





Indranil Sarkar, Ph.D.

Principal

 Washington, D.C.
Boston, MA

 617-956-5996
617-956-5996

 sarkar@fr.com

Overview

About Indranil

Indranil Sarkar, Ph.D., is a principal in the Washington, D.C., and Boston offices of Fish & Richardson P.C. His practice is focused on client counseling and strategic patent prosecution in the area of electrical and computer engineering. Dr. Sarkar manages patent portfolios of clients ranging from individual inventors to Fortune 50 companies, analyzing innovative technologies, identifying scopes of inventions, reviewing related patent landscapes to formulate protection strategies, and drafting and prosecuting patent applications. He handles several large multi-national portfolios, and is experienced in formulating unified prosecution strategies across the globe, including expediting prosecution in relevant jurisdictions via the PPH, ASPEC, etc. He also advises clients on effective commercialization/enforcement of intellectual property, including conducting freedom to operate studies to assess competitors' IP portfolios, and formulating strategies to avoid potentially adverse situations. He also has significant experience in post-grant practice, particularly in drafting and prosecuting reissue applications.

Dr. Sarkar's technical focus is in the areas of wireless technologies, signal and image processing, blockchain, video coding, computer architecture, biometrics, medical devices and software. He has extensive experience in drafting and prosecuting standard-essential patents (SEPs), particularly ones related to the H.264 and MPEG-4 video coding standards, and the 5G wireless standard.

Prior to his legal career, Dr. Sarkar was a researcher in the area of signal/image processing. His doctoral research was in the area of pulse compression codes and their mismatched filtering for various radar, communications, medical, and image processing applications. He has served as a reviewer for several international journals including IEEE Transactions on Aerospace and Electronic

Systems, Elsevier Signal Processing, and Elsevier Digital Signal Processing. He continues to serve as a reviewer of Ph.D. dissertations for students at his alma mater, Visvesvaraya Technological University.

Focus Areas

Services

- Patent
- Post-Grant

Industries

- Digital Health
- Electrical and Computer Technology
- Hardware
- Medical Devices
- Standard Essential Patents
- Telecommunications

Education

J.D. *cum laude*, Intellectual Property concentration, Suffolk University Law School (2018) Dean's List, Jurisprudence Awards in Contract Law, Corporations, and Professional Responsibility

Ph.D., Electrical Engineering, State University of New York at Buffalo (2007)

M.S., Electrical Engineering, State University of New York at Buffalo (2004)

B.E. *with distinction*, Electronics and Communication Engineering, Visvesvaraya Technological University (2002)

Experience

Named Inventor on Patents

U.S. 7,492,312, Multiplicative Mismatched Filters for Optimum Range Sidelobe Suppression in Barker Code Reception.

U.S. 7,843,382, Mismatched Filter.

Insights

Publications

- “Patenting Blockchain Innovations – Avoid Making a Hash of It,” *PLI Current: The Journal of PLI Press*, Vol. 5 (March 2021)
- “Area and power efficient mismatched filters based on sidelobe inversion,” *Signal Processing*, Vol. 89, No. 8, Pages 1550-1556 (August 2009)
- “A New Class of Interlaced Complementary Codes Based on Components with Unity Peak Sidelobes,” *Signal Processing*, Vol. 88, No. 2, Pages 307-314 (February 2008)
- “Multiplicative mismatched filters for sidelobe suppression in Barker codes,” *IEEE Transactions in Aerospace and Electronic Systems*, Vol. 44, No. 1, Pages 349-359 (January 2008)
- “A Wavelet Based Multi-Resolution Approach to Solve Stereo Correspondence Problem Using Mutual Information,” *IEEE Transactions on Systems, Man and Cybernetics, Part B.*, Vol. 37, No. 4, Pages 1009-1014 (August 2007)
- “The interlaced chirp Z transform,” *Signal Processing*, Vol. 86, No. 11, Pages 2221-2232 (November 2006)

Speaking Engagements

- “Blockchain Patenting Strategy in Relation to Business Strategy,” *Practising Law Institute’s Patenting Blockchain and Distributed Ledger Technologies 2022* (December 5, 2022)
- “Patenting Blockchain and Distributed Ledger Technologies 2021,” *Practising Law Institute* (2021)
- “Strategies and Legal Considerations for Patenting Blockchain Innovations,” *Fish Webinar* (October 13, 2021)
- “The Basics of Patents,” *Fish Patent Webinar* (March 25, 2021)
- “Blockchain Patenting Strategy in Relation to Business Strategy,” *Practising Law Institute’s Patenting Blockchain and Distributed Ledger Technologies* (December 2020)
- “Prosecution before the USPTO,” *India’s Global Institute of Intellectual Property* (October-December 2020)
- “Area and Power Efficient Mismatched Filters based on Sidelobe Inversion,” *Proc. IEEE Radar Conference 2008*

- , Rome, Italy (May 2008)
- “A new class of interlaced complementary codes based on components with unity peak sidelobes,” *Proc. 7th IEEE International Symposium on Signal Processing and Information Technology (ISSPIT 2007)*, Cairo, Egypt (December 2007)
 - “Factored Mismatched Filters for Compound Barker Codes,” *IEEE Radar 2007, Waltham, MA*, 541-546 (April 2007)
 - “Multiplicative Mismatched Filter for Optimum Sidelobe Suppression in Barker Codes,” with A. T. Fam, *Signal Processing, Sensor Fusion and Target Recognition XV, SPIE Defense and Security Symposium*, Orlando, Florida (April 2006)
 - “The Interlaced Chirp Z Transform,” *Proceedings of the 7th IEEE International Conference on Signal Processing and Communications (SPCOM 2004)*, *Indian Institute of Science*, Bangalore, India (December 2004)

Languages

- English
- Hindi
- Bengali