0-06-192).
- JoAnn Shimota vs. Michael Joseph Smith (MN Dist. Ct., 2nd Dist. (Ramsey Co.), 62-C8-06-4794).
- ACIST Medical Systems, Inc. vs. Sergio Bulask (MN Dist. Ct., 10th Dist. (Wright Co.), 86-CV-07-001545).
- Michael Afremov vs. Kurt Amplatz, M.D., Franck Gougeon and AGA Medical Corporation (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-02-017734) - Court appointed neutral expert.
- State vs. Brent Peterson (MN Dist. Ct., 4th Dist. (Hennepin Co.), 05-044-702).
- State vs. William Liebesny (MN Dist. Ct., 4th Dist. (Hennepin Co.), 05-044-699).
- Minntech Corporation vs. Serguei Usmanov (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-06-005883).
- GCM, Inc. vs. CDR Global and Justin Goduto (MN Dist. Ct., 1st Dist. (Dakota Co.), 19-C2-05-006785).
- In re Nortel Networks Corp. Securities Litigation (US Dist. Ct., NY, (Consolidated) 01-CV-1855).
- Lake Shore Radiator, INC vs. Radiator Express Warehouse (US Dist. Ct., FL, 3:05-CV1232-J-12).
- HSBC-Finance Corporation and HSBC Card Services Inc., vs. Peter C Constant (US Dist. Ct., MN, 06-1529).
- International Shield, Inc. vs. Joseph M. Kuderko, et al. (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-04-01497).
- St. Paul Travelers Companies, Inc. vs. T. Michael Miller and OneBeacon Insurance Group (MN Dist. Ct., 2nd Dist. (Ramsey Co.), 62-C6-05-007618).
- PFK-MARK III, Inc., vs. South Eastern Pennsylvania Transportation Authority (PA Ct. of Com. Pls., Philadelphia Co., Civil Action – Law: May Term, 2005).
- Health Billing Systems, Inc. vs. Julie Embry and David Embry (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-06-006643).
- Jeffrey L. Foust vs. John R. McFarland (MN Dist. Ct., 4th Dist. (Hennepin Co.), 27-CV-01-009914).
- David B. Peterson vs. Monticello Ford-Mercury, Inc. and Dennis E. Hecker (MN Dist. Ct., 10th Dist. (Wright Co.), 86-C9-05-001735).

- MSI Preferred Services, Inc. vs. Clements Agency, et al. (WI Cir. Ct. Branch 2, 04-CV-265).
- In the matter of Christopher Douglas Dorpat (State of MN, Department of Commerce Administrative Hearings (OAH Docket No. 3-1005-16498-2).
- In Re Marriage of Lynn Louise Davis vs. Bradley Duane Davis (MN Dist. Ct., 9th Dist. (Crow Wing Co.) 18-FO-05-000099).
- In Re Marriage of Lois K. Bullock vs. Robert W. Bullock Jr. (MN Dist. Ct., 1st Dist. (Dakota Co.), 19-F6-05-015750).
- US vs. Falodun (US Dist. Ct., MN).
- US vs. Denise Marie Henderson (US Dist. Ct., MN).
- Precision of new Hampton, Inc., vs. Sonnax Industries, Inc., (IA. Dist. CT.-Chickasaw Cty –Law No. LACV002194)
- Allstate Insurance Company, Farmers Insurance Exchange vs. Linea Latina De Accidentes, Inc., Cristina Suarez, Mobile Care Chiropractic, PLLC, Kristi Lea Zimmerman, D.C., Advanced Injury Specialists, LLC, Renewal Bodyworks, LLC, Scot A. Allan, D.C., Alex Prigoda, and Morningstar Home Care (US. Dist. CT of MN-093681)
- OneSource Inc., f/k/a/ Artful Dragon Productions, Inc., and f/k/a Prestige Argri-Group, Inc., John Arleth and Joan Arleth -Individually vs. I See Me! and Maria B. Haag-Peronally (First Judicial District-No # 25-CV10-2669)
- Dental Health Products, Inc. vs. Darby Dental Supply, LLC, et.al (No:11 CV 2821)
- Uline, Inc., vs. Wes Buckley (Superior CT. of California/Orange Cty- No: 30-2011-00462940-CU-BT-CJC)
- Spanlink Communications, Inc., vs. eLoyalty Corporation, Martin Hameline, and Jeffry Parshall (Fourth Judicial District–No. 27-CV-1023591)
- University of Wisconsin Medical Foundation, Inc. vs. Meriter Hospital, Inc., et al. (Dane Cty Cir. Ct.-No. 11CV5005)
- Genesis Attachments, LLC vs. Bruce E. Bacon and Exodus Machines, Incorporated (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-11-3438)
- Birchwood Laboratories, Inc., vs. Battenfeld Technologies, Inc. (US Dist. Ct./Dist. of MN-Civil File No: 09-cv-3555-MJD-JJK)
- Goodsell POFM Arbitration (MN-Hennepin County)
- CBIZ Benefits & Insurance Services, Inc., a Missouri Corporation vs. William Flaherty, an individual; Bonnie Flaherty, an individual; and One Benefit Source, a California Corporation; and DOES 1-10 (US Dist. Ct of California) No. CV11-8670 JHN (JCGx)

