

FIELDS OF SPECIALIZATION

Theoretical and Applied Microeconomics

Industrial Organization

ACADEMIC HONORS AND FELLOWSHIPS

M.I.T., National Scholar Award, 1968
Edwards Whitacker Award, 1969
Detur Book Prize, 1969
John Harvard Award, 1970
Phi Beta Kappa, 1971
National Science Foundation Fellowship, 1972 - 1975
Recipient of Post-doctoral Grant from the Lincoln Foundation, 1975
National Science Foundation Grant, 1977 - 1985
Recipient of the 1977 P.W.S. Andrews Memorial Prize Essay, best essay in the field of Industrial Organization by a scholar under the age of thirty
Ph.D. Thesis chosen to appear in the Garland Series of Outstanding Dissertations in Economics
Alexander Brody Distinguished Lecture, Yeshiva University, 2000
Keynote Address to the International Competition Network, Mexico, 2004
Milton Handler Lecture, New York, 2004
Distinguished Visitor, University of Melbourne, April 2005

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Co-editor, Journal of Law and Economics, 1980 - present
Associate Editor, Regional Science and Urban Economics, 1987 - 1997
Associate Editor, The International Journal of Industrial Organization, 1991 - 1995
Member, American Economics Association, Econometrics Society
National Bureau of Economic Research, Research Associate
Member, Advisory Committee to the Bureau of the Census, 1987 - 1990
Editorial Board, Intellectual Property Fraud Reporter, 1990 - 1995
Consultant on Merger Guidelines to the U.S. Department of Justice, 1991 - 1992
Accreditation Committee, Graduate School of Business, Stanford University, 1995
Visiting Committee, MIT, Department of Economics, 1995 - present
Resident Scholar, Board of Governors of the Federal Reserve System, Summer, 1995
Member, Advisory Board, Economics Research Network, 1996 - present
Member, Steering Committee, Social Science Research Council, Program in Applied Economics, 1997 - 1999
Participant in meetings with Committee of the Federal Reserve on Payment Systems, June 5, 1997
Participant in roundtable discussions on "The Role of Classical Market Power in Joint Venture Analysis," before the Federal Trade Commission, November 19, 1997 and March 17, 1998.
Member, Advisory Board of Antitrust and Regulation Abstracts, Social Science Research Network, 1998 - present
Participant in the Round Table on the Economics of Mergers Between Large ILECS before the Federal Communications Commission, February 5, 1999
Advisory Board, Massachusetts Institute of Technology, Department of Economics, 1999 - present
Chairman, FTC Round Table on Empirical Industrial Organization (September 11, 2001)
Professor, George Mason Institute for Judges, October 2001
Consultant on Merger Guidelines to the FTC, 2003
Presidential Appointment to the Antitrust Modernization Commission, March 17, 2004 - present
Editorial Board, Competition Policy International (CPI), 2004 - present
Advisory Board, Journal of Competition Law and Economics 2005- present

BOOKS

"Market Behavior Under Uncertainty," Ph.D. Thesis, Massachusetts Institute of Technology (September 1975); Garland Publishing (1984).

Modern Industrial Organization, Scott, Foresman & Co., co-authored with Jeffrey Perloff, first edition (1990), second edition (1994), translated into Chinese, French, Hungarian and Italian; Addison Wesley Longman, third edition (2000), fourth edition (2005).

RESEARCH PAPERS

"The Equilibrium Analysis of Alternative Housing Allowance Payments," (with Joseph Ferreira) Chapter 6 of Analysis of a Direct Housing Allowance Program, The Joint Center for Urban Studies of M.I.T. and Harvard University, (July 1975).

"Theories of Vertical Integration," presented at Fourth Annual Telecommunications Conference. Appears in a volume of Proceedings of the Fourth Annual Telecommunications Conference, Office of Telecommunications Policy, (April 1976).

"Uncertainty, Production Lags, and Pricing," American Economic Review, (February 1977).

"Selecting Subsidy Strategies for Housing Allowance Programs," (with Joseph Ferreira) Journal of Urban Economics, (July 1977).

"Peak Load Pricing With Stochastic Demand," American Economic Review, (December 1977). (Reprinted in Economic Regulation edited by P.L. Joskow, Edward Elgar Publishing Limited, 1998.)

"The Distribution of Permanent Income," Income Distribution and Economic Inequality, edited by Zvi Griliches, et al. (Halsted Press, 1978).

"Market Behavior with Demand Uncertainty and Price Inflexibility," American Economic Review, (September 1978).

"Why New Firms Locate Where They Do: An Econometric Model," in Studies in Regional Economics, edited by W. Wheaton, (Urban Institute, 1980).

"Vertical Integration--An Overview," in Congressional Record Hearings on the Communications Act of 1978. Bill H.R. 13105, (August 3, 1978).

"Vertical Integration in Competitive Markets Under Uncertainty," Journal of Industrial Economics, (March 1979). Awarded the P.W.S. Memorial Prize for the best essay in the field of Industrial Organization by a scholar under the age of thirty.

"Valuing Market Benefits and Costs in Related Output and Input Markets," American Economic Review, (September 1979).

"Contracts, Price Rigidity and Market Equilibrium," Journal of Political Economy, (October 1979).

- "Benefits and Costs of Airline Mergers: A Case Study," (with W. Landes and R. Posner) Bell Journal of Economics, (Spring 1980). (Reprinted in "Air Transport" in Classics In Transport Analysis series, edited by Kenneth Button and Peter Nijkamp, 2001.)
- "The Limitations of Pigouvian Taxes as a Long Run Remedy for Externalities," (with G. Loury) Quarterly Journal of Economics, (November 1980).
- "The Law and Economics of Rights in Valuable Information: A Comment," Journal of Legal Studies, (December 1980).
- "Price Discrimination: Vertical Integration and Divestiture in Natural Resources Markets," (with J. Perloff) Resources and Energy, (March 1981).
- "The Spatial Effects of a Tax on Housing and Land," Regional Science and Urban Economics, (November 1981).
- "Comments on Weicher," Journal of Law and Economics, (December 1981).
- Comment, in Sherwin Rosen ed. Studies in Labor Markets, University of Chicago Press, (1981).
- "Planning and Market Structure," in The Economics of Information and Uncertainty, edited by J.J. McCall, University of Chicago Press, (1982).
- "The Disruptive Effect of Inflation on the Organization of Markets," in Robert Hall, ed. The Economics of Inflation, University of Chicago Press, (1982).
- "A Reexamination of Delivered Pricing," Journal of Law and Economics, (April 1983).
- "Futures Trading, Market Interrelationships, and Industry Structure," American Journal of Agricultural Economics, (May 1983).
- "The Location and Employment Choices of New Firms: An Econometric Model with Discrete and Continuous Endogenous Variables," The Review of Economics and Statistics, (August 1983).
- "The Need for Coordination Among Firms With Special Reference to Network Industries," (with J. M. Klammer) University of Chicago Law Review, (Spring 1983).
- "The Regulation of Insider Trading" (with D. Fischel), Stanford Law Review, (May 1983).
- "Economic Goals and Remedies of the AT&T Modified Final Judgment" (with W. Lavey), Georgetown Law Review, (August 1983).
- "Equilibrium Fluctuations When Price and Delivery Lags Clear the Market," Bell Journal of Economics, (Autumn 1983).
- "Futures Markets: Their Purpose, Their History, Their Growth, Their Successes and Failures," Journal of Futures Markets, (September 1984). (Reprinted in Futures Markets edited by A.G. Malliaris and W.F. Mullady, Edward Elgar Publishing Limited, 1995; and in Classic Futures: Lessons from the Past for the Electronics Age, edited by Lester Telser, Risk Books, 2000.)
- "Energy and Location," Energy Costs, Urban Development, and Housing, Brookings Institution, (1984).

