

KEITH R. UGONE, PH.D.

Senior Advisor (Managing Principal - Retired)

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Dr. Keith R. Ugone has provided economic and damages consulting services in antitrust cases, breach of contract cases, business interruption cases, class action certification matters, employment / loss of earnings cases, intellectual property cases, professional negligence cases, and securities-related cases, among others. He specializes in the application of economic principles to complex business disputes and generally is retained in cases requiring economic analyses and/or damages-related analyses. Damage models constructed or evaluated by Dr. Ugone have had as components revenue analyses, lost sales analyses, cost analyses, assessments of the capacity to produce additional units, assessments of profitability, the competitive business environment in which the damages claim was being made, claimed lost profits, claimed lost business value, and claimed reasonable royalties. During the course of Dr. Ugone's career, he has frequently evaluated lost profits and valuation-related damages using large databases of information and complex computer models. Dr. Ugone also has performed economic liability analyses in antitrust matters including defining relevant markets, assessing market power, and evaluating alleged anticompetitive behavior. Dr. Ugone has testified at trial and in deposition approximately 600 times since 1990.

Dr. Ugone has a PhD in Economics from Arizona State University, an MA in Economics from the University of Southern California, and a BA in Economics from the University of Notre Dame. Subject areas of expertise include microeconomics, macroeconomics, industrial organization, antitrust/regulation, and econometrics. He is a member of the American Economic Association, the American Statistical Association, the National Association of Forensic Economics, and the Western Economics Association.

EDUCATION

1983 Ph.D., Economics, Arizona State University.
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1979 M.A., Economics, University of Southern California.

1977 B.A., Economics, University of Notre Dame.

PROFESSIONAL EXPERIENCE

2004 - Present	Analysis Group, Dallas, Texas – Senior Advisor (June 2020 - present); Managing Principal
	(2004 - May 2020; retired).

- 1985 2003 PricewaterhouseCoopers LLP (and legacy firms) Partner (Principal) 1992 2003; Senior Manager 1989 1992; Manager 1987 1989; Senior Consultant 1985 1987. Member of United States Admissions Committee (2003). Chairman of PricewaterhouseCoopers Intellectual Property Leadership Forum (2000 2003).
- 1983 1985 California State University, Northridge Assistant Professor/Lecturer in Department of Economics, Full-time: 1983 1985, Part-time: 1986 1992.
- 1979 1983 Arizona State University Faculty Associate/Teaching Assistant in Department of Economics.
- 1977 1979 Jet Propulsion Laboratory Economic/Energy Analyst.

PROFESSIONAL AND BUSINESS AFFILIATIONS

American Economic Association American Statistical Association National Association of Forensic Economics Western Economics Association

SELECTED LITIGATION CONSULTING EXPERIENCE (by Alphabetized by Nature of Suit)

Antitrust: Monopolization/Attempted Monopolization Cases

- Evaluated antitrust claims brought by an unauthorized distributor and technology reseller against a manufacturer and an authorized distributor of routers and switches. Plaintiff's allegations related to market definition, market power, anti-competitive policies to exclude competing distributors, market-wide harm, and damages. Among other things, Plaintiff distributor alleged that after customers paid the manufacturer and authorized distributor for maintenance and service packages, the manufacture demanded customers buy new, allegedly overpriced equipment to continue service and avoid a technologically compromised network. Rebutted Plaintiff's allegations of market-wide harm and damages. Also demonstrated that the manufacturer's policies relating to distributors were procompetitive.
- Evaluated Plaintiff's claims that a Defendant manufacturer utilized anticompetitive conduct in an attempt to monopolize a market allegedly comprised of heavy crude drag reducing agents (DRAs) used to assist the flow of heavy crude oil through pipelines. Demonstrated the flaws in Plaintiff's analysis of (a) Defendant's alleged monopoly power in the asserted relevant market, (b) Defendant's alleged exclusionary conduct of tying heavy crude DRA sales and injection equipment, and (c) Plaintiff claimed lost profits damages. Demonstrated that Plaintiff failed to show that Defendant restricted heavy crude DRA output to charge a higher price. Instead, demonstrated that Defendant invested substantially to increase production and capacity after creating the first heavy crude DRA. Also demonstrated that prices for heavy crude DRAs were negotiated outcomes with highly sophisticated customers, some of which commanded a large share of total heavy crude DRA purchases and possessed considerable negotiating leverage that constrained Defendant's pricing. Demonstrated that Plaintiff's claimed lost profits were predicted upon a flawed benchmarking approach.
- Evaluated a downstream online travel agency's (OTA) allegations that certain major hotel chains entered into a conspiracy to eliminate interbrand competition for branded keyword search advertising. Plaintiff alleged that the hotel chains colluded to eliminate interbrand competition in branded keyword search auctions and induced gatekeeper OTAs to agree to eliminate bidding in branded keyword search auctions among themselves and their affiliates. Demonstrated that the Defendant hotels had unilateral economic incentives to (a) not bid on competitor-branded keywords, (b) implement negative keywords for competitor brands, and (c) restrict branded keyword bidding by downstream OTAs. Also demonstrated that the hotel chains' actions were consistent with each Defendant's unilateral economic incentives to protect their brand name and further their competitive business objectives.
- Evaluated Plaintiff's claimed lost profits damages stemming from allegations a manufacturer of coffee brewing systems and compatible portion packs attempted to monopolize At-Home and Away-From-Home uses. The manufacturer sells compatible portion packs under brands that it owns and sells or supplies portion packs under third-party Licensed Brands, Co-Manufactured Partner Brands, and Private Label Brands. Plaintiff claimed the Defendant engaged in anticompetitive conduct including exclusive arrangements with distributors and roasters, designing brewers incompatible with unlicensed portion packs, and threats of patent infringement litigation. Demonstrated Plaintiff's damages claims were flawed and predicated upon multiple assumptions not supported by the evidence, including but not limited, to failing adjust Plaintiff's but-for prices with the claimed adjustment to market prices, flawed claimed lost customer analyses, and a flawed benchmarking approach to evaluating claimed lost portion pack sales.

- Analyzed Plaintiff's allegations that Defendant monopolized or attempted to monopolize the market for magnetic brakes for amusement park rides. Evaluated Plaintiff's assessment of the relevant product market, allegations of market power, and the impact of Defendant's alleged anti-competitive conduct. Also evaluated claimed damages, including assumptions underlying Plaintiff's claimed damages model and economic causal connection between the alleged wrongful conduct and claimed losses. Determined that Plaintiff's expert failed to account for alternative explanations for Plaintiff's claimed losses. Also demonstrated that Plaintiff's expert made inappropriate assumptions regarding growth in the claimed relevant product market and whether Plaintiff was damaged in perpetuity.
- Evaluated claimed antitrust damages asserted by a major airline company against a global distribution system ("GDS") operator for alleged anticompetitive behavior relating to the provision of booking services to travel agencies. Evaluated Plaintiff's claimed damages relating to claimed lost profits resulting from the Defendant's alleged actions to impede the rollout of a competing technology for booking services, contractual restrictions allegedly preventing the airline from offering targeted discounts to price-sensitive customers, allegedly imposing retaliatory booking fee increases, and allegedly biasing fare search results displayed to travel agencies.
- Evaluated Plaintiff's economic liability arguments in an antitrust matter relating to a restriction on the registration of cloned American Quarter Horses with the American Quarter Horse Association. Evaluated Plaintiff's expert's theoretical economic model. Demonstrated that there was no economic harm to the market as a result of the at-issue registration restriction. Also identified numerous flaws in Plaintiff's expert's assumptions regarding the supply and demand of high quality American Quarter horses (including excess breeding capacity). Evaluated Plaintiff's damages claim relating to lost sales of cloned American Quarter horses and lost breeding opportunities.
- Evaluated the claimed anticompetitive impact of an alleged conspiracy by a major oil and gas exploration company to monopolize the market for Helicopter Underwater Egress Training ("HUET"). Evaluated the relevant product and geographic markets and the alleged market power of the Defendant. Demonstrated that the Defendant lacked the market power necessary to monopolize the relevant market. Also demonstrated the flaws in Plaintiffs' damages claim, including but not limited to, loss of Plaintiffs' market share for reasons other than the alleged anticompetitive acts (e.g., self-imposed price increases and the loss of a large customer unrelated to the alleged wrongful conduct), failure to take into account the general economic downturn in the U.S. economy during the relevant period, the use of an inappropriate discount rate for quantifying claimed future damages, and the use of an inappropriate assumption relating to future claimed market shares in the absence of the alleged wrongful conduct.
- Evaluated the anticompetitive impact of an alleged conspiracy between a distributor and manufacturer
 whereby the manufacturer refused to ship certain aftermarket automotive exhaust systems and catalytic
 converters to a competing distributor in Washington and Oregon. Analyses included evaluating the
 relevant product and geographic markets for aftermarket automotive exhaust products and the damages
 suffered by the competing distributor. Also evaluated the competing distributor's direct and indirect
 price discrimination claims (including differential discounts in areas where shipments did occur) and
 associated claimed damages.
- Evaluated the claimed anticompetitive activities of Defendant hospital's alleged exclusionary arrangements and practices relating to managed care contracts. Evaluated the relevant antitrust markets (product and geographic) for primary care services provided by physicians to managed care-covered patients in Smith County, Texas. Also evaluated the volume of commerce impacted by the claimed exclusionary practices and the impact of these claimed exclusionary practices on competition in the relevant markets. In addition, evaluated the economic damages suffered by the Plaintiff hospital as a result of Defendant's alleged anticompetitive activities.

