



**COMPETITION  
DYNAMICS**

# **Next Generation Experience + Expertise**

**EXPERT TESTIMONY AND RESEARCH AT THE  
INTERSECTION OF INTELLECTUAL PROPERTY,  
COMPETITION AND INTERNATIONAL TRADE**

# THE PAST AND THE FUTURE

Intellectual property, competition, and international trade disputes often raise fascinating and difficult economic problems. Seen through these overlapping lenses, the facts, causes, resolutions and remedies of these disputes become more challenging still.

I founded Competition Dynamics to create innovative solutions to the economic problems that continue to arise at this intersection. Through more than 200 engagements, CD has provided innovative solutions in some of the largest and most complex cases in U.S. history and around the world:

- Federal Trade Commission and Apple v. Qualcomm. The plaintiffs advanced antitrust- and contract-based claims against Qualcomm's intellectual property licensing model, alleging that its prices were "too high" relative to the competitive level
- Idenix v. Gilead. The plaintiff sought a 10% patent royalty on the U.S. portion of a globally traded pharmaceutical, for which Gilead had incurred the global R&D costs to discover and synthesize the active ingredient, and invent the pro-drug delivery mechanism, all in anticipation of future competition from its own and third-party products
- Power Integrations v. Fairchild. Power Integrations sought an patent royalty for unmeasurable US imports of its globally traded 1-watt power saving chips and for the portion of global price erosion caused by US competition from the infringer.

In addition, CD has been increasing its global footprint, with recent expert testimony in intellectual property cases in China, the UK, Germany, India and Canada.

In short, CD's past is also its prologue. We have assembled a team of economic experts, specializing in industrial organization, econometrics, accounting, finance, transfer pricing and antitrust, to take on the next generation of legal and economic challenges. These interdisciplinary economic skills address the complex issues that arise in a world increasingly interconnected by technology and trade, yet still balkanized by rival national legal systems.

Our next generation of experts, educated in the U.S. and drawn from Europe, China, and East and South Asia, anticipates our expansion into these increasingly important legal and economic markets. Please allow me to introduce them to you.

The world doesn't need another consulting firm. The world needs its problems solved. Our team looks forward to solving yours..



Jonathan D. Putnam  
**Founder**

# JON PUTNAM

For 35 years, Jon Putnam has been consulting on the economics of intellectual property, competition and international trade. Throughout his career, he has been privileged to support and learn from many of the best IP lawyers in the world.

Jon holds BA, MA and PhD degrees in economics from Yale University, where he specialized in international, macro and R&D economics. His dissertation measured the global value of patent rights. A subsequent paper, "How to Count Patents and Value Intellectual Property," has been cited over 1,000 times. From 2001 to 2005, Dr. Putnam held a professorship in the Law and Economics of Intellectual Property at the Centre for Innovation Law and Policy, University of Toronto.

Jon has been ranked in *Intellectual Asset Management's* annual list of leading economic witnesses since its inception in 2014. Here's what the industry says:

*"A formidable witness"*

*"One of, if not the smartest damages experts in the country"*

*"A leading light on SEP issues and IP damages more broadly"*

*"Exceptionally good at the interface between IP and competition law"*

*"A seasoned veteran in the space ... first-rate work"*

*"In his element when the stakes are high"*

*"One of the best in the business"*

*"His knowledge of standard essential patents is particularly outstanding"*

*"Demonstrated litigation savvy in scores of disputes"*

*"He matches dazzling academic credentials with street smarts"*

*"Critical to our success"*

*"Analytical skills are peerless"*

*"One of the best when it comes to SEP matters"*

*"Rigor that is hard to find elsewhere"*

*"Immensely intelligent, thorough and diligent"*

*"You don't get a lot of original thinking in this game, but he supplies it in spades"*



## OUR EXPERTS



**Dr. Ngoc Ngo**  
*Economist*

Ngoc specializes in the advanced empirical analysis of intellectual property, antitrust and competition disputes in the telecommunication, medical device, pharmaceutical, consumer goods, computer software and industrial tools sectors. She has employed **advanced econometric techniques** to identify substitution patterns in pharmaceutical markets, to determine the causes of commercial success, and to measure the value of standard-essential patent portfolios. She has testified by expert report and deposition in patent infringement litigation.

Ngoc completed her PhD in Applied Economics with a focus on industrial organization at Northeastern University. Her dissertation applied a modified random-coefficient discrete choice model to measure the impact on consumer welfare and firm profits of United Airlines' decision to cease operations at Cleveland Hopkins International Airport.

Ngoc graduated magna cum laude in economics from Bates College.



