

Cleve B. Tyler, PhD

Berkeley Research Group, LLC
1800 M Street, NW, 2nd Floor | Washington, DC 20036
Direct: 202.480.2727
ctyler@thinkbrg.com

SUMMARY

Cleve B. Tyler, PhD, is a managing director at BRG who specializes in applying economic analyses to antitrust, intellectual property, and damages issues. An economic consultant with more than twenty years of experience, Dr. Tyler also teaches, writes, and speaks about competition and intellectual property topics. He has testified at deposition and trial in federal court, in state court, and at arbitration. Dr. Tyler is an adjunct professor of economics in Johns Hopkins University's applied economics program, teaching graduate-level courses in industrial organization and microeconomics.

Dr. Tyler has developed or analyzed damages models for a range of matters including antitrust, unfair competition, patent infringement, trade secret misappropriation, copyright infringement, breach of contract, breach of fiduciary duty, and fraud. His competition and antitrust work include evaluation of both horizontal and vertical issues and analysis of market definition, market power, and competitive effects using regression analysis and economic modeling. Dr. Tyler has analyzed economics and damages issues in many industries, including waste collection and disposal, pharmaceuticals, medical devices, biotechnology, semiconductors, memory products, telecommunications, data products and services, enterprise software, online search advertising, video games, insurance, healthcare, avionics, automotive and automobile components, home appliances, food and beverages, and electricity generation and distribution.

Dr. Tyler holds a PhD in economics specializing in industrial organization, finance, and the economics of the public sector. He is an author of the book *Assets and Finance: Calculating Intellectual Property Damages*, published by Thomson-Reuters, and authored a chapter on expert testimony admissibility in prior versions of this book (annually 2010-2020). He has published articles on damages and competition issues, including in *Antitrust*, *Antitrust Bulletin*, and *The Global Competition Review*. Dr. Tyler is editor-in-chief of *BRG Review* and a member of the American Economic Association and American Bar Association.

EDUCATION

PhD, Economics
BA, Economics

Clemson University
University of Virginia

PROFESSIONAL EXPERIENCE

Berkeley Research Group

Managing Director (January 2018–present)

Director (December 2014–2017)

Principal (December 2010–2014)

Johns Hopkins University

Adjunct Professor of Economics (2010–present)

LECG

Senior Managing Economist (2006–2010)

Managing Economist (2003–2005)

Senior Economist (2001–2002)

Economic Analysis LLC

Economist (1998–2000)

Clemson University

Instructor, Microeconomics and Macroeconomics (1996–1998)

Teaching Assistant, Microeconomics and Macroeconomics (1995–1996)

Research Assistant for Robert E. McCormick and Michael T. Maloney (Fall 1996)

Electric Lite

Economic Consultant and Director of Business Development (1997)

General Accounting Office: Resources, Community, and Economic Development Division

Intern (Summer 1995)

Strategic Analysis Inc.

Analyst (Summer, 1990–1993)

TESTIMONY and EXPERT REPORTS

- *Kingston Technology Corporation, et. al. v. SPEX Technologies, C.A. No. 8:16-CV-01790.* Provided opinions related to claimed patent misuse (assertion of allegedly unenforceable patent) in alleged market for secure portable USB memory products including evaluation of market definition, market power, and competitive effects. (Expert Report and Deposition Testimony)
- Prefiled Direct Testimony before The Regulatory Commission of Alaska *In the Matter of the Joint Revenue Requirement and Cost of Service Study of Alaska Waste Interior, LLC. d/b/a Alaska Waste, Filed as TA115-667 for the Fairbanks North Star Borough Service Area* (as well as for matters *TA127-692, TA92-714, TA90-731, TA52-653, TA44-654, TA42-655, TA46-656, TA49-502*). Provided

testimony proposing a rate setting model for appropriate operating margins for solid waste collection companies in Alaska. (Written testimony)