- Evaluated Plaintiff's claim of antitrust injury in the markets for orthodontic brackets and orthodontic services allegedly due to the advertising guidelines promulgated by a national orthodontic trade association. Analysis demonstrated the advertising guidelines were efficiency enhancing (by lowering consumer search costs), promoted competition, and did not stifle innovation in the relevant markets. Also empirically demonstrated that legitimate advertising through a variety of media was not impacted by the advertising guidelines.
- General Overview. Provided economic analyses and developed damages models and/or critiqued the opposition's damages models in various antitrust cases involving the following industries and/or markets: anesthesia services, printed circuit boards, nutritional supplements, carbonated soft drinks, aftermarket automotive exhaust systems, telecommunications switching equipment, dairy processing, radio control model airplanes, local area networks, entertainment lighting, integrated casino bonusing software, home lighting control systems, medicare supplement/long term care insurance, commercial air conditioning units, disposable dust/mist respirators, immunodiagnostic tests, in-patient hospital services and managed care contracts, PBX systems, military freight forwarding, underground storage tanks, long distance telephone lines, tennis ball throwing machines, check processing readers/sorters, local television advertising, personal watercraft, automobile refinishing paint, Christian music, subsea horizontal extraction wells, orthodontic braces, DRAM microcomputer chips, women's designer clothes, single point of contact telecommunication services, non-prescription reading glasses, and the provision of temporary electrical services to convention centers. Damages models were constructed or critiqued that involved lost sales analyses, incremental cost analyses, and assessments of capacity increases. Also investigated were economic forces external to the company that may have impacted the company's performance. Economic analyses included defining the relevant market, assessing the presence or absence of market power, evaluating whether a business activity was pro-competitive or anti-competitive, and/or evaluating the level of competition in a particular market.

Antitrust: Price Fixing Cases

• Evaluated allegations of price-fixing among freight companies relating to bids to ship the household goods of U.S. Armed Forces' members and civilian employees of the U.S. Department of Defense between Germany and the U.S. Analyses included an investigation of the efficiency-enhancing economic benefits provided by the at-issue "landed rate" pricing system. Also evaluated Plaintiff's claimed damages allegedly associated with elevated rates and alternative factors contributing to claimed elevated rates unrelated to claimed conspiracy. Evaluated Plaintiff's econometric model used to identify claimed overcharges.

Antitrust: Predatory Pricing/Price Discrimination Cases

• Evaluated the relevant product and geographic markets and impact on competition in a price discrimination case involving a manufacturer of lighting products and the prices charged to various distributors. Analyses included an investigation of the primary-line market (i.e., competition among manufacturers of lighting products) and the secondary-line market (i.e., competition among distributors). The impact on competition among the distributors of lighting products was investigated (and whether a substantial lessening of competition occurred) given the pricing policies of the manufacturer.

Antitrust: Tying Cases

• Evaluated certain economic and damages claims made by a local television station against a television program syndicator. At issue was an alleged unlawful tying arrangement relating to the claimed requirement to license *Becker* in order to license *Judge Judy* and *Judge Joe Brown*. Demonstrated the syndicator did not possess market power in a properly defined market since substitution existed between different genre of television programs, between different syndicators, between different demographic groups, and between different types of syndicated programming (i.e., first-run, off-network, and evergreen programming). Also demonstrated that the pricing patterns of the syndicator were inconsistent with the antitrust claims being made.

Breach of Contract / Breach of Fiduciary Duty Cases

- Evaluated a distributor's claim of lost profits relating to an alleged breach of contract by a major retailer to purchase in-store / not for resale hand sanitizer and dispensers during the COVID-19 period. The retailer had entered into a long-term contract with the distributor. Demonstrated the unreliable nature of the Plaintiff's lost profits claim, including but not limited to, the failure to incorporate changing market realities such as decreasing hand sanitizer prices after an initial surge and an overall decrease in demand for the in-store use of the hand sanitizers. Also demonstrated the retailer was experiencing increases in not-for-resale hand sanitizer inventory and a reduced future demand for such products.
- Evaluated an aluminum can manufacturer's claim of lost profits relating to a requirements contract with a beverage company to purchase aluminum can bodies and can ends for its formulations of an energy drink. Plaintiff alleged the beverage company breached the can supply agreement by failing to purchase the requisite annual minimum volume of cans and can ends and by failing to pay a "shortfall" penalty. Demonstrated that the can manufacturer failed to demonstrate actual damages associated with any alleged breach of contract, failed to properly account for the scrap value of produced but unpurchased cans, and failed to demonstrate the ability to fulfill the minimum volumes under the can supply agreement given capacity constraints. Also demonstrated that the claimed shortfall penalty would yield a windfall gain given the can manufacturer's actual profit margins.
- Evaluated claimed damages on behalf of a manufacturer of solid-oxide fuel cell systems for on-site power generation that contain stacks of interconnectors an endplates. The manufacturer provides energy servers for power generation systems based upon solid oxide fuel cells. The manufacturer claimed that a vendor provided underperforming interconnector components. This resulted in the manufacturer having to replace the defective interconnector components earlier than expected in order to provide energy output performance in line with that of non-defective interconnectors produced by other suppliers. Evaluated the increased costs suffered (and to be suffered) by the manufacturer in present value terms over the life cycle of the energy servers by benchmarking the performance of the defective interconnectors to non-defective interconnectors.
- Served as an economics and damages expert for a carbonated soft drink bottler / distributor possessing an exclusive territory to distribute certain brand name beverages. The Plaintiff bottler / distributor alleged that the Defendants engaged in unauthorized transshipping into the bottler's exclusive territory. Evaluated the overall economic impact of transshipping, that an injunction prohibiting transshipping was necessary from an economic perspective, and that the Defendants' transshipping has resulted in irreparable harm to the bottler.
- Evaluated a Plaintiff doctor's damages being asserted against a medical device company for breaching an agreement to make royalty payments for use of proprietary designs, techniques, and enhancements incorporated into certain product lines related to orthopedic surgery and arthroscopic instability repair. Under the terms of the agreements executed by the parties, the Plaintiff doctor was entitled to recover royalty payments or Defendant's profits derived from the commercialization of the accused products. Evaluated the relevant sales made of the accused products and conducted a royalty analysis and a disgorgement analysis.
- Evaluated claimed damages being asserted by a major aircraft manufacturer against a supplier of parts. Claims related to allegedly defective fan cowls that cover aircraft engines that allowed for fluid ingression and the alleged need for replacement. Opined that the cost estimates presented by the aircraft manufacturer's expert over-estimated claimed damages as they included unrecoverable costs, did not all have a nexus to the alleged defect, and alternative reasons for certain repairs were not properly removed from the claimed replacement cost estimates.

