

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

DATATREASURY CORP.,	)	
Plaintiff,	)	
vs.	)	JURY TRIAL DEMAND
	)	
MAGTEK, INC., a/k/a MAG-TEK, INC., and	)	CV No.: 2-O3CV-459
	)	
SMALL VALUE PAYMENTS COMPANY,	)	CV No.: 2:04-CV-85
Defendants,	)	

**DECLARATION OF DR. DONALD MULLINEAUX**

1. My name is Donald Mullineaux. I am over the age of twenty-one, have not been convicted of a crime involving moral turpitude, and am not otherwise disqualified from making this declaration. The following information, which is within my personal knowledge, is true and correct.
  
2. In connection with preparing this declaration, I have reviewed, the '988 and '137 patents, portions of their respective file histories, and relevant banking materials.
  
3. All of the opinions provided in this declaration are:
  - a. Based upon sufficient facts and data to allow me to reach the opinions contained in this declaration;
  - b. My opinions expressed herein are the product of reliable principles and methods;
  - c. My opinions expressed herein constitute a reliable application of those principles and methods to the facts of this case; and

d. My opinions expressed herein are based upon information of a type reasonably relied upon by experts in the arts applicable and analogous to the '988 and '137 patents.

4. I submit this declaration in rebuttal to Defendants' position that the '988 patent does not cover checks.

5. By my education, training, and experience, as evidenced by my curriculum vitae (attached to this declaration as Exhibit A), I am qualified to provide testimony on the understanding of persons of ordinary skill in the art relative to banking transactions and checks in the context of the '988 and '137 patents.

6. I am a finance professor at the University of Kentucky, where I hold the DuPont Chair in Banking and Financial Services. I received my Ph D. in Economics from Boston College in 1971 and worked initially for 13 years at the Federal Reserve Bank of Philadelphia. From 1979-84, I served there as Senior Vice President and Director of Research. I joined the faculty of the Gatton College of Business at U.K. in 1984 and have been teaching courses in Bank Management at the undergraduate, MBA, and Ph.D. levels routinely since that time. I have also served on the faculty of 4 of the 6 graduate schools of banking in the United States and presently serve as Curriculum Director for the American Bankers Association's Stonier Graduate School of Banking. I have published research papers in many areas, including the evolution of the payments system in the United States in the 19th century. I routinely cover payments systems issues in my courses and lectures, which requires that I keep current with developments in this area.

7. I understand that the claim terms should not be determined solely from the claim language alone, but that the broader context of the entire patent should be considered. Consequently, I reviewed the claims, specification, file histories to understand what type of documents could be utilized in any one of the claims in the '988 patent and '137 patent. As a person of ordinary skill in banking practices having specific knowledge in

check payments and processing, I would understand that the '988 patent includes the remote capture of a check, which is type of document.

8. My opinions are the following:

a. It is self-evident that a check is a “document” in the context of the claims of '988 and '137, since any check meets the basic dictionary definition (American Heritage, 2004) of a document as “a writing that contains information” or a “written or printed paper that bears the original, official legal form of something and can be used to furnish decisive evidence or information.” I agree with these definitions and would rely on them, as would other experts in the banking field, as an accurate depiction of what constitutes a document. Indeed, an internet search under the phrase “definition of a check” produces the following result from Legaldefinitions.com: A check is “a *document* signed by the maker, drawn on a bank, payable on demand” (emphasis added). This definition captures the economic essence of a check from an information perspective in that a check is an order from Party X to pay Party Y from an account at Bank Z.

b. That banks and their vendors view checks as documents is supported by the fact that advertisements for check scanners commonly address the number of “documents” that can be scanned within some given time frame. That a check is a document from a regulatory and legal perspective is supported by The Check Clearing for the 21st Century Act which refers to a “substitute check” as an, “Image Replacement Document.” If legislators and bank regulators view a “substitute check” as a document, then surely the original check is itself a document, since each contains precisely the same information. The same argument applies to an “electronic check.”

c. The '988 and '137 patents state clearly in the “Field of the Invention” discussions that the invention operates on “data” and more specifically the retrieval, encryption, transmission, processing and storage of data. But “data” is simply factual information. The “Background Discussion” of '988 specifically refers to “banking transactions” (Column 1, Line 19) and “consumer purchases” (Column 1, line 21). Any person working in finance and banking and reading the '988 patent would recognize that a large portion of these referenced transactions would involve the use of checks. While the “Background Discussion” makes references to “receipts,” it does so in a variety of

contexts, and only a portion of these can be construed to involve checks. But as I noted above, checks can serve a receipt function only because they contain data and information, and this logically supports the facts that makes a check a document.

DECLARATION

In accordance with 28 U.S.C. § 1746, I, Donald Mullineaux, Ph. D., declare under penalty of perjury under the laws of the United States that the foregoing declaration is true and correct.

Executed on the 14<sup>th</sup> of March, 2006.



DONALD MULLINEAUX, PH.D.

