



## Alexander Adam, Ph.D.

PRINCIPAL



### Boston Office

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### PRACTICE AREAS

- Patents
- Counseling
- Trademarks
- Licensing
- Agreements
- Open Source Software Counseling
- Trademark Opposition and Cancellation Proceedings
- Copyrights
- Design Patents
- IP Intelligence and Audits
- IP Diligence

### TECHNOLOGIES

- Medical Devices
- Medical Imaging
- Robotics
- Mechanical Engineering
- Electrical Engineering
- Artificial Intelligence
- Biotechnology and Life Sciences
- Bioinformatics
- Mobile
- Telecommunications
- Computer Software
- Clean Technology
- Optics and Photonics

Alex is a highly experienced scientist turned patent attorney who drafts and prosecutes patent applications in the fields of medical devices, biotechnology, life sciences, computer systems, electronics, imaging software, control systems, mechanical devices, telecommunications, and clean energy. He also has experience in trademark opposition and cancellation proceedings, patent litigation, due diligence, and providing invalidity and non-infringement opinions.

For over a decade, Alex has represented major universities, small and medium businesses, and start-ups, learning their business goals and strengthening their positions by developing strong intellectual property strategies. Alex's patent prosecution work includes semiconductor manufacturing technology, laboratory devices for the pharmaceutical industry, 3-D modeling for surgical planning, computer-controlled prosthetic devices, automatic speech recognition technology, needle-free injection devices, fuel cell technology, drug infusion pumps, wearable sensors, fiber optics, photonic sensors, augmented reality (AR), microfluidics and diagnostics, medical implants, and nanomaterials. Additionally, Alex has worked with artificial intelligence innovations such as neural networks, machine learning, natural language processing, and the Internet of Things. Alex also advises clients on open source software compliance, open source patent issues, and corporate policies on use of open source software.

Alex combines his experience in patent prosecution with his extensive technical background to counsel clients on important business matters and strategies, including:

- portfolio evaluation for potential investors
- patentability opinions
- freedom to operate analyses
- noninfringement and invalidity opinions
- portfolio management
- license agreements
- competitive IP intelligence
- merger and acquisition (M&A) due diligence

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## EDUCATION

- Boston University, B.S. in Biomedical Engineering, *summa cum laude*
- Boston University, M.S. in Biomedical Engineering
- Boston University, Ph.D. in Biomedical Engineering
- Suffolk University Law School, J.D.

## PROFESSIONAL ASSOCIATIONS

- American Intellectual Property Law Association
- Boston Patent Law Association
- German-American Business Council of Boston, Serving on their Board of Directors
- IEEE Engineering in Medicine and Biology Society
- AIPPI-US Member
- Medical Development Group of Boston, Participating in the Programs Committee

Outside of the firm, Alex contributes to the Medical Development Group of Boston (MDG), the MIT eForum, and the German-American Business Council of Boston (GABC). He has been a speaker and co-organizer of events on topics such as Optics and Photonics in Healthcare, Successful Strategies for Medical Device Startups, Bionics and Exoskeletons, Software as a Medical Device (SaMD), Artificial Intelligence in Medicine, and Strategic Focus on Innovation Protection and Rights Enforcement. In 2021 and 2022, Alex received distinction in The Best Lawyers in America® for his patent law expertise. From 2013 - 2019, Alex was named a Rising Star by Super Lawyers. In 2022, Alex was individually recognized by LMG Life Sciences among Leading Life Sciences Lawyers for Patent Prosecution.

As a Ph.D. scientist, Alex worked at Boston University's NeuroMuscular Research Center as a research assistant professor and co-supervisor in the Motor Unit Laboratory. He developed technical expertise in biosignal detection and analysis, sensor design, biomechanics, and digital signal processing.

Alex's doctoral work in biomedical engineering explored the neural regulation of human muscle activity through in-vivo recordings and mathematical modeling. For his master's degree in biomedical engineering, Alex employed electromyographic techniques to analyze nerve signals controlling hand muscles. Alex's undergraduate research focused on computational models of object recognition in the visual system. He has co-authored over ten scientific articles that were published in numerous journals, including The Journal of Applied Physiology, The Journal of Neurophysiology, and The Journal of Neuroscience Methods.