- *ChanBond, LLC. v. Atlantic Broadband Group, LLC.*, U.S. District Court, Delaware, C.A. No. 1:15-cv-00842-RGA. Provided opinions regarding the number of purchased and/or deployed cable modems, number of monthly subscriptions of high-speed data services, and the relationship between price and speed (Mbps) using regression analyses. (Expert Reports and Deposition Testimony) Related matters with same plaintiff and scope for the following defendants:
 - *Bright House Networks, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00843-RGA. (Expert Reports and Deposition Testimony)
 - *Cable ONE, Inc.*, District Court, Delaware, C.A. No. 1:15-cv-00844-RGA. *Cablevision Systems Corporation and CSC Holdings, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00845-RGA. (Expert Reports and Deposition Testimony)
 - *Cequel Communications Holdings I, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00846-RGA. (Expert Reports and Deposition Testimony)
 - *Charter Communications, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00847-RGA. (Expert Reports and Deposition Testimony)
 - *Comcast Corporation and Comcast Communications, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00848-RGA. (Expert Reports and Deposition Testimony)
 - *Cox Communications, Inc.*, District Court, Delaware, C.A. No. 1:15-cv-00849-RGA. (Expert Reports and Deposition Testimony)
 - *Mediacom Communications Corporation*, District Court, Delaware, C.A. No. 1:15-cv-00850-RGA. (Expert Reports and Deposition Testimony)
 - *RCN Telecom Services, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00851-RGA. (Expert Reports and Deposition Testimony)
 - *Time Warner Cable, Inc.*, District Court, Delaware, C.A. No. 1:15-cv-00852-RGA. (Expert Reports and Deposition Testimony)
 - *WaveDivision Holdings, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00853-RGA. (Expert Reports and Deposition Testimony)
 - *WideOpen West Finance, LLC.*, District Court, Delaware, C.A. No. 1:15-cv-00854-RGA.
- *Signature Pharmaceuticals, LLC. v. Ranbaxy Pharmaceuticals, Inc.*, American Arbitration Association, Case No. 01 16 004 6534. Estimated damages related to

alleged breaches of contract and breach of fiduciary duty with regard to sales of liquid metformin and solid metformin pursuant to joint venture agreement. (Expert Report and Arbitration Testimony)

- *MobilizeGreen, Inc. v. The Community Foundation for the National Capital Region, et al.*, Superior Court of the District of Columbia, C.A. No. 14-005764. Evaluated damages related to alleged lost business opportunities for nonprofit organization allegedly due to breach of contract and breach of fiduciary duty, and provided opinions related to reliability of damages estimate. (Expert Reports and Written Testimony)
- *Waste Management of Louisiana, LLC. v. River Birch, Inc. et al.*, U.S. District Court, Eastern District of Louisiana, Case No. 11-2405. Provided rebuttal testimony regarding damages related to RICO allegations and closure of construction and demolition (C&D) landfill used in the clean-up of debris in the aftermath of Hurricane Katrina. Provided rebuttal testimony regarding damages related to RICO allegations and claimed diverted waste from municipal solid waste (MSW) landfill. (Expert Report, Written Testimony, and Deposition Testimony)
- *Digital Recognition Network, Inc. v. Accurate Adjustments, Inc. et al.*, U.S. District Court, Northern District of Texas, C.A. No. 4:14-CV-00903-A. Opined on relevant antitrust market, monopoly power, competitive effects, and damages issues regarding vertical restraints in sale of Automated License Plate Recognition (ALPR) solutions in case involving trade secret misappropriation. (Expert Report)
- *Apotex, Inc. and Apotex Corp. v. UCB, Inc. and Kremers Urban Pharmaceuticals, Inc.*, U.S. District Court, Southern District of Florida, C.A. No. 12-60706 (DMM). Analyzed and opined on a reasonable royalty for a manufacturing process for pharmaceutical products based on trade secrets. (Expert Report and Deposition Testimony)
- *William Brody v. Village of Port Chester, et al.*, U.S. District Court, Southern District of New York, Case No. 00 CIV 7481 (HB). Estimated damages related to the loss of right to appeal the taking of property pursuant to New York's eminent domain law. (Expert Report, Written Testimony, Deposition Testimony, and Trial Testimony)

SELECTED EXPERT CONSULTING EXPERIENCE

Intellectual Property and Damages

- *Genentech v. Amgen* – Reasonable royalty for patent infringement involving manufacturing process and method of treatment for biosimilar products (two cases involving Avastin and separately, Herceptin)