Ex A

**PERSONAL RESUME**

**NAME:** Mullineaux, Donald J.

**ADDRESS:** Gatton College of Business and Economics  
University of Kentucky  
Lexington, Kentucky 40506-0034

**TELEPHONE:** (859) 269-7178 (Home)  
(859) 257-2890 (University)  
(859) 257-9688 (Fax)

**E-MAIL:** [mullinea@pop.uky.edu](mailto:mullinea@pop.uky.edu)

**CIVIL STATUS:** Born July 11, 1945; U.S. Citizen

**EDUCATION:** Graduated in 1971 from Boston College with a Ph.D. in Economics.  
National Science Foundation Trainee, 1967-71  
Received a Bachelor of Arts Degree in Economics from St. Vincent  
College in 1967.

**PROFESSIONAL EXPERIENCE:**

University of Kentucky, Lexington, Kentucky  
1999-Present Director of the School of Management

University of Kentucky, Lexington, Kentucky  
1984-Present Chairholder, The duPont Endowed Chair in Banking and  
Financial Services

University of Kentucky, Lexington, Kentucky  
1990-93 Associate Dean for Academic Affairs

Federal Reserve Bank of Philadelphia, Philadelphia, Pennsylvania  
1971-84 Senior Vice President and Director of Research

Wharton School, University of Pennsylvania, Philadelphia, PA  
1976-80 Taught courses in the MBA program on Financial Structure and Public  
Policy and in Macroeconomics

Temple University, Philadelphia, Pennsylvania  
1975-76 Taught MBA course on Financial Markets

Graduate School of Banking, Madison, Wisconsin

1981-Present Lecture senior bank managers on the relevance of changing economic and financial trends for strategic planning decisions.

Graduate School of Banking at LSU, Baton Rouge, Louisiana

1988-1998 Course Coordinator and Lecturer in Money and Capital Markets

Stonier Graduate School of Banking, Newark, Delaware

1990-Present Lecture on Advanced Money and Capital Markets

Graduate School of Banking at Colorado, Boulder, Colorado

1990-Present Lecture on Bank Investments and Asset-Liability Management

Kentucky School of Banking, Louisville, Kentucky

1984-Present Program Director and Lecturer on Asset-Liability Management

Kentucky School of Banking, Louisville, Kentucky

1987-Present Dean of the Faculty

National Bank Director Training School

Lecture directors on principles of bank management and director duties and responsibilities

#### **UNIVERSITY SERVICE:**

1999- Gatton College Operating Committee

1998-2000 UK Futures Committee

1997-98 University Strategic Planning Committee

1997-99 University Task Force on Research and Graduate Studies (Reedy Committee)

1996-97 MBA Policy Committee

1996-97 Chair, Merit Review Appeals Committee

1995-96 College of Business and Economics Strategic Planning Committee

1995-96 Honorary Degree Committee

1995 Chair, Search Committee for Economics Department Chair

1994-96 Academic Area Committee for Promotion and Tenure (Social Sciences)

1995- Finance Area Coordinator

1994-96	University Senate
1994-95	Finance Department Chair
1990-93	Associate Dean for Academic Affairs
1991-92	Lexington Campus Research Advisory Committee
1991-94	Intellectual Property Committee
1991-92	Kentucky Educational Reform Act Committee
1990-91	Merit Review Appeals Committee (Chair)
1990-91	MBA Program Review Committee
1990-91	University Self-Study Committee (University Finances)
1989-90	Chairman, Academic Area Committee for Promotion and Tenure (Social Sciences)
1988-89	Academic Area Committee for Promotion and Tenure (Social Sciences)
1988-89	Research Professorship Selection Committee
1987-91	Department Chairman
1987-88	Faculty Grant Awards Committee
1986-87	DBA Policy Committee
1985-87	Academic Area Committee for Promotion and Tenure (Social Sciences)
1985-87	DBA Program Coordinator
1985-86	Chairman, Committee for MS Degree in Banking
1984-85	Chairman, MBA Policy Committee
1984-85	Chairman, Department of Economics Review Committee

**GRANTS:**

Prochnow Education Foundation Grant, 1988.



Financial Services Roundtable, 1999.

**COURSES TAUGHT:**

Bank Management  
Money and Capital Markets  
Seminar in Financial Institutions  
Macroeconomics  
Internet Economics

**AWARDS:**

Distinguished Alumnus Award, St. Vincent College, 1995.  
Outstanding Teacher in the College, Beta Gamma Sigma, 1990.  
Unique Achievement Award, Federal Reserve Bank of Philadelphia, 1983

**DOCTORAL DISSERTATIONS CHAIRED:**

Rosemary Carlson, "Shareholder Wealth Effects and Changes in Interstate Banking Regulations," 1988 (Morehead State University).

Jeong J. Park, "Tests of Real Estate Investment Trusts as Inflation Hedges," 1989 (Yeungnam University, Korea).

Dianna Preece, "Monitoring, Contractual Flexibility, and the Capital Market Response to Loan-Agreement Announcements," 1990 (University of Louisville).

Gregory Filbeck, "Regulatory Monitoring and the Impact of Bank Holding Company Dividend Changes on Equity Returns," 1990 (University of Toledo).