- Bagelmann vs. IBMC (Dist., Ct., 4th Dist. -Hennepin Co.)
- James E. Fields, an individual, and Ed Fields and Sons, Inc., a Minnesota Corporation vs. Anthony Emmerich, an individual, Roger Okerman, an individual, Round Lake, LLC, a Minnesota Limited Liability Corporation, and 1st Regents Bank, a Minnesota Corporation (Dist., Ct. 10th Dist. (Anoka C.) No. 02-CV-11-5482)
- Relco, LLC vs. A Kent Keller, Keller Technologies, Inc., Roger Oshsner, Cheese Systems, Inc., Custom Fabricating and Repair, Inc., and Troy Cascoigne (MN Dist. Ct. 8th Dist. (Kandiyohi Co.) No. 34-CV-11-396
- Dawn Laurie-Johnson vs. Kathryn E. Meyer, Fiduciary of the John Meyer Estate, and Andrew Meyer (IA Dist. Ct. (Fayette Co.) No. LACV053026)
- Palm Beach Finance Partners, L.P. and Palm Beach Finance II, L.P. Debtors./Barry E. Mukamal, in capacity as Liquidation Trustee vs. Greater Minneapolis Daycare Association (US Dist. of Florida Palm Beach Division-No. 09-36379-BKC-PGH/Adv. Case No. 11-02963-PGH)
- In Re the Marriage of: Krista Susan Bauer and Blaine Courtney Bauer (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-FA-10-6650)
- In Re the Marriage of: Lalainia Joy Lewandowski, Petitioner and Richard Joel Lewandowski, Respondent (Dist., Ct. 10th Dist. (Anoka C.) No. 02-FA-09-1823)
- United Natural Foods, Inc., a Delaware Corporation vs. james Hagen, an individual, Barclay Hope, an individual, Freshpack Produce, Inc., a Colorado corporation, Freshpack Acquisition Corp., a Colorado corporation, Freshpack Holdings, LLC, a Delaware limited liability company, Tonka Bay Equity Partners, LLC, a Minnesota limited liability company, and Silver Peak Partners, LLC, a Delaware limited liability company. (Dist. Ct. Denver, Colorado (Denver Co.) No. 2010CV4220)
- TruStone Financial Federal Credit Union vs. Michael Lott (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 27-CV-10-7511)
- State of Minnesota vs. Bradley Allen Carney Blount (MN Dist. Ct., 3rd Dist. (Waseca Co.) No. 81-CR-09-1180)
- Mesabi Natural Stone, LLC vs. Angel Snidarich and Up North Stone, Inc. (Dist. Ct., 6th Dist. (St. Louis Co.) No. 69VI-CV-09-506)
- Cindy Hunter, as Personal Representative of the Estate of Viola Huckabay, Deceased vs. Phoenix Healthcare, L.L.C. and Larry Cain as Court-Appointed receiver of The Lakes Nursing Home (Dist. Ct. of Oklahoma Co. State of Oklahoma-No. CJ-2009-402
- Larry E. Smith as trustee for the Heirs and Next to Kin of David Cornelius Smith vs. Timothy Gorman and Timothy Callahan, acting in their

individual capacities as Minneapolis Police Officers, and The City of Minneapolis (MN Dist. Ct., 4th Dist. (Hennepin Co.) No. 11-cv-03071)