- *Caltech v. Apple and Broadcom* – Reasonable royalty base and valuation of technology related to allegations of patent infringement involving Wi-Fi patents allowing for faster data transmission
- *Acceleration Bay v. Electronic Arts* – Reasonable royalty for patent infringement involving technology related to network architecture and operation of video games
- *Bombardier Recreational Products, et al v. Arctic Cat* – Reasonable royalty for patent infringement involving technology related to snowmobile engines
- *Samsung Electronics v. NVIDIA Corporation, et al.* – Reasonable royalty and base for patent infringement involving technologies related to the manufacture and operation of semiconductors (including related to Wi-Fi)
- *ContentGuard v. Amazon et al.* – Reasonable royalty and base for patent infringement involving technology related to digital rights management
- *Starhome v. AT&T Mobility, Roamware, and T-Mobile* – Reasonable royalty and base for patent infringement for a technology related to international cell phone roaming
- *In Re Qimonda AG Bankruptcy Litigation* – Economic implications of allowing discontinuance of patents of insolvent firm in the semiconductor industry
- *Callaway Golf Company v. Acushnet Company* – Lost profits, reasonable royalty, and base associated with patents related to golf ball technology
- *Commissariat a L’Energie Atomique v. Chi Mei Optoelectronics, AUO, et al.* – Reasonable royalty and base for alleged infringement of patents related to liquid crystal display (LCD) monitors

Antitrust - Competition

- Retained to estimate price effects using regression analysis related to alleged collusion and bid rigging in the broiler chicken industry
- *In Re: Dealer Management Systems Antitrust Litigation* – Analysis of damages from alleged anticompetitive exercise of market power in data integration services related to provision of software applications to automobile dealerships
- *Quenneville et al. v. Audi, BMW, Mercedes-Benz, Porsche, and Volkswagen* – Evaluation of class certification and damages issues related to alleged conspiracy by automakers to limit competition in quality of vehicles, and to mislead consumers regarding quality of vehicles

- *In Re: Niaspan Antitrust Litigation* – Reverse payment settlement between branded pharmaceutical companies and potential generics under Hatch-Waxman regulations – competitive effects and valuation of ancillary deals including value of a no authorized generic clause (“no-AG clause”)
- *Beltran v. Interexchange, et al.* – Evaluation of class certification, merits, and damages issues related to proposed class of au pair alleging collusion and unfair labor practices regarding payment of weekly stipend
- *Avnet and BSP Software v. Motio* – Claims of patent misuse in provision of version control for business intelligence software – market definition, monopolization, and competitive effects
- *Massimo v. Mindray* – Claims of patent misuse, exclusive contracts, and tying in alleged markets and submarkets related to pulse oximetry – market definition, market power, vertical restraints and competitive effects
- *Plaza 22 v. Waste Management of Louisiana* – Class certification in markets for small container commercial waste collection – market definition and common impact
- *First Data Merchant Services Corporation v. Security Metrics* – Competitive effects from provision of security standard compliance for merchants in the payment card industry – market definition, market power, and competitive effects
- *Sanger Insurance Agency v. HUB International* – Claims related to contracts between preferred broker and carriers in the provision of professional liability insurance – market definition, market power, competitive effects from vertical restraints, efficiencies, and damages
- *MM Steel v. Reliance Steel & Aluminum* – Claims related to contracts between steel producers and steel service centers – market definition, market power, and competitive effects from vertical restraints
- Litigation related to exclusive contracting in the provision of fitness benefits to Medicare Advantage plans – market definition, monopoly power, and competitive effects related to vertical restraints
- FTC and EU Commission investigations regarding claims of monopolization and abuse of a dominant position in the provision of specialized search advertising – econometric models to investigate competitive effects using big data, survey design, and remedies
- *In Re: K-Dur Antitrust Litigation* – Reverse payment settlement between branded pharmaceutical companies and potential generics under Hatch-Waxman regulations – market definition, market power, competitive effects, and valuation of ancillary deals

