

FisherBroyles

Name: James Raynolds

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Practice Areas: Intellectual Property

Bar Admissions: U.S. Patent & Trademark Office

Education: University of Pittsburgh, *B.S.*, Physics; Ohio State, *M.S. and Ph.D. in Physics*; University of Michigan in Materials Science, post doctoral fellow

Experience: Adams & Reese; Wood Herron & Evans; Drinker Biddle & Reath; Sterne Kessler Goldstein & Fox

After a number of years working as a research scientist in both the academic world and the defense industry, I now use my extensive background in physics and engineering to prepare and prosecute patents for leading technology companies.

James E. Raynolds, Ph.D. has more than nine years' experience in all aspects of preparation and prosecution of patent applications involving optics, imaging, electro-mechanical and camera systems, optics for semiconductor lithography, antennas and WiFi, software, computer memory and semiconductor devices, automotive, engine, control and braking systems, excavator technology and control, and other physics, mechanical and electrical-engineering based technologies. James has a strong background with fundamental research experience in the areas of optics, antennas and electrical engineering, software development and computational algorithms, solid-state physics, semiconductor systems and devices, nanoscience and quantum effects, materials, and mechanical and electro-mechanical systems. He also holds two United States patents for quantum based all-optical switching devices, and he has experience as a scientific/engineering consultant to government and industry.

Before becoming a patent agent, James was an Assistant Professor in the College of Nanoscale Science and Engineering at the University of Albany-State University of New York from 2003-10. He was also a Senior Scientist at the UAlbany Institute for Materials from 2001-03 and a scientist at Lockheed Martin/Knolls Atomic Power Laboratory from 1997-2001. James also co-founded and served as an advisory scientist at a New York-based startup company developing nanotechnology-based components for telecommunications and bio-medical applications. He has authored more than 20 peer-review articles published in scientific articles.

Prior to joining FisherBroyles, James' previous patent agent experience includes:

- Serving as a registered patent agent at an intellectual property law firm in New Orleans, LA, from February 2020 through February 2020 during which time he was involved in United States and foreign patent preparation and prosecution
- Serving as a registered patent agent at an intellectual property law firm in Cincinnati, Ohio, from February 2016 through January 2018 performing domestic and foreign patent preparation and prosecution
- Working as a patent agent at the Washington, DC, office of a national law firm from 2012-16, handling patent preparation and prosecution on matters for large international clients and smaller domestic clients, drafting and prosecuting patent applications, and interacting with inventors and foreign associates
- Serving as a patent agent at a firm specializing in the protection, transfer and enforcement of intellectual property rights in Washington, DC, from 2010-12, during which time he received fundamental training and mentoring in all aspects of patent preparation and prosecution