- Evaluated claimed damages in an alleged breach of fiduciary duty matter between a franchisee and a major fast food franchisor relating to the development and managing of fast-food franchises. Plaintiff claimed economic harm due to franchisor's refusal to grant certain additional franchisees to Plaintiff that Plaintiff claimed would otherwise be in competition with the Plaintiff's existing franchises. Concluded Plaintiff's impact analysis failed to take into account many factors affecting the performance of the Plaintiff's existing franchises that were unrelated to the alleged wrongful conduct.
- Evaluated Plaintiff's damages claim concerning the alleged failure of a call center to properly process
 inquiries relating to the newspaper and television marketing of a collectible doll in the likeness of a
 recently deceased public figure. Analyzed advertising expenditures, response rates across cities, major
 news announcements related to the marketing of such merchandise, and contributing problems caused by
 Plaintiff's actions. Estimated damages by comparing sales in an un-impacted period with sales in the
 alleged impacted period.

Business Interruption/Interference Cases

- Evaluated the damages sustained by a cosmetic company as a result of defective decorated glass containers being furnished for its new therapy products. Evaluated and/or verified product retrieval costs, retrieval program administration costs, customer goodwill replacement gift costs, waste disposal costs, and lost profits on the therapy products. The lost profits analysis included assessing the life cycle sales pattern of new cosmetic products introduced by the company.
- Evaluated damages relating to the introduction of a new popcorn product line in a business interruption dispute. The introduction of the new popcorn product line was aborted due to defective containers. Analyses undertaken included determining the cost of popcorn, the cost of popcorn bags, freight costs, as well as the projected revenues associated with popcorn sales. An assessment was also made of the supermarket outlets and territories in which the popcorn would have been sold.
- Evaluated Plaintiff's damages claim relating to the installation of an allegedly defective computer software system at an automobile dealership. Plaintiff contended the software had defects adversely affecting the accounting system and day-to-day operations of the dealership, and submitted an "increased cost" damages claim. Analysis demonstrated Plaintiff's expert used an inappropriate methodology for measuring damages and submitted cost increases unrelated to the allegedly defective software.
- Other Matters. Provided deposition questions, economic analyses, and a critique of opposing economists' damage models in various business interruption cases resulting from (e.g.) fires, "lockouts", electrical outages, defective products, and/or injuries to key personnel. Businesses evaluated included a workout facility (gym), a pediatric practice, a balloon manufacturing plant, a radiology practice, and a packaging machine manufacturer.

Class Certification Engagements

• Evaluated various economic, class certification, and damages-related issues in a consumer class action matter relating to allegations that a bottled water provider misrepresented its product as being "100 percent Natural Spring Water." Plaintiffs claimed the misrepresentation caused consumers to overpay and make purchases they otherwise would not have made. Evaluated whether standard economic analyses could be used to quantify reliably on a Class-wide basis (using common proof) the economic injury and economic damages being claimed or if individual inquiry was required. Also evaluated Plaintiffs' proposed common proof approaches for calculating claimed Class-wide damages including but not limited to a conjoint analysis / market simulation approach (evaluated from an economic perspective) and a hedonic regression approach. Opined that Plaintiffs' experts failed to isolate the price premium (if any) attributable to the alleged misrepresentation and failed to evaluate individual inquiry issues

- Evaluated various economic, class certification, and damages-related issues in a consumer class action matter relating to allegations that a company that packages, markets, and distributes "in shell" eggs used misleading labeling claims relating to the hens being pasture raised and ethically treated. Plaintiff's experts submitted a conjoint analysis / market simulation approach and an analytical approach to evaluating Class-wide damages. Opined that the conjoint analysis / market simulation approach omitted important characteristics that would influence market demand, that the results of the analysis were not representative of market outcomes, and that a substantial portion of the survey respondents did not value the "pasture raised" and/or the "ethical eggs" labeling claims. Also opined that the analytical approach relied upon economically implausible assumptions including a constant wholesale price of eggs even though egg prices varied substantially during the putative class period. Both approaches were unreliable for estimating putative Class-wide damages using common proof.
- Evaluated economic and damages-related issues in a consumer class action matter relating to allegations that a gas stove manufacturer failed to warn consumers as to the harmful health effect of gas cooking including regularly emitted pollutants and the risk of nitrogen oxides. Opined that a common proof approach to evaluating claimed Class-wide damages would not reliable. For example, (a) the proposed constant percentage price premium would not take into account the different features and functionalities associated with the Challenged Products. Also, the proposed conjoint analysis / market simulation approach (a) omitted attributes and attribute levels that would be relevant purchase drivers, (b) did not take into account supply-side considerations, and (c) did not take into account the warning labels that were provided on the Challenged Products. Opined that individual inquiry would be required to reliable evaluate the harm suffered, if any.
- Evaluated economic and damages-related issues in a consumer class action matter relating to allegations that a major furniture retailer advertised "original prices" which did not represent actual prices thereby allowing the retailer to offer "phantom discounts." Named Plaintiff's expert proposed and then implemented two approaches to evaluate and calculate claimed Class-wide damages: (a) a hedonic regression approach and (b) a demand regression approach. Opined that from an economic and damages quantification perspective, individualized inquiry would be required given the high degree of consumer search, competing stores in the marketplace with similar furniture, and the prevalence of repeat buyers. Also opined that Named Plaintiff's expert did not identify which of the claimed damages approaches was more relevant should the two approaches yield different results (which they did) and that both the hedonic regression approach and the demand regression approach omitted key explanatory variables.
- Evaluated Named Plaintiffs claim of economic harm in a consumer class action matter relating to bonded abrasive wheels (e.g., cutting and grinding wheels). Named Plaintiffs alleged that the manufacturer failed to provide adequate warning that the product had an expiration date and that usage past the expiration date could cause the product to fail. Named Plaintiffs' expert asserted that economic damages could be calculated formulaically. Opined that individual inquiry would be required given the facts and circumstances of this matter and that certain putative class members received the benefit of the bargain for at least some of their purchases. Also opined that Named Plaintiffs' expert did not take into account the assortment of uses (i.e., cutting vs. grinding), sizes (i.e., diameter and thickness), type of wheel, package size/count, different brands, and prices associated with the Challenged Products.
- Evaluated economic and damages-related issues in a consumer class action matter relating to allegations that a major automobile manufacturer sold and leased vehicles that had defective front bumper covers and air inlets allowing road debris to enter and damage the vehicles' aluminum radiators. Plaintiffs claimed they would not have purchased or leased the vehicles on the same terms had they known of the alleged defect and the cost of repair. Plaintiffs' expert's proposed common proof methodology for calculating claimed damages was to sum together the material cost associated a new grille plus the labor cost of installation (with no specific calculations). Opined that such a proposed methodology would not yield a reliable or relevant measure of Class-wide injury; individual inquiry would be required. The proposed methodology, among other things, did not take into account the manifestation rate of the alleged defect, any causal nexus between radiator damage and the alleged defect, warranty coverage, considerations relating to secondary market transactions, or variations in the cost of repair.

