

LIFE SCIENCES, BIOTECHNOLOGY, PHARMACEUTICAL AND MEDICAL DEVICE IP TEAM

What Makes Vorys a Good Fit?

RELEVANT EXPERIENCE

We have a wide range of relevant technical experience working with several companies in the medical treatment and prevention field, including substantive patent drafting and prosecution, and analyses for opinions.

VETERAN PORTFOLIO MANAGERS

Our team is versed in managing and onboarding large patent portfolios, and our patent attorneys currently have the capacity to effectively and efficiently manage patent portfolios. We regularly coordinate with FDA counsel regarding Orange Book and Purple Book listable patents.

WE ARE INNOVATIVE

We offer innovative patent spend management solutions, such as PatentlyIntegrated®, to help clients align foreign filing, prosecution, and maintenance decisions in view of business goals.

At Vorys, our patent transactional and prosecution team has developed extensive capabilities to assist our life sciences, biotechnology, and medical device clients with their intellectual property needs. Our attorneys and professionals have extensive technical and legal experience in methods and therapies related to life sciences. In particular, our team has technical experience in pharmaceutical and biological research and development, delivery systems, manufacturing, diagnostics, genomics, medical devices, bioinformatics, proteomics, vaccines, and screening assays. Our team has counseled life science clients in areas of patent portfolio development strategy, licensing, acquisitions, divestitures, strategic collaborations, due diligence, investments, FDA related patent procedures, trade secrets, and associated litigation. We believe in a proactive approach to helping our clients identify their business goals and match intellectual property strategies to those goals using appropriate and cost-effective mechanisms. Our patent team are active members of the life sciences community through bar associations, trade associations, and industry organizations. Our experience in the industry helps clients execute their business goals in a cost-appropriate and efficient manner. Recent experience includes:

- Preparing patent applications for one of the world's largest drug manufacturers of protein-based therapeutics.
- Drafting and prosecuting U.S. and foreign patent applications on bioscience-related inventions, such as pharmaceuticals, vaccines, diagnostics, cancer therapeutics, gene therapy, heart and arterial stents, contraceptive devices, dental products, diabetes management products, anti-rejection drugs, cardiology treatments, antifungals, antibiotics, gynecological treatments, dermatological drugs, and antibodies.
- Representing clients in post-issuance patent challenges before the U.S. Patent and Trademark Office, including proceedings related to chromatographic separation of biological samples, modeling software and algorithms, semiconductor testing methods, a cardiovascular treatment, and a dermatological product.

- Representing U.S. and foreign universities and university laboratories.
- Drafting and reviewing regulatory dossier submissions for the U.S. Food and Drug Administration (FDA) and the European Agency for the Evaluation of Medicinal Products in support of drug marketing approval.
- Counseling clients regarding supportive Drug Master Files for New Drug Applications before the FDA related to medical devices.
- Analyzing and preparing patent submissions for the FDA Orange Book.
- Conducting due diligence investigations related to medical devices for an international pharmaceutical company, including regulatory analysis.
- Conducting due diligence analysis of a global patent portfolio for a pre-clinical stage potential blockbuster drug and negotiating the global license of this portfolio.
- Analyzing and providing freedom to operate, invalidity and non-infringement opinions for ophthalmological treatments and dermatological products.

Relevant Experience

Robotic surgical tools	Dental tools and equipment	Nanotherapeutics
Endoscopic, laparoscopic, and endovascular medical devices	Spinal implants	Medical sensors and imaging
Intravenous stents	Joint fusion devices	Magnetic resonance imaging tools
Orthopedic and biomedical implants	Cardiac stents, pacemakers	Medical diagnostic systems
<i>In vivo</i> sensors	Biomaterials	Consumer wearable health-tracking devices
	Molecular and nano-based bioimaging agents	Insulin pumps and detectors
		Cardiological drugs
		Gynecological suppositories
		Antifungal treatments
		Dermatological drugs
		Anti-rejection treatments
		Surgical orthopedic devices



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Kim Beis: Kim is a partner located in Chicago, Illinois. She has extensive experience with IP litigation in industries regulated by the Food and Drug Administration and the Federal Trade Commission. Kim's experience in this area includes Hatch-Waxman Act litigation, biologics and biosimilars, antitrust matters, and other complex regulatory matters. She has experience in all aspects of litigation from pre-suit investigations, discovery, motion practice, trial preparation to examining witnesses at trial in both state and federal court. Kim also has experience advising clients in a variety of industries regarding compliance with FDA and FTC requirements. Through her experience in litigation, regulatory matters, advertising and labeling litigation and compliance, trademark infringement, and more, Kim has assisted clients from a variety of industries including the pharmaceutical, health care, cosmetic, and consumer product industries. Kim received her J.D. *magna cum laude* from Northern Illinois University College of Law. She earned her B.A. from Lewis and Clark College.