**Dr. Pinar Gencer**  
*Associate*

Since joining CD, Pinar has applied her expertise to conduct licensing and damages assessments for intellectual property and competition-related litigations. Pinar specializes in **comprehensive financial and accounting analyses** in cases involving preliminary injunctions, FRAND disputes, and patent infringement.

Pinar completed her PhD in Accounting at the University of Texas at Dallas, where she taught financial accounting. Her research focused on intangible asset valuation and corporate compliance practices. She also obtained a Master's degree in Finance from Sabanci University, and graduated summa cum laude from the Middle East Technical University, Department of Business Administration.

Pinar is a CPA candidate and is pursuing a CPA license in the state of Massachusetts.



**Dr. Chen Wang**  
*Associate*

At CD, Chen relies on his background in **economics, econometrics and transfer pricing** in litigations focusing on patent infringement, FRAND disputes and damage calculation.

Prior to joining CD, Chen was a transfer pricing economist at PricewaterhouseCoopers in San Francisco. At PwC, Chen managed projects for multinational clients in a wide range of industries.

Chen received his Ph.D. in Economics from Clemson University and a master's degree in Economics from North Carolina State University. His dissertation analyzed the effects of competition among firms and their choices on product quality and variety in markets with unified final good prices, with a focus on the U.S. film industry. At Clemson, Chen taught microeconomic theory and macroeconomic theory.



**Dr. Ratib Ali**  
*Associate*

Ratib Ali specializes in analyzing **patent and antitrust** claims, and evaluating economic damages in medical devices, telecommunications, healthcare, e-commerce, the gig economy, fine arts, and aviation. Prior to joining CD, Ratib was the Economic Analyst at the Massachusetts Attorney General's Office, Antitrust Division, where he aided in federal and state antitrust investigations spanning the pharmaceutical, technology, and aviation industries.

Ratib has taught microeconomic theory and cultural economics at Boston College and Emerson College, and currently teaches intermediate microeconomics at Tufts University.

Ratib completed his PhD in Economics from Boston College, where his research focused on how government regulation informs and impacts firm incentives by econometrically modeling demand and supply to evaluate airline mergers and conduct.

## FIRM MANAGEMENT



**Lou Zetes**  
General Manager

Lou Zetes joined Competition Dynamics in 2016 as General Manager. He is responsible for expert development, performance management, employee recruiting and training, and oversight of the company's operations.

Prior to CD, Lou spent 15 years in investment banking in London, Frankfurt and Munich, and 20 years in executive search.



**Kerri Stamm**  
Director of Operations

Kerri Stamm joined CD as its first employee after working with Jon Putnam for eight years at Charles River Associates, where she held roles in new business development and conflict administration. At CD, Kerri oversees all aspects of firm management including human resources, financial administration, AR/AP, as well as day-to-day business operations, making the firm a successful, dynamic, and exciting place to work.

## PROJECT MANAGEMENT



**Will VanRenterghem**  
Associate Project Manager

After joining CD as an analyst in 2021, Will VanRenterghem brings extensive hands-on experience to the cases he manages. Will has helped draft expert reports on damages and injunctive relief in numerous patent, copyright and trade secret litigations in the telecom and medical device industries, and has managed teams on standard-essential patent disputes both in the US and UK.

Will holds an economics and mathematics degree from Northeastern University.

**“Exceptional leadership to a team brimming with talent”**  
**“An amazingly dedicated, hard-working and talented team”**

# REPRESENTATIVE ENGAGEMENTS

## FRAND / Standard-Essential Patents

- *Cellular*. For an ITC complainant with a portfolio of essential 4G patents, we developed an econometric model of patent essentiality to apportion the 4G and 5G standard's value between the complainant's patents and others, rebutting respondent's claim that the complainant had not made a FRAND offer.
- *Cellular*. For a UK FRAND defendant, we developed an econometric model to determine consumer willingness to pay for the 4G and 5G standards in smartphones, over and above the value of "standardization."
- *HEVC video codec*. Smartphones often use multiple codecs, but most commercial sources do not disclose which ones. We scraped multiple websites to create a unique database showing which models use each standard, then developed an econometric model to measure each codec's value, after controlling for other smartphone features.
- *eSIM cards*. Virtual SIM cards, which replace physical SIM cards in smartphones, are governed by their own standard. In UK litigation, we relied on the largest licensor of eSIM patents to compute a fair and reasonable royalty rate from the licensor's multiple lump-sum agreements.
- *Digital subscriber lines (ADSL/VDSL)*. Unlike cellular standards, cable video standards generally do not require that standard participants disclose patents that may be essential. We developed survey methods that enabled a technical expert to efficiently determine the total number of essential patents by oversampling key technology fields. Using an econometric model, we also determined the costs saved per household by deploying DSL instead of laying new cable, apportioning those savings among device manufacturers and other patentees to obtain a fair and reasonable royalty.