- Evaluated economic and damages-related issues in a consumer class action matter relating to allegations that a major food manufacturer engaged in misleading labeling by using a "Made with Real Cheese" label claim and a block of cheddar cheese image on a snack food package. Named Plaintiffs alleged that the value of the product purchased was materially less than the value represented by the Defendant. Named Plaintiffs' expert proposed evaluating a claimed price premium through use of a conjoint analysis approach and a hedonic regression approach. Opined that Named Plaintiffs' expert did not adequately describe how the two studies would be implemented, which would be used, whether data was available to conduct the studies, the variability of prices across different retailers, the pricing of competitors, or the product characteristics that would be important to include in the analysis.
- Evaluated economic and damages-related issues in a consumer class action matter relating to allegations that a major automobile manufacturer sold and leased vehicles that had defective windshields that would crack, chip, and or fracture under normal driving conditions. Plaintiffs claimed they would not have purchased or leased the vehicles or would have paid substantially less if they had known of the alleged defect at the time of purchase. Plaintiffs' expert proposed a common proof methodology using a "Repair Cost Model" to evaluate claimed Class-wide damages but did not provide a numerical estimate of the claimed overpayment. Opined that such a proposed methodology would not yield a reliable or relevant measure of Class-wide injury and that individual inquiry would be required. The proposed methodology, among other things, did not take into account the probability of the defect's occurrence, goodwill repairs on the part of the manufacturer, a reliable ownership percentage to allocate changes in vehicle values over time, or that customers were satisfied with their purchase. Incomplete estimates of the cost of repair also were provided.
- Evaluated Plaintiffs' position that the claimed economic injury allegedly suffered by putative Class members could be quantified on a Class-wide basis in a matter brought by an institutional investor against a bank associated with the bank's securities lending program. Demonstrated that a class-wide approach would obfuscate important differences among putative Class members' individual investment expectations and tolerances. Differences requiring individualized inquiry included the variability in maturity guidelines, credit-quality guidelines, prohibited investments, and diversification requirements.
- Evaluated Plaintiffs' position that the claimed economic injury allegedly suffered by putative Class members could be quantified on a class-wide basis in a matter where an automobile company allegedly did not inform purchasers that actual vehicle miles per gallon performance could vary from the 40 miles per gallon EPA estimated fuel efficiency. Demonstrated that individualized inquiry would be required to ascertain consumers' valuation of vehicle characteristics (including their expected fuel economy) when purchasing an accused vehicle, actual prices paid, driving patterns, driving conditions, and whether putative Class members' expectations were influenced by the company's alleged wrongful conduct. Evaluated Plaintiffs' class certification expert's opinion that alleged damages could be evaluated on a class-wide basis using a hedonic regression methodology.
- Evaluated Plaintiffs' position that the economic injury allegedly suffered by putative class members could be quantified on a class-wide basis in a matter where a beverages company marketed certain beverages as "All Natural" when they contained high fructose corn syrup ("HFCS"). Demonstrated that wide variations existed in the beverages' retail prices across distribution outlets, across geographic areas, and across the time periods considered. Also demonstrated that wide variations existed in the beverages' retail prices because of promotional discounts and coupons and because the company did not sell directly to consumers. Consequently, whether consumers paid a price premium because of the "All Natural" labeling (and how much, if any) could not be determined by proof common to the proposed class. A comparison of the average retail prices of the "All Natural" beverages in dispute to identified benchmark products did not support the allegation that the "All Natural" beverages possessed a systematic price premium as a result of the "All Natural" labeling.

Intellectual Property: Patent Infringement and Patent-Related Cases

- Evaluated a non-practicing entity's royalty damages claim against a major information technology company offering network security and software development services. Plaintiff accused various routers and related networking components running certain operating system versions. Opined that the presented royalty damages did not provide guidance as to a reasonable royalty payment in that the claimed benefits of the asserted patents were overstated, Plaintiff had limited success in monetizing the asserted patents, comparable license agreements were dismissed as licensing value indicators, the apportionment approach was flawed, non-infringing alternatives were dismissed, and an incorrect royalty payment structure was used
- Evaluated a biotechnology company's royalty damages claim asserted against joint venture biotechnology / biopharmaceutical Defendants. Plaintiff alleged the Defendants infringed seven of the Plaintiff's patents with its commercialization of a messenger RNA ("mRNA") vaccine for the coronavirus disease 2019 ("COVID-19") caused by the SARS-CoV-2 virus. Also provided an independent evaluation of Plaintiff's royalty damages. Opined that Plaintiff's expert did not fully account for Defendants' significant contributions to the commercial success of the vaccine, including but not limited to: (a) technical contributions (including patents, know-how, R&D expenditures, and third-party license agreements); (b) vaccine production contributions; and (c) vaccine distribution contributions. At a hypothetical negotiation, defendants also would stress the significant contributions of the federal government to the commercialization of COVID-19 vaccines that created value unrelated to the Patents-in-Suit, including but not limited to: (i) accelerated regulatory approvals; (ii) purchasing and stockpiling vaccine doses; (iii) promoting the COVID-19 vaccines; (iv) creating mass vaccination sites; and (v) providing free vaccinations and monetary incentives to recipients to encourage vaccination. In addition, acceptable non-infringing alternatives were available that were functionally equivalent, acceptable, and not cost prohibitive.
- Evaluated Plaintiff's claimed lost profits and royalty damages being asserted against a manufacturer of laptop computers and related components. Plaintiff claimed certain components used in the desktop computers, laptops, and servers infringe its patents relating to trenched metal-oxide-semiconductor field effect transistor ("MOSFET") technology. Opined that Plaintiff's lost profits claim was unreliable because Plaintiff's expert: (a) assumed no acceptable alternatives but acknowledged that the trenched MOSFET market was "highly competitive"; (b) did not establish that Plaintiff had the manufacturing capacity and marketing capability to make the claimed lost units; and (c) failed to acknowledge that the Plaintiff had quality issues with its products. Opined that Plaintiff's royalty damages claim was unreliable because Plaintiff's expert: (i) utilized the lost profits claim as the basis for the royalty damages claim; (ii) utilized apportionment percentages that were not supported, (iii) utilized a total apportionment factor that was unreasonably high in light of royalty stacking considerations; and (iv) inappropriately assumed the smallest saleable unit was a MOSFET component rather than a wafer.
- Evaluated a non-practicing entity's royalty damages claim on behalf of a Defendant social technology company in a patent infringement matter relating to haptics and feedback technology as contained in the Defendant's virtual reality systems that integrated multiple game engines and related software. Opined that, at the hypothetical negotiation, the Defendant would assert that it would be required to make significant on-going business and financial contributions to successfully commercialize the accused systems and that its contributions would include (a) valuable brand names, (b) significant investments in R&D efforts, and (c) significant marketing efforts. These contributions would be essential for the accused systems to achieve and maintain commercial success, placing downward pressure on the to-benegotiated royalty payment. Utilized the Plaintiff's and Defendant's comparable license agreements (adjusted to compensate for certain differences between the actual licenses and the to-be-negotiated hypothetical license) to determine the appropriate reasonable royalty payment.

- Evaluated a Plaintiff's royalty damages claim against a major heavy-duty truck manufacturer relating to an asserted patent claiming to prevent corrosion caused by electrolysis in motor vehicle radiators through the use of a sacrificial anode. Opined that deficiencies in Plaintiff's expert's analysis included (a) using an unreliable benchmark to calculate the claimed excess profits of the accused radiators, (b) failing to compare the profitability of the accused radiators to non-accused radiators when evaluating excess profits, and (c) claiming an unreasonable incremental willingness to pay by end users for the claimed benefits of the asserted patent.
- Evaluated damages asserted against a Defendant and its counterclaim damages in patent infringement actions between the Defendant / counterclaim Plaintiff and a competitor in the cybersecurity space. Defendant / counterclaim Plaintiff alleged its competitor instructed and encouraged its customers and end users to use the competing security platform in ways that infringe Defendant's / counterclaim Plaintiff's patents covering certain cybersecurity processes. The technology at issue involves cybersecurity and network access control. Evaluated the parties negotiating positions at the hypothetical negotiation for Defendant / counterclaim Plaintiff's asserted patents such as: the benefits associated with the asserted patents, the Defendant's / counterclaim Plaintiff's success in commercializing and profiting from the sale of products embodying the teachings of the asserted patents, and the direct competitor relationship of the parties in the market for network access control ("NAC") products. Utilized a comparative license approach to evaluating claimed damages supported by a combined technical / analytical approach.
- Evaluated Plaintiff's lost profits and royalty damages in a patent infringement matter brought against a competitor relating to the production of stators used in electric motors for both fully electric and hybrid applications. Used pricing data and associated cost data from purchase orders to estimate Plaintiff's lost revenues and lost profits. Apportioned the revenues associated with motor sales in the evaluation of claimed royalty damages as well as prior license agreements executed by the parties.
- Evaluated the lost profits and reasonable royalty damages claims being made against a Defendant medical device company by another medical device company relating to hardware equipment and implants used in spinal surgery. Opined that Plaintiff's lost profits claim was unreliable given the failure to adequately incorporate into the analysis the combined presence of (a) acceptable non-infringing alternatives, (b) drivers of demand for the accused products unrelated to the claims of the asserted patents, and (c) the availability of competing products that were more comparable (in features and functionality) to the accused products. Used a comparable license approach and anti-royalty stacking concepts to evaluate Plaintiff's royalty damages claim.
- Evaluated Plaintiff's claimed royalty damages in a patent infringement action brought against a major on-line retailer that also manufactures certain electronic devices that display images. The technology at issue related to digital picture frames and, generally, describes (a) a network-connected digital display device, (b) the downloading of image data over a network, (c) authenticated client-server communication, (d) over the network software updates, and (e) user account creation and management. Opined that Plaintiff's expert's royalty opinions were not reliable as they failed to appropriately evaluate the negotiating positions of the parties, extracted value from the accused functionalities unrelated to the asserted patents, and implemented flawed income and market approaches for evaluating claimed royalty damages,
- Using a hypothetical negotiation framework and guidance set forth in *Georgia-Pacific Corp. v. United States Plywood Corp.* and subsequent cases, evaluated a gaming company's royalty damages claim against another gaming company. The asserted patents related to the provision of online social gaming products and wager-based, casino-style gaming products. Royalty analysis incorporated that the value of the technology was increasing over time as the market for mobile and social games was increasing, the asserted patents provided significant improvements to the user experience, the parties were competitors, the patent holder had a strong market presence, and the patent holder made significant investments in its patented technology and would seek to obtain an appropriate return on its investments. In addition, because of the lack of license agreements executed by the parties, the parties would agree that as prudent