- *Harrill et al. v. Reagan National Advertising of Austin* – Claims related to contractual provisions related to billboard leases – market definition, market power, raising rivals’ costs, and damages
- *Coca-Cola v. Sugar Sweet Syrup* – Vertical restrictions related to sales of fountain beverages by retail outlets – market definition, market power, competitive effects, and damages
- *Fraser v. Major League Soccer* – Claims related to single-entity structure of sports league including - evaluation of financial structure of organization
- *Universal Avionics v. Rockwell Collins* – Claims involving flight control systems and flight management systems for regional and corporate aircraft – Evaluation of damages from alleged tying behavior

Antitrust – Mergers

- Merger of companies involved in the provision of customer relations management software and data used in CRM software – market definition, monopolization, and competitive effects including impacts on innovation
- Canadian Competition Bureau investigation into merger of companies selling gasoline at wholesale and retail – market definition and potential unilateral and coordinated competitive effects in 14 alleged markets
- DOJ investigation into merger in the avionics industry – market definition, horizontal and vertical effects, and evaluation of potential for raising rivals’ costs
- *Commissioner of Competition v. Tervita* – Merger in the hazardous waste industry in British Columbia (Canadian Bureau of Competition litigation) – market definition, monopoly power, competitive effects using econometric analyses, and efficiencies
- FTC investigation into merger in the coffee industry – market definition (including econometric analysis), market power, vertical competitive effects, and efficiencies
- *FTC v. Polypore* – Consummated merger and monopolization in the battery separator industry (FTC investigation and litigation) – market definition, competitive effects, efficiencies, and remedies
- DOJ investigation into merger in the waste collection and disposal industries – market definition, competitive effects (horizontal and vertical), efficiencies, and remedies
- FTC investigation into merger in the video game industry – market definition and competitive effects

- *DOJ v. Oracle* – Merger involving financial management and human resource management enterprise software products (DOJ litigation) – market definition and competitive effects
- *Texaco v. Dagher; Shell Oil v. Dagher* – Joint venture between oil refiners - evaluation of appropriate competition authority oversight

Damages and Finance

- Retained to build model to predict municipal solid waste and waste recovery volumes based on demographic variables and trends
- Retained to evaluate host fees paid to municipalities by waste industry companies with disposal assets
- *Blairgowrie Trading v. Allco Finance Group Ltd.* – Syndicated loan availability and cost for company operating on certain relevant sectors, including transportation (aviation, rail, shipping), energy, commercial real estate, and wholesale financial services
- *Ameritox v. Millenium Laboratories* – Evaluated claims of unfair competition, false advertising, and unfair trade practices in provision of confirmatory urine drug testing for pain management health care practitioners
- Retained to analyze length of stay by guests at hotel accused of violating the California Civil Code regulating residential hotels
- *Chechele v. Tom Ward and Sandridge Energy* – Recoverable profit resulting from insider trading pursuant to Section 16(b) of the SEC Act
- *Abu Dhabi Investment Authority v. Citigroup* – Damages model using event study analyses related to misrepresentation claims in banking industry
- *Caterpillar v. Navistar* – Alleged breach of contract and alleged fraud associated with an agreement to sell fuel injectors for use in diesel engines – estimation of damages
- Damages involving marketing programs in selling genetically modified soybeans and herbicides
- Value of a right of first refusal for season ticket holders following relocation of sports team
- Analysis of matched and manipulative stock trading

Energy and Regulation

- Retained to evaluate regulated rate methodology in the waste collection industry
- Claimed manipulative trading of energy derivative products – econometric evaluation of electricity prices
- Wholesale electricity prices – evaluation of competitive reasonableness of 2006 Illinois auction
- Claims that an artificial price in electricity forward markets was created through spot market actions and information dissemination
- Claims related to sale of electricity in California and the western US during the California electricity crisis – market definition and competitive effects
- Regulatory proposal for a locational installed capacity market (LICAP) in New England – market power, generator availability, shape of the demand curve, and role of historical capacity levels
- Analyses of California electricity crisis (transmission constraints, calculation of rebates under various scenarios, and trading practices of electric power generators during 2000 and 2001)

PUBLICATIONS

Assets and Finances: Calculating Intellectual Property Damages, 2020-2021 edition, with Gregory Smith, West Publishing, Thomson-Reuters.