- "The Economics of Gray-Market Imports," (May 1985).
- "The Limitation of Pigouvian Taxes As A Long Run Remedy for Externalities: Extension of Results," (with G. Loury) Quarterly Journal of Economics, (August 1986).
- "The Rigidity of Prices," American Economic Review, (September 1986).
- "The Theory and The Facts of How Markets Clear: Is Industrial Organization Valuable for Understanding Macroeconomics?" in Handbook of Industrial Organization, eds. Schmalensee and Willig, (1989).
- "Market Power and Mergers in Durable Good Industries," (with R. Gertner), Journal of Law and Economics, (October 1989).
- Comments on Vertical Integration and Market Foreclosure, Brookings Papers on Economic Activity, (December 19, 1990).
- Book Review of Tirole's The Theory of Industrial Organization, Journal of Political Economy, (June 1990).
- "The Genesis of Inflation and the Costs of Disinflation: Comment," Journal of Money, Credit & Banking, (August 1991, Part 2).
- "The Theory of Allocation and its Implications for Marketing and Industrial Structure: Why Rationing is Efficient," Journal of Law and Economics, (October 1991).
- "The Economics of Cooperation and Competition in Electronic Services Network Industries," in Economics of Electronic Service Networks, Wildman Steven ed., Praeger Press, (1992).
- "Merger Policy and Market Definition Under the EC Merger Regulation," (with W. D. Bishop). Conference on Antitrust in a Global Economy, Fordham Corporate Law Institute, (1994).
- "The Antitrust Economics of Credit Card Networks," (with A. Frankel) Antitrust Law Journal, (Winter 1995).
- "Economic Organization and Conflict," Journal of Institutional and Theoretical Economics, (March 1995).
- "Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?" (with G. Bamberger and R. Epstein) The Rand Journal of Economics, (Vol. 26, No. 1, Spring 1995, pp. 131-147).
- "The Competitive Effects of Line-of-business Restrictions in Telecommunications," (with K. Arrow and H. Sider), Managerial and Decision Economics, (Vol. 16, pp. 301-321, 1995). (Reprinted in Deregulating Telecommunications - The Baby Bells Case for Competition, edited by Richard S. Higgins and Paul H. Rubin, John Wiley & Sons Ltd., 1995.)
- "The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee," (with A. Frankel), Antitrust Law Journal, (Spring 1995).

- "Antitrust and Payment Technologies," (with A. Frankel), Review, Federal Reserve Bank of St. Louis (November/December 1995).
- "Antitrust Policy Toward Mergers When Firms Innovate: Should Antitrust Recognize the Doctrine of Innovation Markets?" Testimony before the Federal Trade Commission Hearings on Global and Innovation-based Competition (October, 1995).
- "You Keep on Knocking But You Can't Come In: Evaluating Restrictions on Access to Input Joint Ventures," (with S. Salop), Harvard Journal of Law & Technology, (Volume 9, Summer, 1996). (Reprinted in e-Commerce Antitrust & Trade Practices, Practising Law Institute, 2001.)
- "Comments on Causes and Consequences of Airline Fare Wars," Micro Brookings Papers on Economic Activity, (1996).
- "A Critical Assessment of the Role of Imperfect Competition in Macroeconomics," in Market Behavior and Macro Economic Modeling, Brakman, Van Ees, & Kuipers (eds.), MacMillan Press (1997).
- "Price Rigidity," Business Cycles and Depressions, David Glasner ed., Garland Publishing, Inc., (1997).
- "Communication Among Competitors: Game Theory and Antitrust," (with R. Gertner and A. Rosenfield), George Mason Law Review, (1997). (Reprinted in e-Commerce Antitrust & Trade Practices, Practising Law Institute, 2001.)
- "Comments on Born and Viscusi," Brookings Papers on Economic Activity: Microeconomics, (1998).
- "Antitrust and Higher Education: MIT Financial Aid (1993)" (September 1997) (with G. Bamberger), The Antitrust Revolution, (Oxford University Press, 3rd edition 1999).
- "Market Power and Vertical Restraints in Retailing: An Analysis of FTC v. Toys 'R' Us," (with H. Sider), The Role of the Academic Economist in Litigation Support, edited by Daniel Slottje, North Holland, (1999).
- "The Economics of Religion, Jewish Survival and Jewish Attitudes Toward Competition on Torah Education," (with A. Weiss), Journal of Legal Studies, (2001). (Reprinted in Essential Readings on Jewish Identities, Lifestyles and Beliefs, edited by Stanford M. Lyman, Gordian Knot Books, 2003).
- "A General Analysis of Exclusionary Conduct and Refusal to Deal -- Why Aspen and Kodak are Misguided," Antitrust Law Journal, (2001). (Reprinted in e-Commerce Antitrust & Trade Practices, Practising Law Institute, 2001.)
- "The Lessons from Microsoft," Business Economics, (January 2001).
- "Lessons from Halacha About Competition and Teaching" (with A. Weiss), Center for Business Ethics Social Responsibility, <http://besr.org/library/competition.html>, (March 2001).
- "The Choice of Organizational Form in Gasoline Retailing and The Costs of Laws Limiting that Choice," (with A. Blass), Journal of Law and Economics, (October 2001).

- "Should The Merger Guidelines Be Scrapped? Introduction to a Debate," in Symposium On The Antitrust Analysis Of Mergers: Merger Guidelines vs. Five Forces, 33 U. WEST L.A. L. REV. (2001).
- "Contracts that Lessen Competition -- What is Section 27 for, and How Has it Been Used?" (with David Goddard), in Mark N. Berry and Lewis T. Evans eds., *Competition Law at the Turn of the Century: A New Zealand Perspective*, Victoria University Press (2003).
- "Free Riding and Sales Strategies for the Internet," (with J. Chevalier), The Journal of Industrial Economics, (December 2001).
- "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," (with M. Waldman), The Rand Journal (Vol. 33, No. 2, Summer 2002).
- Interview, Economists' Roundtable, Antitrust Magazine, (Spring 2003).
- "Airline Networks and Fares," (with G. Bamberger), Handbook of Airline Economics, McGraw Hill (2003).
- "Intellectual Property, Antitrust and Strategic Behavior," (with R. Gertner), in eds. Adam Jaffee and Joshua Lerner, Innovation Policy and the Economy, Volume 3, MIT Press (2003).
- "The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization", (Fall 2003), George Mason Law Review.
- "The Control of Externalities in Sports Leagues: An Analysis of Restrictions in the National Hockey League," (with A. Frankel and E. Landes), Journal of Political Economy, (February 2004).
- "An Empirical Investigation of the Competitive Effects of Domestic Airline Alliances," (with G. Bamberger, and L. Neumann), Journal of Law and Economics, (April 2004).
- "Why Barriers to Entry are Barriers to Understanding", American Economic Review, (May 2004).
- "Using Economics to Improve Antitrust Policy", Milton Handler Lecture, Columbia Business Law Review, (June 2004).
- "The Proper Role for Antitrust in an International Setting", (Keynote address: Second Annual Conference of the International Competition Network (ICN), Merida City, Mexico (June 25, 2003), appears as Appendix to "Using Economics to Improve Antitrust Policy", Columbia Business Law Review (June 2004).
- "The Competitive Effects of Fannie Mae," (with D. Gross and R. Stillman) in Housing Matters: Issues in American Housing Policy, Fannie Mae (January 2002, reprinted 2004).
- "Econometric Analysis of Telephone Mergers" (with H. Sider) pp. 373-395 in American Bar Association, Econometrics: Legal, Practical, and Technical Issues, (2005).
- "How Economics Can Improve Antitrust Doctrine Towards Tie-in Sales" (with M. Waldman), Competition Policy International, (Spring 2005).
- Preface to: "Law and Economics of the Mexican Competition Laws" by Francisco Gonzalez de Cossio (forthcoming).

"Mergers", Palgrave Dictionary, forthcoming (with J. M. Perloff).

"Predation and the Entry and Exit of Low-Fare Carriers", (with G. Bamberger), in Advances in Airline Economics: Competition Policy and Antitrust, Darin Lee, ed., 2005 (forthcoming).

UNPUBLISHED PAPERS

"Modeling the Housing Allowance Program," M.A. Thesis, Massachusetts Institute of Technology (September 1974).

"The Cost of Eliminating a Futures Market and The Effect of Inflation on Market Interrelationships," (1984).

"The Empirical Importance of Delivery Lags as an Explanation of Demand," (1984).

"Statistical Supplement to The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee Comment, 63 Antitrust Law Journal 903 (1995)," (with Alan Frankel), (May 1997).

"Competition, Monopoly, and Aftermarkets," (with M. Waldman), Working Paper No. 8086, National Bureau of Economic Research, (January 2001, revised March 2002).