- negotiators it would be appropriate to look to licensing transactions between third parties (appropriately adjusted) to obtain guidance as to the licensing value of the Patents-in-Suit.
- Evaluated Plaintiff's claimed royalty damages in a patent infringement action brought against a major on-line retailer that also manufactures smart home devices, Kindle e-readers, tablets, and various other electronic devices. The asserted technology pertained to smartphone and tablet products capable of receiving video signals for a mobile terminal and converting them to another display. Opined that in a hypothetical negotiation framework, the Defendant would emphasize that the accused feature was not a driver of demand for the accused products. At the hypothetical negotiation, the Defendant would emphasize that the claimed benefits of the asserted patents added limited value to the accused products and did not drive the commercial success of the Accused Products relative to the Defendant's brand name, commitment to the development of innovative and superior products, relationships with outside entities such as popular entertainment platforms and smart home device manufacturers, and numerous consumer-demanded features of the accused products unrelated to the asserted patents. In addition, most customers did not use the accused feature. Used comparable licenses as guideposts to the determination of a reasonable royalty payment.
- Analyzed Plaintiff's lost profits and reasonable royalty damages in two separate patent infringement matters relating to scanning, counting, and counterfeit detection technologies in currency discriminators. In both matters, analyzed the *Panduit* and *Georgia-Pacific* factors, constructed a hypothetical negotiation framework, conducted market and industry research, and compiled an accused product sales database. With respect to Plaintiff's lost profits-related damages, performed incremental profit analyses on lost unit sales and ancillary sales. Evaluated Plaintiff's reasonable royalty-related damages taking into account the economics associated with currency discriminator sales. Evaluated damages under a variety of scenarios based upon potential findings of infringement on patents and claims contained in these patents.
- Evaluated Plaintiff's lost profits and price erosion damages in a patent infringement matter relating to a method for delivering internet content from a network of content delivery network ("CDN") servers. The suit was brought by a CDN services provider. Evaluated Plaintiff's lost profits-related damages using market share data, adjusting for customer and market segment differences and the likelihood of supplemental sales. Evaluated Plaintiff's price erosion-related damages for selected customers for whom Plaintiff was required to lower rates and/or renegotiate contracts based upon the alleged unlawful competition of the Defendant.

Intellectual Property: Theft of Trade Secrets Cases

- Evaluated claimed damages being asserted against a hospital and a medical care software company accused of trade secret misappropriation, breach of contract, unjust enrichment, and unfair competition. The action was brought by a prior vendor / mobile health care company offering a virtual care platform for physicians delivering virtual or telehealth patient care. Plaintiff claimed the hospital disclosed trade secrets and confidential information to the new vendor for purposes of developing a competing virtual care software platform. Plaintiff claimed monetary remedies including lost profits damages, unjust enrichment, and royalty damages. Opined that Plaintiff's expert's calculations were deficient in that there was a mismatch between the beginning date of claimed damages and the occurrence of the misappropriation of trade secrets. In addition, claimed lost revenues were overestimated and associated costs were underestimated, claimed avoided costs were not properly identified, and the claimed royalty payment was based upon the Defendants' maximum willingness to pay rather than a negotiated outcome.
- Evaluated claimed damages asserted against a major amusement ride developer / contractor in a theft of trade secrets, breach of contract, and copyright infringement dispute relating to a certain type of rollercoaster that is supported or suspended from a vertical tower instead of moving along a horizontal track. The parties had previously entered into a Confidentiality and Non-Disclosure Agreement and a Master Intellectual Property Agreement. Claimants allege that after signing the aforementioned agreements, respondent misappropriated Claimant's trade secrets and infringed on their copyright by designing and building their own tower-based rollercoaster. Opined that Claimant's expert failed to establish a nexus between his calculations and specific counts being asserted, failed to incorporate into

the analysis prior resolutions executed between the parties, used inappropriate benchmarks for evaluating construction costs, and used inappropriate benchmarks (i.e., other amusement parks) for evaluating claimed lost royalty income based upon attendance figures.

- Evaluated claimed damages being asserted against a Defendant in an alleged misappropriation of trade secrets matter relating to Defendant's hiring of Plaintiff's employees. Trade secrets related to a Stretch Form Process used in manipulating, stretching, and extruding aluminum used in the creation of aircraft/airplane wings. Plaintiff alleged Defendant used the misappropriated information to enter into a service agreement to manufacture and provide stretched and extruded aluminum to an aircraft manufacturer. Evaluated Plaintiff's monetary remedy claim for lost profits and unjust enrichment. Demonstrated Plaintiff's expert utilized inappropriate assumptions in the monetary remedy calculations including using unreasonable high prices, a failure to incorporate Plaintiff's lower quality products, the aircraft manufacturer's prior experience with the Defendant, the aircraft manufacturer's desire to find a second supplier, improper treatment of capital expenditures, and too long of a claimed impact period.
- Evaluated claimed damages in a theft of trade secrets matter filed by a competitor relating to subsea tree technology used in underwater oil wells to monitor and control production of a subsea well. Plaintiff alleged the trade secrets were misappropriated by a former employee so that the Defendant could develop competing subsea tree products. Opined that Plaintiff's expert's analysis did not demonstrate the alleged misappropriation of trade secrets resulted in economic gains to the Defendant, whether in the form of avoided costs, profits from sales of accused units, or other claimed value associated with the asserted trade secrets. Also demonstrated, from an economic perspective, that end-user demand for the accused products was due to other features and attributes and not the alleged trade secrets.
- Evaluated on behalf of a Defendant automotive parts manufacturer and seller asserted claims of damages by a direct competitor alleging trade secret theft relating to employment movement. Both the Plaintiff and Defendant sell new and remanufactured aftermarket brake calipers, power steering products, gears, and rack-and-pinion products. Plaintiff claims a former employee had access to confidential and proprietary information relating to sales and marketing strategies, pricing information, and customer preferences and the information was used to divert customers from the Plaintiff to the Defendant. Evaluated claims of "head start" unjust enrichment damages, incremental price increase unjust enrichment damages, and lost profits from diverted customers.
- Evaluated claimed damages on behalf of a light sensor manufacturer in a trade secret misappropriation
 and breach of contract lawsuit against a competitor. Plaintiff alleged that, subsequent to failed merger
 talks between the companies, Defendant misappropriated Plaintiff's trade secret information obtained
 through the due diligence process and started a competing optoelectronics business in breach of a
 confidentiality agreement. Evaluated Plaintiff's disgorgement of Defendant's profits claim and
 reasonable royalty damages.