“United States Overview,” in The Handbook of Competition Economics 2021, Global Competition Review, *forthcoming 2020*, with Henry J. Kahwaty. (prior editions: 2016, 2017, 2018, 2019, and 2020).

“Intellectual Property Expert Damages Admissibility,” with Deepa Sundararaman, in Assets and Finances: Calculating Intellectual Property Damages. 2019-2020 Edition, by William O. Kerr, and Gregory Smith, West Publishing, Thomson-Reuters. (prior editions: 2017, authors Richard B. Troxel and William O. Kerr; and 2018).

“Admissibility of Expert Damages Testimony in IP Cases,” in Assets and Finances: Calculating Intellectual Property Damages, 2016 Edition, by Troxel, Richard B. and William O. Kerr, West Publishing, Thomson-Reuters. (prior editions: 2010, 2011, 2012, 2013, 2014, and 2015).

“Canada High Court Breathes New Life Into M&A Efficiencies,” *Law360*, February 6, 2015, with Henry J. Kahwaty.

“Market Definition – Achieving an Integrated Analysis,” *The Antitrust Bulletin*, 59(3): 667-685, Fall 2014, with Henry J. Kahwaty.

“Measuring Reverse Payments in the Wake of *Actavis*,” *Antitrust*, 28 (1): 29-35, Fall 2013, with William O. Kerr.

“Shifting Regulatory Oversight of Utility Mergers” in *Innovating for Transformation: The Energy and Utilities Project*, Montgomery Research, Inc., 2006, with Cliff W. Hamal.

“Market Power Mitigation or Obviation, That is the Question: FERC’s Pending Decision on New England’s Installed Capacity Market Design,” *The Energy Antitrust News*, Winter 2005.

“Renewed Interest in Coordinated Effects in Merger Analysis: The *UPM Case*,” *Trade Practices Law Journal*, Summer 2004, with David A. Weiskopf.

Issues in the Deregulation of the Electric Industry. 1998. Clemson University, PhD Dissertation.

“The Wires Charge: Risk and Rates for the Regulated Distributor,” *Public Utilities Fortnightly*, September 1997, with Michael T. Maloney and Robert E. McCormick.

PAPERS, COMMENTARY, and CONTRIBUTIONS

“Written Comments Regarding Recommendation on Methodology for Deriving Operating Ratio for Solid Waste Haulers, Submitted on Behalf of WRRRA,” Washington Utilities and Transportation Commission, Docket TG-131255, Inquiry into Methods for Setting Rate for Solid Waste Collection Companies, October 25, 2019, with Paul Diver.

Contributor to Section of Antitrust Law, Antitrust Law Developments (Eighth), American Bar Association, 2017.

“What Drives Physician Testing for Pain Medication Compliance – Risk or Reward?”, Working Paper, December 2014, with Robin Cantor, Shireen Meer, Daniel Boada, and Sandra Wetzel, presented by Robin Cantor at Society for Risk Analysis Annual Meeting, Complex Challenges in Health Policy.

Contributor to Selected Readings in Antitrust Economics: Game Theory (VI. Vertical Restraints), American Bar Association, Section of Antitrust Law Economics Committee, May 2014.

“Reasonable Royalty Damages: Expert Testimony and Admissibility,” 2014.

“An Economic Evaluation of the Competitive Nature of Reverse Payment Settlements,” 2013.

“Analysis of Horizontal Market Power in Transactions Under the Federal Power Act: Comments” with Carl Danner, Henry J. Kahwaty, and Keith Reuter, FERC Docket No. RM11-14-000, May 23, 2011.

Comments for Horizontal Merger Guidelines Review Project, “Comments on Questions 2, 4, and 13,” November 9, 2009.

“An Agreement in the Rough: A Modified Cournot Approach to Distribution Agreements,” with Ecer, Kahwaty, Nieberding, and Weiskopf. Winter 2006.

“A Plan for Restructuring the Electric Industry in South Carolina,” Citizens for a Sound Economy. June 30, 1997, with Michael T. Maloney and Robert E. McCormick.