"Product Variety and Demand Uncertainty", (with James D. Dana Jr.), (2004). NBER Working Paper 10594.

"Tying, Upgrades, And Switching Costs In Durable-Goods Markets", (with Michael Waldman), (2005), NBER Working Paper 11407.

"Theories of Tying and Implications For Antitrust", (with Michael Waldman), (July 2005).

EXPERT TESTIMONIAL EXPERIENCE

Testimony of Dennis W. Carlton in Re: "Vertical Integration--An Overview." Congressional Record Hearings on the Communications Act of 1978: Proceedings before the House on Bill H.R. 13105, August 3, 1978.

Testimony of Dennis W. Carlton, William M. Landes and Richard A. Posner in Re: Competitive Effects of the Proposed North Central-Southern Airline Merger: Proceedings before the Civil Aeronautics Board, Docket No. 33136, Exhibit NC/SO-T-7, October 13, 1978 and October 9, 1979.

Testimony of Dennis W. Carlton in Re: McNeilab, Inc.: Proceedings before the United States Department of Justice, Drug Enforcement Administration, Docket No. 78-13, March 13, 1980 and May 1980 (Oral).

Testimony of Dennis W. Carlton in Re: Acco Industries, Inc. v. Kresl Power Equipment, Inc.: In the U.S. Court of Appeals For the Seventh Circuit, Docket No. 80-2024, March 29, 1980.

Deposition, Testimony, and Rebuttal Testimony of Dennis W. Carlton in Re: Ethyl Corporation: Proceedings before the Federal Trade Commission, Docket No. 9128, November 10 & 11, 1980 (Deposition), November 13 & 14, 1980 (Testimony), February 20, 1981 (Rebuttal).

Deposition of Dennis W. Carlton in Re: Independence Tube Corporation v. Copperweld Corporation, Regal Tube Company, The Yoder Company v. David F. Grohne (counter-defendant): In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 76 C 4201, January 24, 1981.

Affidavit of Dennis W. Carlton in Re: Ellis Banking Corporation, Ellis First National Bank of Bradenton, and Ellis First Security Bank v. Barnett Banks of Florida, Inc., Barnett Bank of Manatee County, and Westside National Bank of Manatee County: In the U.S. District Court for the Middle District of Florida, Tampa Division, No. 81-693-Civ-T-H, July 28, 1981.

Deposition and Economic Report of Dennis W. Carlton in Re: Schneider Industrial Sales and Service Company, William Schneider and Mary Emily Schneider v. Acco Industries, Inc.: In the U.S. District Court for the District of New Jersey, April 19, 1982.

Deposition and Testimony of Dennis W. Carlton in Re: City of Batavia, et al. v. Commonwealth Edison Company: Proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division, No. 76 C 4388, May 17, 18 & 25, 1982 (Deposition), July 22, 1982 (Testimony).

Deposition of Dennis W. Carlton in Re: M. K. Metals Inc., et al. v. National Steel Corporation: In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 79 C 1661, September 15, 1983.

Declaration and Deposition of Dennis W. Carlton in Re: Carter Hawley Hale Stores, Inc. v. The Limited, Inc., et al.: In the U.S. District Court, Central District California, No. CV 84 22000 AWT (JRX), April 21, 1984 (Declaration), April 23, 1984 (Deposition).

Verified Statements and Testimony of Dennis W. Carlton in Re: Denver & Rio Grande Western Railroad v. Santa Fe Southern Pacific Corporation et al: Proceedings before the Interstate Commerce Commission, Docket No. 30400, August 28, 1984, November 14, 1984, and May 22, 1985, (Statements), and January 30, 1985 and June 19, 1985, (Testimony).

Affidavit of Dennis W. Carlton and William M. Landes in Re: United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, December 19, 1984.

Statement of Carlton in Re: To the National Telecommunications Information Administration (NTIA) Request for Comments in Connection with the Comprehensive Study of the Structure and Regulation of the U.S. Telecommunications Industry, March 29, 1985 (with DeMuth, Landes, and Rosenfield).

Deposition and Affidavit of Dennis W. Carlton in Re: L&W Industries, Inc. v. American Standard, Inc.: In the U.S. District Court, Eastern District of Wisconsin, Civil Action No. 81-C-1409, May 14, 1985 (Deposition), August 30, 1985 (Affidavit).

Testimony of Dennis W. Carlton in Re: E. I. Du Pont De Nemours and Company's Thebaine Import Application: Proceedings before the U.S. Department of Justice, Drug Enforcement Administration, Docket No. 84-51, May 31, 1985.

Testimony of Dennis W. Carlton, William M. Landes and Sam Peltzman in Re: Joint Application of Pan American World Airways, Inc. and United Airlines, Inc., Pacific Division Transfer Case: Proceedings before the U.S. Department of Transportation, Docket No. 43065, August 7, 1985.

Deposition of Dennis W. Carlton in Re: General Motors "THM 200" Transmission Litigation: Proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division, No. 79 C 1249, 80 C 2151 and 85 C 4805, July 2, 1986.

Affidavit of Dennis W. Carlton in Re: Norwest Bank Fire Case: Proceedings before the U.S. District Court, Fourth Judicial District, State of Minnesota, Court File No. 83-08122, August 28, 1986.

Affidavit of Dennis W. Carlton in Re: Policy and Rules Concerning Rates for Dominant Carriers: Before the Federal Communications Commission, Washington, D.C., Docket No. 87-313, October 16, 1987.

Deposition of Dennis W. Carlton in Re: Research Institute for Medicine and Chemistry, Inc. v. Wisconsin Alumni Research Foundation: In the U.S. District Court, Western District of Wisconsin, Case No. 85-C-1060-D, October 20 & 21, 1986.

Affidavit and Deposition of Dennis W. Carlton in Re: United States Football League, et al. v. National Football League, et al.: In the U.S. District Court, Southern District of New York, 84 Civ. 7484 (PKL), November 24, 1986 (Affidavit), February 26, 1986 and December 4, 1986 (Deposition).

Verified Statements of Dennis W. Carlton in Re: Coal Trading Corporation, et al. v. The Baltimore and Ohio Railroad Co., et al.: Before the Interstate Commerce Commission, ICC Docket No. 38301S, December 16, 1986 and September 8, 1987.

Testimony of Dennis W. Carlton in Re: The Application of Pacific Bell, a Corporation, for Authority to Increase Certain Intrastate Rates and Charges Applicable to Telephone Services Furnished within the State of California, California Public Utilities Commission, Application No. 85-01-034, December 19, 1986 and January 22 & 28, 1987.

Deposition of Dennis W. Carlton in Re: John H. Torphy v. Touche Ross & Co., et al.: In the Circuit Court Dane County, State of Wisconsin, Case No. 82-CV-4033, August 25, 1987.

Deposition of Dennis W. Carlton in Re: Martin Exploration Management Company, et al. v. Panhandle Eastern Corporation, et al.: In the U.S. District Court for the District of Colorado, Civil Action No. 86-Z-804, May 5, 6 & 18, 1988.

Deposition of Dennis W. Carlton in Re: The Dow Chemical Company v. Halliburton Company and The Dow Chemical Company v. Mississippi Power & Light Company: In the U.S. District Court for the Northern District of Mississippi Greenville Division, No. GC-78-31-GD-D and No. GC-78-32-GD-D, June 16, 1988.

Statements and Testimony of Dennis W. Carlton in Re: Trailer Train Company et al., Approval of Pooling of Car Service With Respect to Flat Cars: Before the Interstate Commerce Commission, Finance Docket No. 27590. (Sub-No. 1), July 7 & 14, 1988 (Statements), July 25 & 26, 1988 (Testimony).

Testimony of Dennis W. Carlton in Re: Pontarelli Limousine, Inc. v. City of Chicago, Finance Docket No. 83-C-6716, September 25 & 26, 1989.

Deposition of Dennis W. Carlton in Re: Great Northern Nekoosa Corporation v. Georgia-Pacific Corporation: Before the United States District Court District of Connecticut, Civ. Action No. B-89-607-WWE, December 28, 1989, January 15, 1990.