Alexander is a native German speaker.

## REPRESENTATIVE EXPERIENCE

- Prosecuted a large portfolio of patent applications for a major university in the drug delivery space.
- Prosecuted a significant portfolio of patent applications for an additive manufacturing startup company.
- Developed and expanded a major portfolio of patent applications for a medical implant startup company.
- Conducted due diligence of a medical device patent portfolio for an acquisition by a major private investment company.
- Successfully represented a food manufacturer in a trademark cancellation proceeding.
- Conducted trademark clearance for a public gene therapy company.

## ADMISSIONS

- U.S. District Court, District of Massachusetts
- U.S. Patent and Trademark Office
- Massachusetts

## CERTIFICATIONS

- Black Duck Certified Open Source Legal Professional

## IP NEWS ALERTS

- USPTO Delays the Planned Non-DOCX Filing Surcharge Fee Yet Again, March 31, 2023
- April 2023 Brings Changes in Form and Format at the USPTO, March 23, 2023
- Impact of the Brexit Vote on Your IP, *Hamilton Brook Smith Reynolds Alert*, June 27, 2016

## ARTICLES

- Rehabilitation Robotics and Prosthetics: Trends and Intellectual Property Considerations, *Medical Design Briefs*, March 1, 2018
- Intellectual Property: How Medtech Startups Can Protect It, *Medical Design & Outsourcing*, August 7, 2017
- Lesson Learned: Contrasting the Canadian and European Patent Experiences with Key AIA Provisions, *Boston Patent Law Association Newsletter*, Spring 2012
- Significant Changes in European and Chinese Patent Law: What You Need to Know, November 2009
- "Technology Transfer to Combat Climate Change: Opportunities and Obligations Under TRIPS and Kyoto" 9 J. HIGH TECH. L. 1 (2009).

## SPEAKING ENGAGEMENTS

- "Medical Device Development: Advancing from Product to Market," presented during the four week hybrid course that examined the current climate for the development of medical devices, Harvard Catalyst, April 1-May 1, 2023
- "Optics and Photonics in Healthcare - Advancing Cross-Functional Solutions for the Present and Future," Medical Development Group Forum, October 27, 2022
- "Patenting Strategies for Entrepreneurs," UMass Lowell Innovation Hub, October 4, 2022
- "TRANSforming Care with Emerging, Novel Devices (TRANSCEND)," presented during the four week hybrid course that explored the current climate for medical device development, Harvard Catalyst, April 1-May 1, 2022

## SPEAKING ENGAGEMENTS (CONTINUED)

- “Artificial Intelligence in Medicine – Promise Becoming Practice,” MDG Online Forum, January 19, 2022
- “Strategic Focus on Innovation Protection and Rights Enforcement,” German American Business Council of Boston, May 19, 2021
- “Orthopedic and Sports Rehabilitation - Game Changing Innovations,” MDG Online Forum, December 2, 2020
- “Once Upon a Time in ...Medical Device and Open Source Land,” MIT Enterprise Forum, Webinar, October 14, 2020
- “Software as a Medical Device (SaMD),” MDG Forum, January 8, 2020
- “Bionics and Exoskeletons - Advances in Technology and Current Unmet Needs for Prosthetics,” MDG Forum, Weston, MA, January 16, 2019
- “Suffolk University’s Journal of High Technology Law Alumni Panel,” Suffolk University Law School, Boston, MA, November 27, 2018
- “Successful Strategies for Medical Device Startups,” MDG Forum, Weston, MA, April 4, 2018
- “Strategies and Considerations for Protecting Your Medical Technology Start-Up’s Innovations,” Hamilton Brook Smith Reynolds Lecture, Cambridge, MA, November 29, 2016
- National Institute of Biomedical Imaging and Bioengineering’s Training Grantees Meeting, Bethesda, MD, July 11, 2016
- “Intellectual Property Protection Strategies,” Hamilton Brook Smith Reynolds / German-American Business Council of Boston Lecture, Newton, MA, April 6, 2016