“Redistribution and Retribution: A Positive Theory of Transfers and Police Expenditures,” Public Finance Workshop Paper, Clemson University. December 1996.

“Amtrak: Information on Subsidies in Thruway Bus Operations,” General Accounting Office. Resources, Community, and Economic Development Division. May 9, 1995. (major contributor)

PRESENTATIONS

“Effective Intellectual Property Damages Calculation: A Comprehensive Guide,” The Knowledge Group, September 30, 2020.

Patent Infringement Mock Trial Damages Expert Testimony - Japanese Intellectual Property Association, Washington, DC, November 12, 2019, (and at previous events on November 3, 2017; November 6, 2015; November 7, 2013; November 11, 2011; November 13, 2009; and November 9, 2007).

Presentation at Washington Utilities and Transportation Commission Technical Conference, “Inquiry into methods for setting rates for solid waste collection companies”, Docket TG-131255, on behalf of Washington Recycling & Refuse Association, with Paul Diver, PhD, October 8, 2019.

“Section 337 Exclusion Orders for New Technology (Mock Hearing on Public Interest for Infringing Biologic Product),” Practitioners’ Think-Tank on ITC Litigation & Enforcement, American Conference Institute, June 27, 2019.

“2019 Antitrust Trends, Developments and Legal Issues,” The Knowledge Group, April 24, 2019.

“Reverse Payment Settlements: Economic Issues Arising in Antitrust Litigation,” The Knowledge Group, August 30, 2018.

- “Antitrust Enforcement for Pay-For-Delay Settlements: U.S. and E.U. Perspective,” The Knowledge Group, October 20, 2016.
- “Merger Analysis: The CCS Case,” Clemson University; Clemson, South Carolina; October 18, 2012.
- “Quantitative Analysis in Consulting Engagements,” University of Virginia; Charlottesville, VA; September 7, 2012; with Anthony D’Andrea.
- “A Discussion of the Rolls Royce Decision and Expert Testimony,” BRG – Washington, DC, July 2011 with Keith Reutter.
- “Capacity Market Design Fundamentals,” EUCI conference workshop, Baltimore, MD; October 27, 2010, with Cliff Hamal and Julie Carey.
- “Merger Analysis in the Waste Industry – Republic and Allied,” University of Virginia; Charlottesville, VA, October 21, 2010, with Paul Diver.
- “Critical Elements of Ancillary Services Market Design,” EUCI conference workshop, Minneapolis, MN; June 18, 2010, with Scott M. Harvey.
- “An Analysis of Reverse Payments in the Pharmaceutical Industry – An Antitrust Topic,” Charlottesville, VA; September 25, 2008.
- “Market Design Choices for Ancillary for Ancillary Services Products,” workshop at EUCI conference, Minneapolis, MN; September 12, 2007, with Cliff Hamal.
- “Reliability, Ancillary Service Markets and Scarcity Pricing,” presented at EUCI conference, Minneapolis, MN; September 11, 2007; authored by Scott M. Harvey.
- “Daubert and Economic Experts,” Mock Daubert Hearing, LECG Summer Seminar Series, July 9, 2003.
- Presentation before the Public Service Commission of South Carolina on behalf of Citizens for a Sound Economy, Hearings on Electricity Deregulation, August 1997.

ACTIVITIES, HONORS, and AWARDS

- American Economic Association (2001–present)
- American Bar Association (2004–present)
- Editor-in-Chief, *BRG Review* (2015–present)
- Who’s Who Legal: Competition Leaders, Economists 2020

- Who's Who Legal: Competition Future Leaders, Economists 2019
- Signatory of Panmure House Declaration, at The New Enlightenment: Reshaping Capitalism and the Global Order in a Neo-Mercantilist World (2019)
- Co-Office Director for BRG's Washington DC office (2015–2017)
- United States Association for Energy Economics (2009–2017)
- International Association for Energy Economics (2009–2017)
- American Health Lawyers Association (2014–2015)
- WCEE (2009–2010)
- Close Fellowship (1994–1996)
- Macaulay Award for Outstanding Performance by a Graduate Student in Economics (1993–1994)
- Earhart Fellowship (1993–1994)