- State of Minnesota vs. Michael David Brown (Dist. Ct., 10th Dist. (Wright Co.) No. 86-CR-11-1558)
- State of Minnesota vs. David Allen Wentworth (Dist. Ct., 1st Dist. (Scott Co.) No. 70-CR-11-7099)
- State of Minnesota vs. Roger Keith Gould (Dist. Ct. 5th Dist. (Blue Earth Co.) No. 07-CR-11-1199)
- Stacey Buzay vs. Edward Jones Mortgage, LLC, Wells Fargo Bank, N.A., and Doherty Employment Group, Inc. (Dist. Ct. of MN (Hennepin Co) No. 11-cv-01315 (DSD/JSM)
- State of Minnesota vs. Cade Cole Duroe (Dist. Ct. 5th Dist. (Cottonwood Co.) No. 17-CR-11-192)
- WuXI ApptTec, Inc. vs. Gabrielle J. Van't Hul Zaeska and American Preclinical Services, LLC. (Dist. Ct. 4th Dist.(Hennepin Co.) No. 27-CV-12-8285



Publications

Bench & Bar of Minnesota

Security, Convenience and Medical Devices August 2019

Physical Security as Part of an Incident Response Plan July 2019

Papers and Effects Part II May/June 2019

Security Considerations for Law Firm Data Governance March 2019

The Marriott breach: four years? February 2019

"Papers and effects" in a digital age co-authored with Judge (Ret.) Rosenbaum January 2019

The Chinese spy chip scandal and supply chain security December 2018 Republished in The Computer & Internet Lawyer

Don't forget the inside threat November 2018

Cyberattacks and the costs of reputational harm October 2018

Fair elections and cybersecurity September 2018

E-discovery vs. forensics: Analyzing digital evidence August 2018

Social media and managing reputational risk July 2018

Managing Cyber Risk: Is cyber liability insurance important for law firms? June 2018 Republished in The Computer & Internet Lawyer *Social engineering: How cybercriminals capitalize on urgency* April 2018

Stephen Allwine: When crime tries to cover its digital track March 2018

Is the Internet of Things spying on you? February 2018

#UberFail January 2018

Ransomware: To pay or not to pay? December 2017

How digital evidence supported gerrymandering claims November 2017

Facial recognition technology brings security & privacy concerns October 2017

Putting communication and clients first in digital forensic analysis September 2017

Digital evidence: New authentication standards coming July 2017

Your Personal Data – Or is it? Doxxing and online information resellers pose threats to the legal community June 2017

What You Don't Know Can Hurt You: Computer Security for Lawyers March 2014

Minnesota Lawyer

Phishing, vishing and smishing – oh, my! January 2018

Equifax was unprepared for a data breach September 2017

Cybersecurity and forensic application in cars July 2017

Preventing 'spear-phishing' cyber attacks May 2017

Opting out when private information goes public March 2017

Are fingerprints keys or combinations? February 2017

Digital Forensics and its role in data protection February 2017

Acknowledge the security issues December 2016 *Modern life is driven by the internet of things* November 2016

Are medical devices vulnerable to hackers? October 2016

Digital evidence as today's DNA September 2016

Colorado Lawyer

Is Emailing Confidential Information a Safe Practice for Attorneys? July 2018 Republished in The Journals & Law Reviews database on WESTLAW

International Risk Management Institute, Inc. (IRMI)

Communication in Responding to Cyber Attacks and Data Breaches June 2019

Cyber Security and Resilience January 2019

Leadership in Developing Cultures of Security September 2018

Real-Life Consequences in a Digital World: The Role of Social Media July 2018

Some Thoughts on the Dark Web—and How it Affects You March 2018

Personal Information and Social Media: What Now to Post September 2017

Managing Doxxing-Related Cyber Threats July 2017

Understand the Layers of Cyber-Security and What Data Needs Protecting March 2017

Learn about the Internet of Things: Connectivity, Data, and Privacy Assessing Risk and Cyber-Security September 2016

SCCE The Compliance & Ethics Blog

The Components of Strong Cybersecurity Plans: Parts 1-5 2017

Prevention Is the Best Medicine August 2016

Lawyerist

Detection: The Middle Layer of Cybersecurity April 2017

Don't Be Too Hasty! What to Do When an Email Prompts You to Act Quickly February 2017

How to Avoid Spoofing, Spear Phishing, and Social Engineering Attacks October 2016

E-Discovery Deskbook

Chapter Thirteen "Forensic Experts—When and How to Leverage the Talent" coauthored with John M. Degan Briggs and Morgan, P.A.