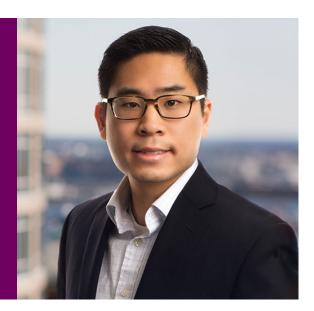


Frank D. Liu Partner

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Frank is a registered patent attorney who represents companies across various industries, primarily counseling clients in patent litigation and related matters. He helps clients develop effective patent litigation strategies to achieve their goals.

OVERVIEW

Frank handles all aspects of patent litigation, including pre-suit diligence, claim construction, expert discovery, and trial. He has particular experience in handling patent litigation matters before the United States International Trade Commission (ITC). Frank also handles *inter partes* review (IPR), particularly in connection with on-going related patent litigation. He also helps clients evaluate patent portfolios and implement effective patent strategies that maximize the value of those portfolios.

Frank has experience handling patent litigation matters across a wide array of technologies, including in areas of digital audio signal processing, digital imaging systems, optical imaging systems, digital communications and networking systems, graphics processing hardware and software, dental software, and semiconductor design and fabrication.

Frank also has an active pro bono practice. He has worked with the Middlesex County District Attorney's Office Domestic Violence Pro Bono Attorney Program representing victims through the civil restraining order process. Frank also serves as a volunteer attorney with the Boston Bar Association's Criminal Offender Record Information (CORI) sealing project, which helps low-income clients who have questions about their criminal records.

REPRESENTATIVE MATTERS

- Represented complainant FlashPoint Technology against consumer electronics manufacturers on patents related to digital imaging. *Certain Electronic Imaging Devices (USITC Inv. Nos. 337-TA-726 and 337-TA-850).*
- Represented plaintiff Nazomi Communications against consumer electronics manufacturers on patents relating to Java hardware acceleration. *Nazomi Communications Inc. v. Nokia Corp. et al.* and *Nazomi Communications Inc. v. Samsung Telecommunications Inc. et al.* (N.D. Cal.).
- Represented Complainant Tela Innovations against consumer electronics manufacturers on patents relating to integrated circuit layout and design. Certain Integrated Circuit Devices (USITC Inv. No. 337-TA-873).
- Represented Complainant Tela Innovations against semiconductor manufacturer on patents relating to integrated circuit layout and design. Certain Standard Cell Libraries (USITC Inv. No. 337-TA-906).

- Represented Complainant Andrea Electronics against PC and smartphone manufacturers on patents relating to digital audio signal processing. Certain Audio Processing Hardware and Software (USITC Inv. Nos. 337-TA-949 and 337-TA-1026).
- Represented Complainant ZiiLabs Inc. against consumer electronics manufacturers and graphics processor suppliers on patents relating to graphics processing. Certain Graphics Processors (USITC Inv. No. 337-TA-1037 and 337-TA-1099).
- Represented Respondent 3Shape against patent infringement claims on patents relating to intra-oral scanners and dental treatment software. Certain Intraoral Scanners and Related Hardware and Software (USITC Inv. No. 337-TA-1090), Certain Color Intraoral Scanners and Related Hardware and Software (USITC Inv. No. 337-TA-1091).
- Representing Respondent 3Shape against patent infringement claims on patents relating to intra-oral scanners and dental treatment software. Certain Color Intraoral Scanners and Related Hardware and Software (USITC Inv. No. 337-TA-1144).
- Representing Complainant Tela Innovations against semiconductor manufacturer and consumer electronics manufacturers on patents relating to integrated circuit layout and design. Certain Integrated Circuit Devices (USITC Inv. No. 337-TA-1148).
- Representing Tela Innovations in declaratory judgment action brought by Intel. *Intel Corp. v. Tela Innovations Inc. (N.D. Cal.).*

AWARDS

• Boston Magazine, Top Lawyers List, Intellectual Property Rights (2023)

TOP AREAS OF FOCUS

- Intellectual Property
- Patent Litigation

ALL AREAS OF FOCUS

- ITC Litigation
- Intellectual Property
- Patent Litigation

EDUCATION AND CERTIFICATIONS

EDUCATION

- University of New Hampshire Franklin Pierce School of Law, J.D., *cum laude*, 2009, senior articles editor, *IDEAu00ae: The Intellectual Property Law Review*
- · University of Illinois Urbana-Champaign, B.S., with honors, 2006, mechanical engineering

BAR ADMISSIONS

- Massachusetts
- · U.S. Patent and Trademark Office

SPEAKING ENGAGEMENTS

- Panelist, "When the CEO Calls Part II," Troutman Pepper CLE Webinar, September 29, 2022.
- Panelist, "When The CEO Calls," Troutman Pepper CLE Webinar, February 24, 2022.

PUBLICATIONS

- Co-author, "<u>Strategic Considerations for ITC Investigations Given USPTO's New Guidance on IPR/PGR Discretionary Denial</u>," *Troutman Pepper*, July 21, 2022.
- Co-author, "Litigation Redesigns at the ITC", IP Strategist, March 2022.