Testimony of Dennis W. Carlton in Re: The Matter of the Physicians and Surgeons Medical Malpractice Insurance Rates of St. Paul Fire & Marine Insurance Company: Before the State of Minnesota Office of Administrative Hearings for the Commissioner of Commerce, O.A.H. Docket No. 0-1004-3412-2, January 1990.

Deposition of Dennis W. Carlton in Re: Dale A. Ervin, et al. v. Amoco Oil Company, et al.: In the District Court, City and County of Denver, State of Colorado, No. 88-CV-11994, September 5, 1990.

Reply Affidavit of Dennis W. Carlton and George J. Stigler in Re: United States of American v. Western Electric Company Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, Civil Action No. 82-0192, January 10, 1991.

Testimony of Dennis W. Carlton in Re: Westreco, Inc. v. Commissioner of Internal Revenue: In the United States Tax Court, Washington, D.C. 20217, Docket No. 24078-88, January 29, 1991.

Deposition, Testimony, and Rebuttal Testimony of Dennis W. Carlton in Re: In the Matter of Marathon Oil Company and Phillips Petroleum Company: Before the Department of Revenue, State of Alaska, Case No. 89314, April 23 & 24, 1991 (Deposition), March 28, 1991, June 19, 1991 (Testimony), July 22, 1991 (Rebuttal Testimony), October 3 & 4, 1991 (Oral).

Deposition of Dennis W. Carlton in Re: Martin Exploration Management Company, et al. v. Panhandle Eastern Pipeline Corporation, et al.: In the U.S. District Court for the District of Colorado, Civil Action No. 91-N-110, February 5, 1992.

Deposition, Affidavit and Testimony of Dennis W. Carlton in Re: United States of America v. Brown University, et al.: In the U.S. District Court For the Eastern District of Pennsylvania, Civil Action No. 91-CV-3274, February 18 & 19, 1992 (Deposition), April 28, 1992 (Affidavit), July 8 & 9, 1992 (Testimony).

Deposition of Dennis W. Carlton in Re: United States of America, People of The State of California, et al. v. J. B. Stringfellow, Jr., et al.: In the United States District Court Central District of California, No. CIV 83-2501 JMI, March 10 & 11, 1992.

Affidavit of Dennis W. Carlton in Re: SCFC ILC, Inc. d/b/a MountainWest Financial v. Visa U.S.A., Inc.: In the U.S. District Court for the District of Utah, Central Division, Civil No. 2:91-cv-047B, June 25, 1992.

Deposition and Testimony of Dennis W. Carlton in Re: Adcom, Incorporated, Cutrone Communications, Incorporated, Great Southern Communications Incorporated, Nola Communications Incorporated and Conrad Communications, Incorporated v. Nokia Corporation, Nokia-Mobira Oy, Nokia-Mobira, Incorporated, Nokia, Incorporated, Nokia Data Communications and Cue Paging Corporation: In the United States District Court for the Eastern District of Louisiana, Civil Action Number 90-4088, November 3 & 4, 1992 (Deposition), February 9 & 10, 1993 (Testimony).

Statement, Supplemental Statement and Deposition of Dennis W. Carlton in Re: City of Dillingham, et al. v. Western Pioneer, Inc., et al., and City of Nome v. Western Pioneer, Inc., et al.: In the United States District Court for the District of Alaska, No. A89-014 Civil (Consolidated for Pre-Trial Proceedings with No. N89-004 Civil), November 6, 1992 (Statement and Supplemental Statement), November 24, 1992 (Deposition).

Verified Statement of Dennis W. Carlton in Re: Kansas City Southern Industries, Inc., The Kansas City Southern Railway Company and K&M Newco, Inc. -- Control -- MidSouth Corporation, MidSouth Rail Corporation, MidLouisiana Rail Corporation, SouthRail Corporation and TennRail Corporation, Before the Interstate Commerce Commission, Finance Docket No. 32167, May 1993.

Verified Statements and Deposition of Dennis W. Carlton in Re: Union Pacific Corporation, Union Pacific Railroad Company and Missouri Pacific Railroad Company -- Control -- Chicago and North Western Holdings Corp. and Chicago and Northwestern Transportation Company: Before the Interstate Commerce Commission, Finance Docket No. 32133, May 24, 1993, June 21, 1993, and November 24, 1993 (Statements), March 17, 1994 and July 26, 1994 (Deposition).

Verified Statement of Dennis W. Carlton in Re: Application of TTX Company and Certain Common Carriers by Railroad For Approval of Amendment of Pooling Agreement and Car Contract Extending Their Terms, Before the Interstate Commerce Commission, Finance Docket No. 27590 (Sub-No. 2), November 19, 1993.

Deposition of Dennis W. Carlton in Re: Merck & Co., Inc. v. Alcon Laboratories, Inc., In the United States District Court for the District of Delaware, No. C.A. 92-691, December 14, 1993.

Deposition and Affidavit of Dennis W. Carlton in Re: Northwest Airlines, Inc. v. American Airlines, Inc., Before the United States District Court, District of Minnesota, Fourth Division, C.V. No. 4-91-539, February 22 & 23, 1994, May 16 & 17, 1995, and July 8, 1997 (Deposition); and February 20, 1995 and May 9, 1996 (Affidavit).

Testimony of Dennis W. Carlton in Re: Florida Power & Light Company: Before the Federal Energy Regulatory Commission, Docket Nos. ER93-465-000, ER93-507-000, ER-93-922-000, and EL94-12-000, April 5, 1994, October 19, 1994, and June 22, 1995.

Testimony of Dennis W. Carlton in Re: The Matter of Touchfax Information Systems Inc. and Landis & Gyr Communications: Before the American Arbitration Association, No. 13-T-133-00260-93, May 10, 1994.

Affidavit and Declaration of Kenneth J. Arrow and Dennis W. Carlton in Re: United States of America v. Western Electric Company, Inc., and American Telephone and Telegraph Company: Before the United States District Court for the District of Columbia, Civil Action No. 82-0192, February 28, 1994 (Affidavit), May 30, 1995 (Declaration).

Affidavit and Testimony of Dennis W. Carlton and Alan S. Frankel in Re: Leonard R. Kahn v. Emerson Electric Co., a Missouri corporation; Hazeltine Corporation, a Delaware corporation; and Motorola, Inc., a Delaware corporation; John Doe corporations 1-x; and John Does 1-x, individually: Before the United States District Court, for the Eastern District of New York, 92 Civ. 3063 (ADS), October 20, 1994 (Affidavit), May 22, 1995 (Testimony).

Deposition and Testimony of Dennis W. Carlton in Re: Federal Trade Commission v. B.A.T. Industries P.L.C., Brown and Williamson Tobacco Corporation; American Brands, Inc.; and American Tobacco Company, Before the United States District Court, Southern District of New York, C.V. No. 94 Civ. 7849, November 20, 1994 (Deposition), December 14, 1994 (Testimony).

Affidavit, Supplemental Affidavit and Deposition of Dennis W. Carlton in Re: Weatherford Roofing Company v. Employers National Insurance Company and Employers Casualty Company et al: In the United States District Court for the District of Dallas County, Texas, 116th Judicial District, No. 91-05637, May 5, 1995 (Affidavit), May 9-10 & June 1, 1995 (Deposition), October 20, 1995 (Supplemental Affidavit).

Affidavit of Dennis W. Carlton in Re: Airline Travel Agency Commission Antitrust Litigation: In the United States District Court for the District of Minnesota, No. 4-95-107, June 14, 1995.

Declaration of Dennis W. Carlton in Re: Donnelly Corporation v. Gentex Corporation: In the United States District Court for the Western District of Michigan, Southern Division, Case No. 1:93 CV 530, October 20, 1995.

Testimony of Dennis W. Carlton before the Federal Trade Commission Hearings on Global and Innovation-based Competition, October 25, 1995.

Report and Deposition of Dennis W. Carlton in Re: Brand Name Prescription Drugs Antitrust Litigation, In the United States District Court for the Northern District of Illinois, Eastern Division, MDL No. 997, November 20, 1995 (Report), December 18 & 19, 1995 (Deposition).

Expert Report and Deposition of Dennis W. Carlton in Re: Johnson Matthey v. General Motors (Antitrust Counterclaim), District Court for the Eastern District of Wisconsin, No. 93 C 0931, January 9, 1996 (Expert Report), February 14, 1996 (Deposition).