Intellectual Property: Copyright/Trademark/Trade Dress Infringement/False Advertising Cases

• Evaluated Plaintiff's claim of economic harm in a competitor-to-competitor alleged false advertising matter relating to software associated with do-it-yourself tax preparation services. Plaintiff alleged deceptive marketing by the Defendant indicated an "expert final review" and a "thorough review of a consumer's return before it is filed" would take place. Plaintiff was making a claim for lost profits from an alleged reduced demand for its tax preparation products and a claim for the disgorgement of any profits unfairly realized as a result of the misleading advertising. Analyses demonstrated that (a) customer experiences with the Defendant's products were consistent with their expectations (as indicated by product recommendation scores, customer reviews, and high customer satisfaction ratings) and (b) customers would not have made different purchase decisions in the absence of the alleged misleading advertising (i.e., a high degree of repeat customers existed).

- Evaluated Plaintiff's claim of economic harm in a competitor-to-competitor alleged false advertising matter relating to retail furniture sales. Plaintiff alleged that Defendant inflated the "regular prices" of its advertised goods in order to falsely represent savings and used the word "PLUS" in its advertising to deceive customers into believing that they were able to receive discounts off of regular prices and long-term interest-free financing with no down-payment and no minimum purchase. Plaintiff claimed lost sales and lost profits from diverted customers, increased advertising and financing expenditures, and a disgorgement of benefits received by the Defendant. Analyses demonstrated that Plaintiff's expert used a damaged benchmark to evaluate claimed lost foot traffic and conversion rates, assumed a two-player market when the retail furniture industry is very competitive with many competing retail providers, failed to evaluate the opening of new competitive retail stores, failed to properly evaluate the impact of the cannibalization of its own existing store sales by the opening of its own new stores, and failed to account for the growth of on-line sales.
- Evaluated Plaintiff's claim of economic harm in a competitor-to-competitor alleged false advertising matter relating to prescription lidocaine pain relief patches and over-the-counter (OTC) lidocaine patches. The at-issue claims included claims of "maximum strength" and instructions to apply the accused products for up to 8 or 12 hours. Plaintiff alleged the false and misleading advertising implied that the OTC lidocaine patches were superior, or at least equivalent, in efficacy and results to prescription lidocaine patches. Evaluated from an economic and damages quantification perspective whether a permanent injunction was warranted should Defendants be found to have engaged in false and misleading marketing. Evaluated Plaintiff's past lost profits, the amount of profits earned by Defendants attributable to the at-issue claims, and the costs associated with corrective advertising.
- Evaluated claimed damages in a false advertising matter involving tooth-whitening products between two large consumer product companies. At issue were allegedly false, misleading, and disparaging statements about Plaintiff's tooth-whitening products in comparative advertisements shown on television. Plaintiff sought to recover lost profits damages associated with reduced sales resulting from the alleged false advertising. Analyses included an evaluation and critique of Plaintiff's expert's claimed damages model including analysis of A.C. Nielsen scanner data and CMR media data. Analysis demonstrated that Plaintiff's expert did not measure properly the impact of the alleged misleading content, failed to account for alternative reasons for Plaintiff's sales declines, and implemented an incorrectly specified econometric model.
- Provided economic analysis relating to claims of unfair competition and misleading advertising in the
 pizza industry. Using economic indicia such as dollar sales revenue, trends in market share, growth in
 number of stores opened, same-store sales data, and store closure rates, evaluated whether the
 commercial success of a particular pizza company was due to customer acceptance of its pizza product or
 allegedly deceptive advertising. Also investigated the buying patterns of pizza consumers with respect to
 cross-chain patronage.
- Evaluated Plaintiff's unjust enrichment damages claims in a copyright infringement matter brought against a hospital and a construction company relating to a medical building design. Compared budgeted construction costs to actual construction costs and analyzed the revenues received by the construction company associated with the copyrighted attributes of the building design as opposed to unrelated construction costs. Also analyzed the likely demand-related reasons for revenues that would accrue to the hospital unrelated to the design of the hospital.
- <u>General Overview (Trademark/Trade Dress)</u>. Performed economic and damages-related analyses in trademark / trade dress disputes between companies in the following industries: food, home construction, medical (hospitals), hotel chains, insurance, investment banking, real estate, etc.

Intellectual Property: Commercial Success Cases

Using Federal Circuit guidance, evaluated a biotechnology company's claim that a COVID-19 vaccine
accused of infringing the company's patents achieved commercial success, supporting a finding of nonobviousness for the asserted patents. Evaluated whether the commercial success of the vaccine had a

discernible nexus to the asserted patents. Opined that multiple factors contributed to the commercial success of the vaccine, including actions undertaken by governmental entities and the incorporation of many components, technologies, and intangibles not associated with the asserted patents (including the direct contributions of the biotechnology / biopharmaceutical Defendants, the Defendant companies' own intellectual property, manufacturing capabilities, innovative distribution approaches, and other licensed technologies).

• Evaluated indicators of commercial success relating to a surgical hernia mesh fixation device employing a patented helical tacker design. Demonstrated that the patented device had achieved significant and sustained sales and sales growth. Also demonstrated that the sales of the patented device had grown faster than the sales of other hernia mesh fixation devices and achieved a majority share of sales when compared to staplers and other hernia mesh fixation products.

Loss of Earnings Cases: Personal Injury / Wrongful Death/ Wrongful Termination

- General Overview (Personal Injury). Assessed damages and lost earnings in various personal injury cases involving movie production workers, management consultants, financial consultants, nurses, medical doctors, chiropractors, secretaries, truck drivers, airline stewardesses, mechanics, engineers, maintenance personnel, carpenters, masonry workers, crane operators, machine operators, actresses, military aircraft production workers, tankermen, teachers, film editors, portfolio managers, hair stylists, automobile assemblers, landscape architects, sole proprietors, and real estate agents (among others). In each case, issues investigated included an assessment of the projected undamaged income, damaged income, expected work life of the individual, and appropriate discount rate to use. Assistance to the attorney included the preparation of deposition questions, economic analyses, and a critique of the opposing economist's damage model.
- General Overview (Wrongful Death). Developed numerous damage models in wrongful death cases. Issues investigated included the projection of lost earnings, the projected personal consumption expenditures of the decedent, and projected lost pension benefits. Professions of the decedents included various types of entrepreneurs (e.g., boat store owners, etc.), white-collar workers (e.g. attorneys, architects, etc.), and blue-collar workers (e.g., demolition contractors, grocery store clerks, etc.). Ages of the decedents ranged from adults to teenagers to children.
- General Overview (Wrongful Termination Matters). Assessed damages and lost earnings in wrongful termination cases involving internal medicine specialists, neurosurgeons, anesthesiologists, entertainment company executives, brokers/traders, secretaries, accountants, attorneys, quality assurance managers, company presidents, real estate brokers, over-the-counter traders, property managers, insurance brokers/managers, multilevel marketing sales representatives, and military aircraft production workers. Areas investigated include many of the same items as described in personal injury cases.

Securities: 10b-5 / Section 11 Cases

- Evaluated the economic damages being asserted by shareholders and debt holders of a bankrupt energy trading company against a brokerage firm. Plaintiffs alleged the brokerage firm recommended the stock and debt securities associated with the company even though it knew or should have known the deteriorating pre-bankruptcy financial condition of the company. Analyzed the trading patterns of the brokerage account customers and the stock price movements of the company upon issuance of analyst reports, and researched confounding events contributing to investors' trading of the securities-in-question. Demonstrated an economic causal link did not exist between the alleged wrongful conduct and the claimed trading patterns. Also evaluated the event study conducted by Plaintiffs' damages expert and the claimed inflation component embedded in the company's stock price. Demonstrated Plaintiffs' damages expert failed to remove the economic impact of confounding events. Performed an alternative damages evaluation.
- Evaluated shareholder and debt holder claimed damages against a major accounting firm relating to the issuance of allegedly false and misleading financial statements that did not identify certain assets of a communications company as impaired. Researched industry reports and analyst reports regarding the

company's common stock and debt securities, evaluated an event study conducted by Plaintiffs' damages expert, analyzed loss causation in accordance with *Dura*, studied the company's stock price movements before and during the claimed class period, and analyzed the company's stock price movement on the day of the alleged corrective disclosure. Demonstrated Plaintiffs' event study did not appropriately isolate the stock price movement associated solely with the alleged corrective disclosure as confounding events were not removed from the analysis. Performed an alternative damages calculation.