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Stephen Benson: Stephen is a partner located in Chicago, Illinois. He has an extensive background in microbiology and physics, as well as nearly 20 years of experience in IP law and more specifically IP litigation and counseling clients on issues related to pharmaceutical patents. Stephen primarily assists clients in industries regulated by the Food and Drug Administration and the Federal Trade Commission. This includes representing clients in Hatch-Waxman Act litigation, New Drug Applications (NDAs), Abbreviated New Drug Applications (ANDAs), biologics and biosimilars, antitrust matters, and other complex regulatory matters. He manages matters from strategy design to settlement and verdict. Stephen has led fact and expert discovery; appeared at hearings and filed motions; conducted direct and cross-examination at trial; and routinely supervises associates on litigation tasks. Stephen received his J.D. from the DePaul University College of Law in 2005. He received his M.S. in Neurobiology from Northwestern University and his B.S. Microbiology and Physics from the University of Michigan.



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D. Jeremy Harrison: Jeremy has experience preparing and prosecuting foreign and domestic patent applications in numerous technologies, focused primarily in the mechanical and electromechanical arts. Jeremy has specific experience preparing and prosecuting patent applications relating to the medical industry, including robotic surgical tools, endoscopic and laparoscopic medical devices, orthopedic and biomedical implants, in vivo sensors, intravenous stents, and dental tools and equipment. Jeremy received his J.D. *cum laude* from Franklin Pierce Law Center and his B.S. in Mechanical Engineering from Brigham Young University.



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Carey Jordan: Carey leads the Vorys patent group and is a 20-year patent veteran. She has handled numerous patent procurement and counseling matters involving pharmaceutical formulations, medical devices, and medical testing methods and apparatus. In particular, Carey has developed expertise in the field of material science as it relates to pharmaceuticals and medical devices. She has also counseled clients for FDA, NDA, and ANDA applications and resulting litigation. She has specific experience advising suppliers of medical devices and pharmaceutical formulations relating to DMFs and other documentation to support NDA and ANDA applications. Carey received her J.D. from the University of Houston Law Center in 1997, and her B.S. and M.S. in the polymer chemistry area from Clemson University.



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Iona Kaiser: Iona is a partner and has over 20 years of experience, first as a chemical engineer and then a patent attorney. She has written and prosecuted patents across the spectrum of the chemical arts, and she currently focuses her practice on U.S. and foreign prosecution and work flow design to improve outcomes for clients. Iona has drafted and supervised the drafting and prosecution of applications around the world on various topics ranging from hydrocarbon transportation, corrosion chemistry, alternative sweeteners, negative-pressure wound therapy, polymer chemistry, and nanomaterials. She regularly advises clients on opinion and clearance issues regarding proposed products and processes. Iona has years of experience managing global patent portfolios to promote consistency of worldwide prosecution while harnessing efficiencies across the scope of a portfolio. She received her B.S. in Chemical Engineering from the Virginia Polytechnic Institute and State University and worked for five years as a process control engineer at a chemical processing facility focused on acetyls and ethylene oxides and their derivatives before attending law school. She received her J.D. *magna cum laude* from the University of Houston Law Center.