Brief of Evidence, Summary of Evidence, and Testimony of Dennis W. Carlton on Behalf of Defendants in Re: Shell (Petroleum Mining) Company Limited and Todd Petroleum Mining Company Limited v. Kapuni Gas Contracts Limited and Natural Gas Corporation of New Zealand Limited, In the High Court of New Zealand, Auckland Registry, Commercial List, CL 5/94, April 2, 1996 (Brief of Evidence), July 18, 1996 (Summary of Evidence), July 18-19, 1996 (Testimony).

Expert Report, Deposition, and Testimony of Dennis W. Carlton in Re: The Matter of the Arbitration Between Sprint Communications Company L.P. and Network 2000 Communications Corporation, Arbitration Case Number 57 181 0013 94, July 15, 1996 (Expert Report with H. Sider), August 12, 1996 (Deposition), September 27, 1996 (Testimony).

Testimony, Prepared Statement and Affidavit of Dennis W. Carlton on behalf of Sacramento Municipal Utility District in Re: Pacific Gas & Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company: Before the Federal Energy Regulatory Commission Technical Conference on Market Power & Transmission Pricing, Docket Nos. ER96-1663-000, EC96-19-000, EL96-48-000, September 12, 1996 (Testimony and Prepared Statement), January 16, 1997 (Affidavit with G. Bamberger).

Declaration of Dennis W. Carlton in Re: United States of America v. International Business Machines: In the United States District Court for the Southern District of New York, Civil Action No. 72-344 (AGS), November 12, 1996.

Expert Report, Affidavit Rebuttal and Deposition of Dennis W. Carlton in Re: Bell Atlantic Corporation and DSC Communications Corporation v. AT&T Corporation and Lucent Technologies Inc., Civil Action No. 5-96CV45, December 4, 1996 (Expert Report with R.E. Olley and D.S. Sibley), January 10, 1997 (Affidavit Rebuttal with R.E. Olley and D.S. Sibley), January 21, 1997 (Deposition).

Affidavit of Dennis W. Carlton in Re: Advanta Corp., Advanta National Bank U.S.A., and Advanta National Bank v. Visa U.S.A., Inc. and Mastercard International, Inc.: In the United States District Court for the Eastern District of Pennsylvania, Civil Action No. 96-CV-7940, January 21, 1997.

Deposition, Testimony, and Surrebuttal Testimony of Dennis W. Carlton in Re: In the Matter of Toys "R" Us, Inc.: In the United States of America Before the Federal Trade Commission, File No. 9278, March 16, 1997 (Deposition), April 16 and 25, 1997 (Testimony), June 3, 1997 (Surrebuttal Testimony).

Deposition of Dennis W. Carlton in Re: In the Matter of Theresa Aguilar, et al vs. Atlantic Richfield Corporation et al: In the Superior Court of the State of California In and For the County of San Diego, File No. 700810, September 30, 1997 (Deposition).

Report of Dennis W. Carlton in Re: Few Ready Mix Concrete Co., v. Transit Mix Concrete & Materials Co., et al: In the United States District Court for the Eastern District of Texas Lufkin Division, No. 9:96-CV-86, October 31, 1997 (with W. J. Lynk).

Verified Statement, Depositions, Verified Reply Statement, and Verified Rebuttal Statement of Dennis W. Carlton in Re: CF Industries, Inc. v. Koch Pipeline Company, L.P.: In the United States of America Before the Department of Transportation Surface Transportation Board, No. 41685, November 7, 1997 (Verified Statement), December 19, 1997 (Deposition), January 8, 1998

(Verified Reply Statement), February 3, 1998 (Deposition), February 20, 1998 (Verified Rebuttal Statement).

Expert Witness Report, Deposition and Affidavits of Dennis W. Carlton in Re: Industrial Silicon Antitrust Litigation: In the United States District Court for the Western District of Pennsylvania, No. 95-2104, January 9, 1998 (Expert Witness Report), February 10-11, 1998 (Deposition), April 8, 1998 (Affidavit), June 29, 1998 (Affidavit).

Declaration, Affidavit (NY), Affidavit (FL) and Second Declaration of Dennis W. Carlton in Re: Applications of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.: Before the Federal Communications Commission, CC Docket No. 97-211, January 25, 1998 (with H. Sider); Before the New York State Public Service Commission, No. 97-C-1804, February 16, 1998 (Affidavit with H. Sider); Before the Florida Public Service Commission, No. 971375-TP, February 27, 1998 (Affidavit with H. Sider); Before the Federal Communications Commission, CC Docket No. 97-211, March 19, 1998 (Second Declaration with H. Sider).

Expert Report and Deposition of Dennis W. Carlton in Re: Bepco, Inc., et al v. AlliedSignal Inc. and AlliedSignal Truck Brake System Co.: In the United States District Court for the Middle District of North Carolina, Winston-Salem Division, No. 6:96CV00274, February 3, 1998 (Expert Report), March 3, 1998 (Deposition).

Affidavit, Reports, Reply Affidavit, Reply Report, Prepared Statements and Testimony of Dennis W. Carlton in Re: The Merger of SBC Communications Inc. with Ameritech Corporation: Before the Federal Communications Commission, CC Docket No. 98-141, July 20, 1998 (Affidavit and Report), November 12, 1998 (Reply Affidavit and Reply Report), February 5, 1999 (Prepared Statements and Testimony as a Participant in the Round Table on the Economics of Mergers Between Large ILECS), April 13, 1999 (Report to the FCC on Supplemental Analysis of the Katz/Salop Hypothesis).

Report and Supplemental Report of Dennis W. Carlton in Re: Riverside Pipeline Company v. Panhandle Eastern Pipeline Company: In the U.S. District Court for the Western District of Missouri, No. 97-0642-CV-W-4, September 20, 1998 (Report with H. Sider), January 7, 1999 (Supplemental Report).

Statement of Dennis W. Carlton in Re: Enforcement Policy Regarding Unfair Exclusionary Conduct in the Air Transportation Industry: Before the Department of Transportation, Office of the Secretary, Washington, D.C., Docket No. OST-98-3713, September 24, 1998 (with G. Bamberger).

Report and Deposition of Dennis W. Carlton in Re: The Procter & Gamble Company, et al. vs. Amway Corporation, et al.: In the U.S. District Court for the Southern District of Texas, Houston Division, January 8, 1999 (Report), February 9, 1999 (Deposition).

Responsive Direct Testimony, Prepared Answering Testimony (OK), Prepared Answering Testimony and Exhibits (FERC) of Dennis W. Carlton for Intervenor Oklahoma Gas and Electric Company in Re: Joint Application of American Electric Power Company, Inc., Public Service Company of Oklahoma and Central and South West Corporation Regarding Proposed Merger: Before the

Corporation Commission of the State of Oklahoma, Cause No. PUD 980000444, March 29, 1999 (with G. Bamberger); United States of America Before the Federal Energy Regulatory Commission FERC Docket Nos. ER98-40-000, ER98-2770-000, ER98-2786-000, April 27, 1999 (with G. Bamberger).

Report and Declaration of Dennis W. Carlton in Re: Telnet Communications, Inc., et al. v. WorldCom, Inc., et al.: In the United States District Court for the Southern District of Texas, Houston Division, No. H-98-2020, March 30, 1999 (Report), April 28, 1999 (Declaration).

Expert Report, Deposition and Supplemental Report of Dennis W. Carlton in Re: United States of America vs. American Society of Composers, Authors and Publishers in the Matter of the Application of Turner Broadcasting Systems Inc. for the Determination of Reasonable License Fees: Before the United States District Court, Southern District of New York, Civ. 13-95 (WCC) (Referred to Magistrate Judge Dolinger), April 15, 1999 (Expert Report), July 28-29 and August 5, 1999 (Deposition), December 16, 1999 (Supplemental Report).

Declaration, Deposition and Reply Declaration of Dennis W. Carlton in Re: Visa Check/MasterMoney Antitrust Litigation: Before the United States District Court, Eastern District of New York, No. CV 96-5238 (JB) RLM), April 15, 1999 (Declaration), May 25, 1999 and June 1, 1999 (Deposition), August 1, 1999 (Reply Declaration).