- Evaluated Plaintiffs' damages claim in a shareholder suit involving an international airline carrier. At issue were alleged misrepresentations concerning the airline's ability to reduce its maintenance costs. Demonstrated that the fifty percent decline in the company's stock price over a one-month period was for reasons unrelated to corrective disclosures concerning maintenance costs. Also reconstructed Plaintiffs' trading history, comparing the trading pattern to public announcements concerning the airline, and demonstrating a trading pattern inconsistent with Plaintiffs' theory of reliance on the alleged misrepresentations.
- General Overview. Performed an "event study" and/or evaluated claimed damages in various securities litigation cases involving firms in industries such as: airlines, biotechnology, computer software, commodities, banking, real estate development, life insurance, entertainment, communications, energy trading, investment banking, computer printers, health care, medical equipment, hotels, non-traditional automotive insurance, information technology services, workmen's compensation insurance, computer hardware, camera and photo finishing, intelligent disk drives, market research, trucking, temporary staffing, real estate investment trusts, computer networking, specialty stores, skilled nursing facilities, wireless cable encoding devices, the provision of software computer services to insurance companies, and the provision of professional services to power plants and large scale industrial facilities. Analyses included development of an appropriate peer group and isolation of economy-wide, industry-specific, and company-specific factors impacting the particular firm's stock price. Company-specific events often included unfavorable news announcements unrelated to the alleged misrepresentations and the ending of potential takeover bids. Also involved was a comparison of the firm's actual stock price to its "true value" line, the construction of a matrix to track ins-and-outs traders and retention shareholders, and an evaluation of damages under Section 10b-5 and Section 11 claims.

Securities: Merger/Takeover Related Cases

• Analyzed a major entertainment company's stock price movement to determine the takeover premium paid by an acquiring company. Involved was quantifying the impact of takeover rumors prior to the takeover announcement to isolate that portion of the company's pre-acquisition increase in stock price due to takeover speculation as opposed to general industry trends.

Securities/Commodities: Other Cases

- Evaluated the spot price of a base metal in a major commodities-related market manipulation matter. Developed an econometric model to explain the spot price movements of the base metal in an unimpacted period. Used the econometric model to evaluate what the spot price of the base metal would have been in the absence of the alleged manipulation.
- Calculated short-swing trading profits under Section 16(b) of the Securities Exchange Act of 1934 relating to the stock trading activities of an officer of a long distance telecommunications company. Issues analyzed included allocating stock purchases to stock sales of differing numbers of shares and accounting for a 3-for-1 reverse stock split during the period under consideration.
- Evaluated the stock price performance of a major distiller over a forty-year period. At issue was whether a portion of the increase in the stock price could be attributed to the efforts of one senior official in the corporation. Company-specific, industry-specific, and economy-wide factors were investigated to determine the reasons for the stock price performance of the distilling company.

Sports/Entertainment-Related Engagements

• Analyzed Plaintiff's lost profits and reasonable royalty damages in a patent infringement matter relating

to offset head lacrosse sticks. Analysis included an assessment of Plaintiff's sales in the absence of the infringement, the distribution of the lost sales to the models that would have been sold in the absence of the infringement, and an incremental revenue and cost analysis. Also analyzed Plaintiff's competitors, pricing patterns, productive capacity, and geographic coverage in support of the lost profits claim. Reasonable royalty damages were assessed using the *Georgia-Pacific* factors and a determination of important negotiating points in a hypothetical licensor / licensee negotiation.

- Conducted an economic analysis in a vertical non-price (advertising) restraint antitrust case dealing with tennis ball throwing machines. Analysis demonstrated the pro-competitive nature of the advertising restraint and that the termination of a non-complying dealer did not substantially reduce competition in the relevant market.
- Evaluated Plaintiff's claimed damages in a trade secret theft case in the golf equipment industry.
 Plaintiff claimed disgorgement of global profits and other unjust enrichment due to the alleged misappropriation of certain golf club design trade secrets through the Defendant's sale of the company and assets to a large sporting goods company. Analysis included calculating net profits from the sale of the accused golf clubs and evaluating claimed reasonable royalty damages.
- Evaluated Plaintiff's claimed damages in a breach of contract matter involving the sale of certain minority interests in a National Basketball Association team. At issue was Plaintiff's tag-along rights whereby limited partnership interests could be included in any sale by the general partner on the same terms and conditions. Damages were calculated as the difference between the formulaic value of the minority interests versus the market value of the minority interests when sold separately. Discounts for lack of control and reduced marketability were analyzed.
- Evaluated Plaintiff's damages claim relating to a NASCAR racing team sponsorship agreement. Plaintiff contended the Internet service provider sponsor interfered with the racing team's ability to sell advertising banners that were part of the sponsorship agreement. Analyses included assessing the appropriate methodology for valuing a NASCAR race team and assessing comparable transactions. Also analyzed the financial performance of the race team, the economic terms of the sponsorship agreement, and the risks associated with a barter arrangement.
- Estimated the diminished box office revenues suffered by a theatrical release due to the breach of a quick service restaurant promotional tie-in arrangement with a major pizza chain. Developed a database of recently released films and related film characteristics such as genre, rating, critics review, box office revenues, media spending, production budget, season of release, and talent. A regression model was then developed to quantify the relationship between media spending and box office revenue. An industry review of quick service restaurant promotional tie-in arrangements was also conducted.
- Evaluated Plaintiff's claimed royalty damages in two separate patent infringement matters relating to video game controllers. The first matter related to six degrees of freedom video controller technology; the second matter related to controller-to-processor voltage technology. In both matters, conducted market and industry research, performed a *Georgia-Pacific* analysis, and evaluated company-specific and controller-related licenses. Also evaluated the key drivers of Defendant's sales including its brand name, innovative products and games, and installed base of gaming console owners. Provided an alternative royalty damages figure.
- Analyzed the market and evaluated damages on behalf of a television station denied access to a cable system. At issue was whether the cable operator was attempting to monopolize the market for local television advertising. Analysis included an estimation of the advertising revenues that would have been received by the local television station had it been allocated a channel on the cable system.
- Estimated damages arising from a breach of contract claim between a video-cassette manufacture/distributor and a theatrical motion picture producer/distributor. At issue was whether the motion picture distributor manipulated the theatrical release of certain titles distorting the films the video-cassette producer could distribute under the terms of the agreement.

Evaluated the claimed damages of a movie production company against a major home video rental
company. At issue was the claim that the refusal of the home video rental company to commit to carry a
particular movie in its stores caused the movie production company to suffer lost profits when its
distributor then refused to release the movie theatrically. Demonstrated that Plaintiff's methodology for
estimating lost box office revenues was inappropriate and failed to account for important determinants of
movie attendance.