## Life Sciences

- *Biologics*. In response to a claim of patent infringement, we developed an advanced econometric model countering the plaintiff's claim that the defendant's biosimilar product diverted a disproportionate number of the plaintiff's short-acting neutropenia treatments, showing instead that the plaintiff's own long-acting product was an important substitute for the patented product.
- *Parkinson's disease / commercial success*. In a patent infringement dispute, we analyzed the commercial success attributable to a patent on a secondary feature. While the patentee's unit market share was only 4%, its price was 20 times that of competing generics. We developed an econometric model to predict sales at that price with and without the claimed feature. Actual sales were three times expected sales, evidence that the feature caused the product's commercial success.
- *Microbiota transplantation*. In a pharmaceutical patent dispute, our analysis targeted competing explanations for a multiproduct competitor's market exit. Through specialized analysis of financial statements and analyst reports, we assessed changes in the market-perceived probability of success, which plummeted from more than 99% to less than 1%, rebutting the plaintiff's causality claim.

## Medical Instruments

- *Orthopedic instruments*. We computed the profits generated by a patented tool used in knee replacement surgery. Because the defendant did not sell the tool or track its usage, we used survey evidence to determine the tool's incremental contribution to profits from knee implant sales.
- *Medical imaging*. In a trade secret dispute involving single-photon emission computed tomography (SPECT) imaging devices, we refuted the plaintiff's proposed market definition and evolution, to rebut the plaintiff's claim that it enjoyed first-mover and other advantages in the claimed market. We also developed patent-by-patent and overall product models of the defendant's alleged head start relative to provable public disclosures of the alleged secrets.
- *Spinal screws*. When a plaintiff asserted an 8-10% portfolio royalty rate as support for the same rate for individual patents, we developed a model of the plaintiff's portfolio that took into account the plaintiff's other licenses and the ranking of the plaintiff's other patents to determine the true market royalty rate per patent.

# REPRESENTATIVE ENGAGEMENTS

## Information and Communications Technology

- *Semiconductors.* A client asserted two semiconductor patents against the multibillion-dollar product line. Relying on public financial disclosures, we econometrically computed production costs, allocated sales and overhead expenses, removed returns to past R&D, and based on that R&D estimated the number of other patents in the defendant's product, finally relying on technical and marketing evidence to rank the asserted patents and compute their share of the defendant's profits.
- *Satellite radio.* A patent owner asserted that its licensee's bankruptcy terminated the "fully paid up" license of our sublicensee client, who needed another license. Using stock market prices to capture changes in the client's market capitalization, and controlling for a merger and reduced license term, we computed the fair market value of "the same" license.
- *Solid-state storage.* A bankruptcy trustee asked us to value the rights to a portfolio of patents covering a potentially revolutionary storage technology, as of the date of its allegedly fraudulent transfer. While the defendant pointed to the technology's ex post failure, we relied on its contemporaneous forecasts and the patentee's licenses to compute the asset's value to the trustee.

## Software

- *Computer software.* We computed the unjust enrichment obtained by a startup software firm's copyright infringement, showing that large startup costs and negative operating profit masked its high incremental profit from infringement.
- *Confidential customer information.* The ex-employee of a financial services software vendor took "paper gold" customer information to a rival employer, and induced others to do the same. We valued the lost information by computing the stock value from the flow of the client's prior investments in sales and marketing, allocated to the misappropriated materials.

## Consumer and Industrial Products

- *Consumer goods.* In a breach of contract dispute between the designer and manufacturer of atmospheric water generators, we developed an econometric model of industry pricing, establishing that the plaintiff had priced its device too high in relation to its feature set, and rebutting the plaintiff's claim that the defendant's manufacturing practices were to blame for its low sales.
- *Industrial tools.* In response to an application for a preliminary injunction for patents protecting battery-operated strapping tools, we analyzed the causal nexus between the asserted patents and the alleged irreparable harm, disproving the assertion that the patents contributed to or maintained the plaintiff product's competitive advantage.
- *Luxury vinyl tiles.* In an ITC investigation, we assisted a respondent with an antitrust defense to a complainant's infringement claim, based on the complainant's pattern of misusing certain licensing terms. The investigation settled favorably.



10 Federal Street, Suite 301  
Salem, MA 01970

617.394.1940

[www.competitiondynamics.com](http://www.competitiondynamics.com)