Report and Deposition of Dennis W. Carlton in Re: Zeneca Limited, Zeneca Holdings Inc., and Zeneca Inc. v. Rhone-Poulenc Inc. and Rhone-Poulenc AG Company: In the United States District Court for the District of Delaware, No. 97-652-GMS, May 17, 1999 (Report), June 16, 1999 (Deposition).

Affidavit and Reply Affidavit of Dennis W. Carlton in Re: Andersen Consulting Business Unit Member Firms v. Arthur Andersen Business Unit Member Firms and Andersen Worldwide Societe Cooperative: Before the International Court of Arbitration of the International Chamber of Commerce, No. 9797/CK, June 2, 1999 (Affidavit), September 13, 1999 (Reply Affidavit).

Affidavit, Report, Rebuttal Report, Reply Report, Rebuttal Report and Testimony of Dennis W. Carlton in Re: The Commissioner of Competition and Superior Propane Inc. and ICG Propane Inc.: Before The Competition Tribunal, No. CT-98/2, August 17, 1999 (Affidavit and Report), September 14, 1999 (Rebuttal Report with G. Bamberger), September 19, 1999 (Reply Report with G. Bamberger), September 27, 1999 (Rebuttal Report to Professor Michael Ward with G. Bamberger), December 13-14, 1999 (Testimony with G. Bamberger).

Declaration of Dennis W. Carlton in Re: Merger of Qwest Communications International Inc. and U S WEST, Inc.: Before the Federal Communications Commission, CC Docket No. 99-272, October 18, 1999 (with Hal Sider).

Prepared Direct Testimony, Deposition and Cross-Examination of Dr. Dennis W. Carlton on behalf of Sierra Pacific Power Company in Re: United States of America Before the Federal Energy Regulatory Commission: Docket Nos. ER99-28-001, ER99-28-003, EL99-38-002 and ER99-945-002, November 17, 1999 (Prepared Direct Testimony), January 10, 2000 (Deposition), April 26 and May 1, 2000 (Cross-Examination).

Expert Report and Deposition of Dennis W. Carlton in Re: United States of America v. Northwest Airlines Corporation and Continental Airlines, Inc.: In the United States District Court for the Eastern District of Michigan, Southern Division, Civil Action No. 98-74611, January 27, 2000 (Expert Report), June 7, 2000 (Deposition).

Declaration and Ex Parte Declaration of Dennis W. Carlton in Re: Joint Applications of MCI WorldCom, Inc., and Sprint Corporation for Consent to Transfer Control: Before the Federal Communications Commission, CC Docket No. 99-333, February 18, 2000 (Declaration with H. Sider), May 10, 2000 (Ex Parte Declaration with H. Sider).

Testimony, Rebuttal Testimony and Cross-Examination of Dennis W. Carlton on behalf of Sacramento Municipal Utility District in Re: Application of Pacific Gas and Electric Company to Market Value Hydroelectric Generating Plants and Related Assets Pursuant to Public Utilities Code Sections 367(b) and 851: Before the Public Utilities Commission of the State of California, application No. 99-09-053, March 2, 2000 (Testimony), March 16, 2000 (Rebuttal Testimony), May 9, 2000 (Cross-Examination).

Affidavit, Deposition and Reply Affidavit of Dennis W. Carlton in Re: Gregory F. Daniel, M.D., et al., v. American Board of Emergency Medicine, et al: In the United States District Court for the Western District of New York, Civil Action No. 90-CV-1086A, March 3, 2000 (Affidavit), April 17 and 18, 2000 (Deposition), July 12, 2000 (Reply Affidavit).

Expert Report, Reply Expert Report, Deposition and Supplemental Report of Dennis W. Carlton in Re: CSX Transportation, Inc. V. Qwest Communications International, Inc.: In the United States District Court for the Middle District of Florida, Jacksonville Division, Civil Action No. 99-412-CIV-J-21C, July 19, 2000 (Expert Report), October 11, 2000 (Reply Expert Report), January 10-11, 2001 (Deposition), July 18, 2001 (Supplemental Report).

Reply Declaration of Dennis W. Carlton in Re: Joint Application of Northpoint Communications and Verizon Communications for Authority to Transfer Control of Blanket Authorization to Provide Domestic Interstate Telecommunications Services as a Non-Dominant Carrier: Before the Federal Communications Commission, Washington DC, Docket No. 00-157, October 17, 2000 (Reply Declaration with H. Sider).

Declaration and Reply Declaration of Dennis W. Carlton in Re: In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities: Before the Federal Communications Commission, Washington DC, Docket No. 00-195, December 1, 2000 (Declaration with K. Arrow and G. Becker), January 10, 2001 (Reply Declaration with K. Arrow and G. Becker).

Report, Rebuttal Report, Deposition, Testimony, and Supplemental Report of Dennis W. Carlton in Re: Rambus Inc. v. Infineon Technologies AG, Infineon Technologies North America Corp., Infineon Technologies, Inc., Infineon Technologies Holding North America Corp., and Infineon Technologies Corp.: In the United States District Court for the Eastern District of Virginia, Richmond Division, Civil Action No. 3:00CV524, December 20, 2000 (Report), January 19, 2001 (Rebuttal Report), February 6, 2001 (Deposition), May 3, 2001 (Testimony), February 13, 2004 (Supplemental Report).

Reports, Rebuttal Reports, Deposition and Declaration of Dennis W. Carlton in Re: Micron Technology, Inc. v. Rambus Inc.: In the United States District Court for the District of Delaware, Civil Action No. 00-792, March 28, 2001 (Report), April 13, 2001 (Rebuttal Report), April 18, 2001 (Deposition), and August 17, 2001 (Report), September 17, 2001 (Rebuttal Report), Declaration (October 1, 2001).

Expert Report, Deposition and Testimony of Dennis W. Carlton in Re: Amgen Inc. v. Ortho Pharmaceutical Corp.: Endispute Arbitration, Chicago, Illinois, August 31, 2001 (Expert Report), November 27-28, 2001 (Deposition), May 9-10, 2002 (Testimony).

Testimony of Dennis W. Carlton in Re: Empirical Industrial Organization Roundtable: Before the Federal Trade Commission, Matter No. P015602 (September 11, 2001).

Expert Report of Dennis W. Carlton in Re: Artemio Del Serrone, et al. v. Philip Morris Companies, Inc., et al.: In the Circuit Court for the County of Wayne, State of Michigan, No. 00-004035 CZ, December 19, 2001.

Expert Report and Deposition of Dennis W. Carlton in Re: Cigarette Price-Fixing Litigation and related cases, Holiday Wholesale Grocery Company, et al. v. Philip Morris Incorporated, et al.: In the United States District Court for the Northern District of Georgia, Atlanta Division, No. 1:00-CV-0447-JOF, MDL No. 1342, December 19, 2001 (Expert Report), January 23, 2002 (Deposition).

Expert Report and Deposition of Dennis W. Carlton in Re: Flat Glass Antitrust Litigation: In the United States District Court for the Western District of Pennsylvania, No. 97-550, MDL NO. 1200, December 20, 2001 (Expert Report), February 4-6, 2002 (Deposition).

Expert Report, Supplemental Expert Report, and Deposition of Dennis W. Carlton in Re: Symbol Technologies et al v. Lemelson Medical et al and Cognex Corporation v. Lemelson Medical et al: In the United States District Court, District of Nevada, CV-S-01-701-PMP (RJJ) and CV-S-01-702-PMP (RJJ), December 14, 2001 (Expert Report), May 7, 2002 (Supplemental Expert Report), October 3, 2002 (Deposition).

Declaration and Reply Declaration of Dennis W. Carlton in Re: Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services: Before the Federal Communications Commission, Washington DC, CC Docket No. 01-337, FCC 01-360, March 1, 2002 (Declaration with H. Sider), April 22, 2002 (Reply Declaration with H. Sider and G. Bamberger).

Declaration, Deposition, Reply Declaration, and Preliminary Injunction Hearing Testimony of Dennis W. Carlton in Re: Sun Microsystems Inc. v. Microsoft Corporation: In the United States District Court, Northern District of California, San Jose Division, Civil Action No. C 02-01150 RMW (PVT), March 8, 2002 (Declaration), June 27, 2002 (Deposition), August 9, 2002 (Reply Declaration); In the United States District Court for the District of Maryland, Northern Division, MDL No. 1332, December 4, 2002 (Preliminary Injunction Hearing Testimony).