Other: Economic Engagements

- Conducted an economic cost/benefit analysis of the SEC's proposed rule changes relating to non-audit services performed by auditing firms for audit clients. Analyses demonstrated that public accounting firms have an incentive to protect their brand name capital and that purchasers of non-audit services have an incentive to maintain investor confidence in the reliability of the audited financial statements.
- Performed an economic impact analysis on behalf of a major pipeline corporation seeking to gain regulatory approval for the construction of an oil pipeline in the Pacific Northwest. Evaluated the net economic impact of the project on employment, income, and consumer expenditures in the region. New employment opportunities resulting from construction and maintenance of the pipeline were compared to the potential lost jobs associated with the alternative means of transporting the petroleum.
- Evaluated revenue projections relating to an electronic toll collection system. The system was designed to recover lost toll revenue and other administrative fees from toll violators traveling along a consortium of tollways in New York, New Jersey, and Delaware. Analyzed four critical revenue drivers in the projections (number of transactions, violation rates, citation rates, and collections rates) and the potential variability of certain components of the projections by compiling comparative data through interviews with industry participants. Analysis was used in assisting lenders evaluating the economic viability of the project.
- Conducted an analysis of low-cost housing in Los Angeles County (CA) to determine whether sufficient housing was available to house the County's general relief recipient population. In separate engagements, conducted similar studies for San Bernardino County (CA) and Alameda County (CA). The Alameda County study also analyzed earned income incentives and food stamp allotments as a source of income in addition to the County's monthly general relief assistance. An affordable housing analysis was also conducted for the State of New Jersey's Department of Health relating to the state's child exclusion policy and AFDC recipients.
- Conducted an economic analysis on behalf of the California Public Utilities Commission. Tasks included incorporating elasticities into alternative rate design and pricing models, analyzing subsidies accruing to various residential consumer groups under alternative rate designs, and estimating the relative welfare loss associated with each alternative rate design.

TEACHING EXPERIENCE

Macroeconomic Principles and Intermediate Macroeconomics

Topics covered included unemployment/full employment, inflation/price stability, economic growth/gross domestic product, determination of national income, and monetary and fiscal policies.

Microeconomic Principles and Intermediate Price Theory

Topics covered included functioning of markets (demand and supply analysis), elasticities, theory of the firm (profit maximization), industry performance, allocation of resources, and government regulation.

Companies In Crisis

Topics covered included companies, markets, and industries in contemporary crisis situations from external or internal changes in the operating environment or significant conflict. Topics included case studies focusing on solutions for companies facing competitive issues, management issues, or litigation-related issues.

PUBLICATIONS

"An Economic Framework for Analyzing Covenants Not to Compete" (with Elaine Fleming and Steven Herscovici), Expert Witnesses, ABA Section of Litigation, Spring/Summer 2011, Vol. 7 No. 1.

"Financial Expert Witness Challenges and Exclusions: Results and Trends in Federal and State Cases Since Kumho Tire" (with Lawrence F. Ranallo), <u>Accountants' Handbook</u>, Tenth Edition 2004 Supplement, edited by D.R. Carmichael, New York: John Wiley & Jones, Inc., 2004.

"Accounting for Damages in Intellectual Property Litigation" (with Tony Samuel and John Davis), Building and Enforcing Intellectual Property Value – an International Guide for the Boardroom 2003.

"Challenges to the Admissibility of Financial Expert Witness Testimony" (with Lawrence F. Ranallo), <u>Litigation Services Handbook</u>, 2002 Supplement, edited by Roman L. Weil, Michael J. Wagner, and Peter B. Frank, 2A.1 – 2A.17, New York: John Wiley & Sons, Inc., 2001.

"Calculation of Lost Earnings" (with Carlyn R. Taylor and Randi L. Firus), <u>Litigation Services Handbook</u>, edited by Roman L. Weil, Michael J. Wagner, and Peter B. Frank, 11.1 – 11.16, New York: John Wiley & Sons, Inc., 2001.

"Preparing the Financial Expert or Economist" (with George G. Strong, Jr.), Witness Preparation, V. Hale Starr, 13.4 – 13.4.1, New York: Aspen Law & Business, A Division of Aspen Publishers, Inc., 1998.

"The Effect of Institutional Setting on Behavior in Public Enterprises: Irrigation Districts in the Western States" (with John M. McDowell), Arizona State Law Journal, Vol. 1982, No. 2, 453 – 496.

SELECTED RECENT CLIENTS (Past Six Years: 2019 – 2024)

Acer Inc.; Admiral Beverage; Alphatec Holdings, Inc. and Alphatec Spine, Inc.; Amazon.com, Inc. and Amazon Web Services, Inc.; AMS Sensors USA Inc. f/k/a Texas Advanced Optoelectronic Solutions, Inc.; Ashley Furniture Industries, Inc.; ASUSTEK Computer, Inc.; BBB Industries, LLC; B/E Aerospace, Inc.; Best Buy Co., Inc.; BioNTech SE; Bloom Energy Corporation; Bombardier Recreational Products Inc.; Brown Bottling Group, Inc.; Buffalo Rock Company; CDW Corporation; Celsius Holdings, Inc.; Cisco Systems, Inc.; Clear Channel Outdoor Holdings, Inc.; CommScope Technologies, LLC; ConAgra Foods, Inc.; Costco Wholesale Corporation; Covidien LP; Daimler Truck North America LLC; Dentsply Sirona Inc.; Diageo Beer; Dril-Quip, Inc.; Dropbox, Inc.; FCA US LLC (Chrysler); Fieldturf; Fitness Equipment Services, LLC (Sole Fitness); Fortinet, Inc.; The Gap, Inc.; The Gillette Company LLC; Glaukos Corporation; Goli Nutrition, Inc.; Google LLC; Harbor Freight Tools USA, Inc.; Hewlett Packard Enterprise Company (HPE); Hill's Pet Nutrition, Inc.; Hunting Titan, Inc.; IGT and IGT Canada Solutions ULC; Intamin Amusement Rides Int. Corp. Est.; iRobot Corporation; John Paul Mitchell Systems (JPMS); J.R. Simplot Company; Keurig Green Mountain; Kia Motors America, Inc.; Kimberly-Clark Corporation; L'Oreal USA, Inc. and Matrix Essentials, LLC; LensCrafters; LG Electronics, USA, Inc.; LiquidPower Specialty Products, Inc.; Marriott International, Inc.; Mars Wrigley Confectionery, US LLC; Medtronic, Inc.; Mercedes-Benz USA, LLC; Mercy Health, Mercy ACO Clinical Services, Inc. d/b/a Mercy Virtual, LLC; Meta Platforms, Inc. F/K/A Facebook, Inc.; Micron Technology, Inc.; Microsoft Corporation; Music Choice; Nestlé Purina PetCare Company; Nestle Waters North America, Inc.; PayNerd LLC; Pfizer Inc.; PharmaCare U.S., Inc.; Radio Systems Corporation (PetSafe); Red Bull Racing, Ltd.; Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.; Siemens Industry, Inc.; Spirit AeroSystems, Inc.; Sprint Communications Company, LP; Stoneledge Furniture, LLC; Sub-Zero Group Inc. (Wolf Appliance, Inc.); Sunoco Partners Marketing & Terminal L.P.; Toyota Motor Corporation; Universal Alloy Corporation; USAA; Verizon Wireless; Vital Farms, Inc.; Walmart Inc.; Zebra Technologies Corporation.

HONORS

IAM Patent 1000 2014 – The World's Leading Patent Practitioners. (Pages 648 and 666.) IAM Patent 1000 2015 – The World's Leading Patent Practitioners. (Pages 727 and 759.) IAM Patent 1000 2016 – The World's Leading Patent Practitioners. (Pages 740 and 762.)

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IAM Patent 1000 2017 - The World's Leading Patent Practitioners. (Pages 791, 795, and 822.)
IAM Patent 1000 2018 – The World's Leading Patent Practitioners. (Pages 832 and 862.)
IAM Patent 1000 2019 – The World's Leading Patent Practitioners. (Pages 892 and 941.)
IAM Patent 1000 2020 – The World's Leading Patent Practitioners. (Pages 1059, 1061, and 1114.)
IAM Patent 1000 2021 – The World's Leading Patent Practitioners. (Pages 1248, 1251, and 1302.)
IAM Patent 1000 2022 – The World's Leading Patent Practitioners. (Digital edition.)
IAM Patent 1000 2023 – The World's Leading Patent Practitioners. (Digital edition.)
IAM Patent 1000 2024 – The World's Leading Patent Practitioners. (Digital edition.)
GCR Global Competition Review Who's Who Legal: Competition 2014 (Economists).
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D CEO: The Most Powerful 500 Business Leaders In Dallas – Fort Worth, 2017 Edition. (Page 152.)
D CEO: The Most Powerful 500 Business Leaders In Dallas - Fort Worth, 2018 Edition. (Page 160.)
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