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Mihsun Koh: Mihsun is a partner and has extensive experience in drafting and prosecuting U.S. and foreign patents in the fields of biotechnology, pharmaceuticals, pharmacognosy, chemistry, chemical materials, nanotechnology, polymers and green technology. Mihsun's practice also includes conducting due diligence and writing legal analysis regarding freedom to operate, patentability, patent invalidity and non-infringement, and has experience in patent validity challenges before the U.S. Patent and Trademark Office (inter partes review; ex parte reexamination). Mihsun is a registered Korean patent attorney and, prior to joining Vorys, worked for several years at a large Korean patent law firm representing major U.S., European and Japanese chemical and pharmaceutical companies in patent prosecution, litigation and technology due diligence. She is also a licensed pharmacist in Korea and worked for several years as a pharmacist at a large Korean pharmaceutical company in Seoul. Mihsun received an LL.M. from the Georgetown University Law Center. She also received an LL.M. in IP Law from the Yonsei University Graduate School of Law and a B.S. in Pharmacy from the Seoul National University, in Seoul Korea.



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Michael V. Messinger: Mike is a partner in the Vorys Washington, D.C. office. He helps clients harvest innovation, protect products and services, and monetize or defend patent portfolios. Throughout his career, Mike has helped clients create IP strategies for protection and to enhance their freedom-to-operate in computer, electronics and sustainable technologies. He routinely works with company officers and engineers to identify patentable inventions and build strategic patent portfolios. Mike has deep experience prosecuting U.S. and international patent applications. This includes developing worldwide patent portfolios that track company business goals and writing and prosecuting numerous patent applications covering inventions in cloud computing, machine learning, computer networking (Internet and World-Wide Web technologies), browsers, geographical information systems, graphics processing, high-speed optical communications, solar, wind and tidal energy, and data mining. Mike received his J.D. from the Georgetown University Law Center and his B.S. *magna cum laude* in Physics, from Duke University.



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Khaled Shami: Khaled is a partner in the Vorys Washington, D.C. office. He has a bachelor's degree in electrical engineering and has worked as a patent examiner in the U.S. Patent and Trademark Office. He is also affiliated with our Orange County office and spent more than 20 years in Silicon Valley counseling tech companies of all sizes and nationalities in building and monetizing their U.S. and international IP portfolios. From start-ups to large multinational concerns, Khaled has closely associated with inventors, engineers and in-house counsel to develop patent incentive programs, harvest inventions, and draft and prosecute patent applications, implementing effective strategies to build strong IP positions in competitive high tech landscapes. Khaled's technical experience includes medical devices, diagnostics systems and instrumentation, spectrometry and chromatography, computer software and hardware, networking, cloud storage and computing, memory devices, EDA and circuit design, analog circuits, antennas and wireless transmission, signal processing, clean energy, battery technology, avionics and aeronautics, electro-optics and imaging. He received his B.S. in Electrical Engineering from the University of Maryland with emphasis in pre-medicine, including physical chemistry, organic chemistry and biochemistry, and a J.D. from Southwestern University School of Law.



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Anthony Venturino: Anthony is a partner in the Vorys Washington, D.C. office. He has prepared numerous U.S. and PCT patent applications, trademark applications and opinions. He has also participated in major intellectual property litigation, post grant proceedings at the US Patent Office, as well as oppositions and cancellations at the US Trademark Office. He is responsible for complex activities including negotiating and drafting agreements, conducting due diligence for multi-million-dollar technology acquisitions and counseling senior management on intellectual property issues. Prior to joining Vorys, Anthony served as patent counsel for the U.S. Surgical Corporation and was a chemical engineer with Exxon. Anthony's fields of technical experience include chemistry, catalysts, oil, gas and coal processing, metallurgy, surfactants, polymers, pharmaceuticals, compositions, biotechnology, industrial machinery and medical devices. Anthony received his J.D. cum laude from The George Washington University Law School and his M.Ch.E. in Chemical Engineering and his B.Ch.E. *magna cum laude* from Manhattan College.



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Mark A. Watkins: Mark is a partner who focuses his practice on all facets of intellectual property protection, including patent, trademark, copyright, trade secrets, and intellectual property litigation. Mark provides IP counsel to many Fortune 1000 companies across the U.S. and around the world, helping companies create IP strategies for the procurement and protection of their IP rights. He has also participated in the enforcement and defense of a wide range intellectual property matters, including patent, trademark and copyright infringements, and misappropriation of trade secrets. His notable experience in this area includes serving as the primary attorney responsible for the management of international trademark procurement and enforcement efforts. This role included the coordination of a worldwide litigation docket; participation in proceedings before the U.S. Customs Service for protection of trademarks and copyrights; and expert witness testimony on patent procurement and litigation issues. Mark received his J.D. from the University of Akron School of Law and his B.S. in Pharmacy from Ohio Northern University. He was also a practicing pharmacist for nearly seven years.