Declaration of Dennis W. Carlton in Re: In the Matter of Applications for Consent to the Transfer of Control of Licenses, Comcast Corporation and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee: Before the Federal Communications Commission, Washington, D.C., MB Docket No. 02-70, April 26, 2002

Declaration of Dennis W. Carlton In Re Shirley Robinson, et al., v. Bell Atlantic Corporation d/b/a Verizon Communications, et al., United States District Court Eastern District of Kentucky, Lexington Division, Case No. 01-98, August 30, 2002 (with R. Gertner).

Expert Report and Deposition of Dennis W. Carlton in Re: Duramed Pharmaceuticals, Inc. v. Wyeth-Ayerst Laboratories, Inc.: In the United States District Court, Southern District of Ohio, Western Division at Cincinnati, Civil Action No. C-1-00-735, August 19, 2002 (Expert Report), September 24, 2002 (Deposition).

Expert Report, Deposition, Expert Report and Testimony of Dennis W. Carlton in Re: United States of America v. Philip Morris, USA Inc., f/k/a Philip Morris, Inc.: In the United States District Court for

the District of Columbia, No. 99-CV-02496 (GK), May 10, 2002 (Expert Report), September 10, 2002 (Deposition), April 29, 2005 (Expert Report), June 2, 2005 (Testimony).

Affidavit of Dennis W. Carlton in Re: USG Corporation, a Delaware Corporation, et al., In the United States Bankruptcy Court for the District of Delaware, Case No. 01-2094 (RJN), August 20, 2002 (Affidavit).

Expert Report, Expert Rebuttal Report, and Deposition of Dennis W. Carlton in Re: Sarah Futch Hall, d/b/a Travel Specialist, et al., on behalf of themselves and all others similarly situated v. United Airlines, Inc., et al.: In the United States District Court for the Eastern District of North Carolina Southern Division, No. 7:00-CV-123-BR(1), October 4, 2002 (Expert Report), November 13, 2002 (Expert Rebuttal Report), November 21, 2002 (Deposition).

Initial Report and Deposition of Dennis W. Carlton in Re: Sunrise International Leasing Corp., v. Sun Microsystems Inc.: In the United States District Court for the District of Minnesota, Civil Action No. 01-CV-1057 (JMR/FLN), March 27, 2003 (Initial Report with H. Sider), July 30, 2003 (Discovery Deposition).

Declaration and Reply Declaration of Dennis W. Carlton Before the Federal Communications Commission, Washington DC, in Re: Matter of Section 272(f) (1) Sunset of the BOC Separate Affiliate and Related Requirements, 2000 Biennial Regulatory Review Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules, WC Docket No. 02-112, CC Docket No. 00-175, June 30, 2003 (Declaration with H. Sider and A. Shampine), July 28, 2003 (Reply Declaration with H. Sider and A. Shampine).

Economic Analysis, Response and Economic Analysis of Dennis W. Carlton, "Economic Analysis of the News Corporation/DIRECTV Transaction," submitted to the Federal Communications Commission, MB Docket No. 03-124, July 1, 2003 (Economic Analysis with J. Halpern and G. Bamberger); September 8, 2003 (Response with J. Halpern and G. Bamberger); October 2, 2003 (Economic Analysis to DOJ with J. Halpern and G. Bamberger)).

Supplemental Declarations of Dennis W. Carlton in Re: Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services: Before the Federal Communications Commission, Washington DC, CC Docket No. 01-337, FCC 01-360, July 11, 2003 (with H. Sider), September 3, 2003 (with H. Sider).

Expert Report and Deposition of Dennis W. Carlton In Re: D. Lamar DeLoach, et al. v. Philip Morris Companies, Inc., et al. (R.J. Reynolds Tobacco Co.), In the United States District Court for the Middle District of North Carolina, Greensboro Division, Case No. 00-CV-1235, October 2, 2003 (Expert Report), October 30, 2003 (Deposition).

Report of Dennis W. Carlton on behalf of Verizon, November 18, 2003 (with K. Arrow, G. Becker, and R. Solow).

Report and Deposition of Dennis W. Carlton In Re: Francis Ferko and Russell Vaughn as Shareholders of Speedway Motorsports, Inc. v. (NASCAR) National Association for Stock Car Auto Racing, Inc., International Speedway Corporation, and Speedway Motorsports, Inc.: In the United States District Court Eastern District of Texas Sherman Division, Case No. 4:02cv50, Honorable Richard A. Schell, December 15, 2003 (Report), January 21-22, 2004 (Deposition).

Declaration, Deposition, and Rebuttal Declaration of Dennis W. Carlton In Re: CSC Holdings, Inc. v. Yankees Entertainment and Sports Network, LLC., before the American Arbitration Association,

Arbitration Proceeding, Case No 13 181 02839 03, January 23, 2004 (Declaration), February 5, 2004 (Deposition), February 24, 2004 (Rebuttal Declaration).

Expert Report, Deposition, Expert Report, Deposition and Testimony of Dennis W. Carlton In Re: Jamsports and Entertainment, LLC v. Paradama Productions, Inc., d/b/a AMA Pro Racing, Clear Channel Communications, Inc., SFX Entertainment, Inc., d/b/a Clear Channel Entertainment SFX Motor Sports, Inc., d/b/a Clear Channel Entertainment-Motor Sports, In the United States District Court for the Northern District of Illinois Eastern Division, Case No. 02 C 2298, March 8, 2004 (Expert Report), April 19 and 20, 2004 (Deposition), September 28, 2004 (Expert Report), October 4, 2004 (Deposition), March 11, 14, 2005 (Trial Testimony).

Affidavit in Reply, Second Affidavit, and Testimony of Dennis W. Carlton In Re: The Matter of an Appeal from Determinations of the Commerce Commission Between Air New Zealand Limited Between Qantas Airways Limited and The Commerce Commission, In the High Court of New Zealand Auckland Registry Commercial List Under The Commerce Act 1986, CIV 2003 404 6590, June 7, 2004 (Affidavit), July 6, 2004 (Second Affidavit), July 13-16, 2004 (Testimony).

Expert Report and Deposition of Dennis W. Carlton in Re: J.B.D.L. Corp. d/b/a Beckett Apothecary, et al., v. Wyeth-Ayerst Laboratories, Inc., et al., Civil Action No. C-1-01-704. CVS Meridian, Inc., and Rite Aid Corp., v. Wyeth, Civil Action No. C-1-03-781, in the United States District Court for the Southern District of Ohio Western Division, July 7, 2004 (Expert Report), September 3, 2004 (Deposition).

Declaration of Dennis W. Carlton on behalf of Bellsouth Telecommunications, Inc., in the matter of AT&T Corp., v. Bellsouth Telecommunications, Inc., before the Federal Communications Commission, Washington, DC 20554, July 20, 2004 (with H. Sider).

Expert Report, Sur-Reply Expert Report, Deposition and Affidavit of Dennis W. Carlton in Re: Flat Glass Antitrust Litigation: In the United States District Court for the Western District of Pennsylvania, Master Docket MISC No. 97-550, relates to Jeld-Wen, Inc. Docket No. 2-99-875, July 6, 2004 (Expert Report), September 9, 2004 (Sur-Reply Expert Report), November 1-2, 2004 (Deposition), July 20, 2005 (Affidavit)

Expert Report, Declaration and Deposition of Dennis W. Carlton (T-Mobile, Sprint PCS, AT&T Wireless, Cingular, Verizon Wireless Reports) in Re: Wireless Telephone Services Antitrust Litigation: In the United States District Court Southern District of New York, 02 Civ. 2637, December 20, 2004 (Expert Report), February 9, 2005 (Deposition).

Declaration, Testimony, Reply Declaration, Joint Applicants' Statement, and Testimony of Dennis W. Carlton in Re: In the Matter of the Proposed Merger of AT&T Corp., (AT&T) and SBC Communications Inc. (SBC), February 21, 2005 (Declaration with H. Sider); Before the New Jersey Public Utility Commission, May 4, 2005 (Testimony with H. Sider); May 9, 2005 (Reply Declaration with H. Sider); Before the Pennsylvania Utility Commission, May 12, 2005 (Joint Applicants' Statement with H. Sider); June 15, 2005 (Testimony with H. Sider).