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Maryellen Feehery Hank: Maryellen is of counsel at Vorys and has been a patent attorney for over 20 years. Her intellectual property counseling couples her analytical skills with a keen strategic viewpoint. Her practice includes patent portfolio acquisition, management and prosecution for pharmaceuticals, biologics and medical devices in the areas of cardiology, oncology, ophthalmology, antibiotics, fungicides, dermatology, gynecology, organ transplantation, drug delivery systems and other areas. She advises clients on global IP strategy development and implementation; IP portfolio licenses, acquisitions and divestitures; patent prosecution, including inter partes reviews, reexaminations and reissues; freedom to operate, patent invalidity and non-infringement opinions; negotiation of complex IP transactions; trademark prosecution; trade secret counseling; patent, trademark and trade secret litigation; and other intellectual property counseling. She regularly coordinates with FDA counsel regarding Orange Book listable patents and provides paragraph (iv) litigation advice. Clients seek her in the pharmaceutical, life sciences, specialty chemical, recycling, catalyst and animal repellent fields, among others. Before becoming an attorney, Maryellen was a process engineer for Rohm and Haas. She received her B.S.E. in Chemical Engineering from the University of Pennsylvania and her J.D. from the University of Pennsylvania Law School.



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James F. Hooson: James is a patent agent in the Vorys Houston office and a member of the intellectual property (IP) group. He has experience in preparing patents for the chemistry, chemical engineering, materials science and pharmaceutical fields. He also has experience in amending claims and aiding in the conversion of foreign-filed applications into U.S. applications. In regard to technologies, James has experience with semiconductor fabrication, biotech and batteries. James received his Ph.D. in chemistry from the University of Houston. He received his B.S. in biochemical and biophysical sciences from the University of Houston.



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Dr. Tim Petrosius: Tim is a patent agent in the Vorys Houston office. With past experience in the automotive industry, as well as research focused on the development of novel 3-D computational fluid dynamics software, he works with a variety of novel technologies spanning the fields of mechanical engineering, software development, medical technology, and bio-inspired designs. Tim earned his Ph.D. in Mechanical Engineering from Rice University and his B.S. in Mechanical Engineering from the University of Louisville.



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Dr. Thomas Thrash: Tom is a patent agent at Vorys and has more than eight years of experience preparing and prosecuting applications in various oilfield technologies. He has handled numerous matters relating to drilling, stimulation, completion, cementing, production and remediation technologies, as well as the chemical compositions employed in these techniques. In addition, Tom has handled matters relating to polymer synthesis, catalysis, refining, biofuel production, pipeline technologies, industrial chemical production, batteries and nanotechnology. Prior to entering the legal field, Tom managed a good manufacturing practice (GMP) radiopharmaceutical production laboratory, where he oversaw the production of an experimental radioisotope generator for use in positron emission tomography (PET) imaging. He was also a principal scientist for a mid-size pharmaceutical company, where he served as project leader and lead chemist for development of small-molecule drugs for treating inflammatory diseases. Tom received his B.S. in Chemistry from Henderson State University, and his Ph.D. in Chemistry from Rice University.



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Meron Ghidey: Meron is a scientific advisor in the Vorys Cincinnati office. He was an intern in the 2023 Vorys Scientific Advisor Patent Agent Internship Program. Meron received his Ph.D. in biomedical studies from Baylor University addressing antibiotic resistant infections by engineering custom-targeted nanoparticles. He also received his B.S. in biology from the University of Missouri and graduated from the Honors College as a McNair Scholar. Meron completed his postdoctoral research training from Baylor College of Medicine in breast cancer metabolomics, where he earned a National Cancer Institute award granting full funding.



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Dr. Victoria Hlavinka: Victoria is a scientific advisor in the Vorys Houston office. Victoria received her Ph.D. in Chemical and Biomolecular Engineering from the University of Houston. While at the University of Houston, her research focused on medical diagnostics and point-of-care testing. Victoria has hands-on experience with enzymatic, lateral flow, and DNA/RNA assays. She received her B.S. in Chemical Engineering, with a minor in Chemistry, from Texas A&M University.