Expert Report of Dennis W. Carlton in Re: In the matter of Echostar Satellite, L.L.C., v. Fox Television Holdings, Inc., Fox/UTV Holdings, Inc., News Corporation: Before the American Arbitration Association, Case No. 71 472 E 00690 04, March 2, 2005 (with G. Bamberger).

Declaration and Reply Declaration of Dennis W. Carlton in Re: In the matter of Verizon Communications Inc., and MCI, Inc., Applications for Approval of Transfer of Control, Before the FCC (Federal Communications Commission), Washington, DC 20554, WC Docket No. 05-75,

March 10, 2005 (Declaration with G. Bamberger and A. Shampine), May 24, 2005 (Reply Declaration with A. Shampine).

Expert Report, Deposition and Affidavit of Dennis W. Carlton in Re: Celanese Ltd., et al. v. JO Tankers AS, et al., April 8, 2005 (Expert Report); and May 6, 2005 (Deposition); June 10, 2005 (Affidavit).

Affidavit of Dennis W. Carlton in Re: In the matter of Beatrice C. Romero vs. Philip Morris Price Fixing Allegations: In the United States First District Court State of New Mexico County of Rio Arriba, April 15, 2005.

Expert Report, Written Direct Examination, Deposition and Trial Testimony of Dennis W. Carlton in Re: United States of America v. Philip Morris USA Inc. (f/k/a Philip Morris Incorporated), et al., In the United States Court for the District of Columbia, Civil Action No. 99-CV- 2496 (GK), April 29, 2005 (Expert Report); May 23, 2005 (Written Direct Examination); May 23, 2005 (Deposition), June 2, 2005 (Trial Testimony).

Declaration of Dennis W. Carlton in Re: Covad Communications, et.al. v. Bell Atlantic, et. al., Civil Action No.:1:99-CV-01046, June 10, 2005 (Declaration).

Attachment C

ALLAN SHAMPINE

May 2005

Business Address: Lexecon
332 South Michigan Avenue
Suite 1300
Chicago, Illinois 60604-4306
(312) 322-0294
Email: ashampine@lexecon.com

Home Address: 5441 Arcadia Street
Skokie, IL 60077
(847) 663-1433

EDUCATION

- Ph.D. UNIVERSITY OF CHICAGO: Economics, 1996
(Full scholarship from the University)
- M.A. UNIVERSITY OF CHICAGO: Economics, 1993
(Full scholarship from the University)
- B.S. SOUTHERN METHODIST UNIVERSITY: Economics and Systems Analysis,
Mathematics Minor, 1991
(Summa Cum Laude, Honors, Departmental Distinction)

PROFESSIONAL EXPERIENCE

- LEXECON, Chicago, Illinois: Vice President (2003-Present)
- LEXECON, Chicago, Illinois: Economist (1996 - 2003)
- UNIVERSITY OF CHICAGO: Teaching Assistant (1994 - 1996)
- DEGOLYER SPECIAL COLLECTIONS LIBRARY (May - July 1991)
- BARNES & NOBLE (May - July 1989)
- UNIVERSITY OF TEXAS, Research Assistant to Dr. Brian Berry (May - July 1987)

OTHER PROFESSIONAL EXPERIENCE

- Member of the *American Economics Association*
- Associate member of the *American Bar Association*
- Referee for the *American Journal of Agricultural Economics* and *Journal of Business*.

Reviewer for *Agricultural and Resource Economics Review*.

Coordinated the *Conference on Valuing Non-Market Goods*, University of Chicago (July 21-22, 1995)

Assisted in coordinating the *Conference on Research in Health Economics*, University of Chicago (October 21-22, 1994)

Assisted in organizing the *Economic Policy and Public Finance Workshop*, University of Chicago (1993 - 1996)

Presented papers on information externalities and technology diffusion at the *Economics and Public Policy Workshop* (3) and *Price Theory Workshop* (1), University of Chicago (1995, 1996)

Presented *The Impact of Technology on the Modern Labor Market* at the 68th Annual Meeting of the Southwestern Social Science Association (March 29, 1990)

Independent research projects with Drs. Slottje and Hayes, Southern Methodist University (1987 - 1991)

ACADEMIC HONORS

Graduated Summa Cum Laude, Honors, Department Distinction

Phi Beta Kappa

Alpha Lambda Delta (Treasurer, honorary society recognizing academic achievement)

Phi Eta Sigma (honorary society recognizing academic achievement)

Omicron Delta Epsilon (international honor society in economics)

Kappa Mu Epsilon (honor society in mathematics)

Award for Excellence (given to the outstanding senior in the Economics Department as decided by the vote of the faculty)

Presidential Scholarship (full scholarship, Southern Methodist University)

National Merit Scholar (honorary)

Full Scholarship (University of Chicago)

Hyer Society (honorary society of Southern Methodist University)

Honor Roll (1987-1991)

FIELDS OF SPECIALIZATION

Telecommunications

Technology Diffusion

Urban Economics

Agricultural Economics

Environmental Economics

PUBLICATIONS

BOOKS

Down to the Wire: Studies in the Diffusion and Regulation of Telecommunications Technologies, (Editor) Nova Science Press (2003).

ARTICLES

Handicapping Countries in the Race to Digital Switching, Progress in Economics, edited by Frank Columbus (forthcoming).

“The Evolution of Telecommunications Switching in the Central Office,” in Down to the Wire: Studies in the Diffusion and Regulation of Telecommunications Technologies, Nova Science Press (2003).

The Welfare Implications of Advertising and Extension Under Uncertainty (with George Tolley) Technological Forecasting & Social Change, 70 (2003).

Determinants of the Diffusion of U.S. Digital Telecommunications, Journal of Evolutionary Economics, 11 (2001).

Compensating for Information Externalities in Technology Diffusion Models, 80 American Journal of Agricultural Economics, 2 (1998).

Contributed to two catalogs at DeGolyer Special Collections Library (1991).

The Impact of Technology on the Modern Labor Market, 11 Southwestern Journal of Economic Abstracts, 1 (1990).

RESEARCH PAPERS

An Evaluation of Technology Diffusion Models and Their Implications, Ph.D. Dissertation, University of Chicago (1996).

A New Direction in Mixed Income Housing, submitted to Chicago Housing Authority (1993).

UNPUBLISHED PAPERS

A Survey of the Economics of Information, Focusing on Water (1992).

Petroleum Price Shocks and Rationality, B.S. Honors Paper (1991).

EXPERT TESTIMONY

Reply Declaration to the Federal Communications Commission, In the Matter of Verizon Communications Inc. and MCI, Inc., Application for Approval of Transfer of Control (WC Docket No. 05-75), May 24, 2005 (with Gustavo Bamberger and Dennis Carlton).

Declaration to the Federal Communications Commission, In the Matter of Verizon Communications Inc. and MCI, Inc., Application for Approval of Transfer of Control (WC Docket No. 05-75), March 9, 2005 (with Gustavo Bamberger and Dennis Carlton).

Reply Declaration to the Federal Communications Commission, In the Matter of Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements (WC Docket No. 02-112) and 2000 Biennial Regulatory Review of Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules (CC Docket 00-175), July 28, 2003, (with Dennis Carlton and Hal Sider).

Declaration to the Federal Communications Commission, In the Matter of Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements (WC Docket No. 02-112) and 2000 Biennial Regulatory Review of Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules (CC Docket 00-175), June 30, 2003, (with Dennis Carlton and Hal Sider).

Reply Declaration Re: 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, Before the Federal Communications Commission, Washington DC, WT Docket No. 01-14, May 14, 2001, Reply Declaration (with Robert Gertner).

Declaration Re: 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, Before the Federal Communications Commission, Washington DC, Docket No. 01-14, April 13, 2001, Declaration (with Robert Gertner).

Report to Directorate General IV of the European Commission: "Remedies in the United States," in *Remedies in the United States*, in *Remedies in EU Competition Law: The Policy and Practice of the European Commission, A Report for Directorate General IV of the European Commission*, July 1998, Report (with James Langenfeld).

Attachment D [PROPRIETARY]

EXHIBIT 2