John Thompson, "A Multiple-Metric Study of the Returns to Shareholders: The Case of Bank Holding Company Mergers," 1990 (Eastern Kentucky University).

Patricia Webster, "The Capital Market Response to Bank Holding Company Spinoffs," 1991 (Bradley University).

Youguo Liang, "Stock Prices, Volume, and Market Overreaction," 1991. (Prudential).

Shelly Webb, "Ownership Structure and Firm Value for Financially Distressed Firms," 1993. (Xavier University).

Steve Dennis, "Agency Costs in Loan Sales: Theory and Evidence," 1993. (California State University, Fullerton).

Chia Pin Chen, "The Lending Behavior of Global Banks: A Relative Comparison of U.S. vs. Non-U.S. Banks," 1994 (National Chung Hsing University, Taiwan).

Michael Schinski, "The Impact of the Federal Reserve's Source of Strength Doctrine on Bank Equity Returns," 1994 (SUNY at Geneseo).

Marwan Asri, "The Impact of Financial Liberalization on Savings and Investment in Indonesia," 1997 (Gadja Mahda University, Indonesia).

Aloysius Ro, "The Private-Placement Debt Decision: An Empirical Analysis," 1998 (Merrill Lynch).

John Paglia, "An Empirical Examination of the Role of Covenants in Large Bank Loans" 2000 (Pepperdine University).

Sang Wih Lee, "The Size and Composition of Bank Lending Syndicates," 2000 (Bryant College).

Chien Chih Peng, "Commercial-Bank Loan Commitments vs. Spot Loans: An Analysis of Borrower Choice," 2000 (Eastern Kentucky University).

Ivan Roten, "Essays on the Underwriting Activities of Commercial-Bank Holding Companies," 2001 (Appalachian State University).

Ha-Chin Yi, "Are Bank Loan Ratings Relevant?" 2002, (Southwest Texas State University).

#### **MONOGRAPHS:**

*Balance-Sheet Decisions at Relatively Unregulated Banks: New York Free Banking, 1843-62.* Herbert V. Prochnow Education Foundation, 1990.

*General Banking II.* The American Bankers Association, 1990.

#### **REFEREED PAPERS:**

"Liquidity, Labels and Medium-Term Notes," *Financial Markets, Institutions, and Instruments* (forthcoming, with Ivan Roten).

"Debt Underwriting by Commercial Bank-Affiliated Firms and Investment Banks: More Evidence," *Journal of Banking and Finance* 16 (2002): 679-718 (with Ivan Roten).

“Syndicated Loans,” *Journal of Financial Intermediation* 9 (2000): 404-26 (with Steve Dennis).

“Agency Costs and Dividend Payments: The Case of Bank Holding Companies,” *Quarterly Review of Economics and Finance* 39 (1999): 408-19 (with Greg Filbeck).

“Monitoring, Loan Renegotiability, and Firm Value: The Role of Lending Syndicates,” *Journal of Banking and Finance* 20 (1996): 577-93 (with Dianna Preece).

“Insider Trading and Regulation: A Look at Bank Holding Companies,” *Journal of Economics and Finance* 19 (1995): 71-84 (with Greg Filbeck).

“The Impact of the Federal Reserve’s Source of Strength Policy on Banking Holding Companies,” *Quarterly Review of Economics and Finance* 35 (1995): 483-96 (joint with Michael Schinski).

“A Multiple-Metric Study of the Returns to Shareholders: The Case of Bank Holding Company Mergers,” *Journal of Financial and Strategic Decisions* 8 (1995): 43-51 (joint with John Thompson).

“Monitoring by Financial Institutions: Bank vs. Nonbanks,” *Journal of Financial Services Research* 8 (1994): 191-200 (joint with Dianna Preece).

“Overreaction and Reverse Anticipation: Two Related Puzzles,” *Journal of Financial Research* 17 (1994): 31-43 (joint with Youguo Liang).

“Regulatory Monitoring and the Impact of Bank Holding Company Dividend Changes on Equity Returns,” *Financial Review* (1993): 403-15 (joint with Greg Filbeck).

“Are REITs Inflation Hedges?” *Journal of Real Estate Finance and Economics* (1990): 91-101 (joint with Y.J. Park and I.K. Chew).

“The Joint Production of Confidence: Endogenous Regulation and 19<sup>th</sup> Century Commercial Bank Clearinghouses,” *Journal of Money, Credit, and Banking* (November 1987): 457-68 (joint with Gary Gorton).

“Competitive Monies and the Suffolk Bank System: A Contractual Perspective,” *Southern Economic Journal* 53 (1987): 884-98.

“Inflation Expectations and Money Growth in the United States,” *American Economic Review* (1980): 149-61.

“Unemployment, Industrial Production, and Inflation Uncertainty: Some Empirical Results,” *Review of Economics and Statistics* (1980): 163-69.

“On Testing for Rationality: Another Look at the Livingston Price Expectations Data,” *Journal of Political Economy* 86 (1978).

“Economies of Scale and Organizational Efficiency in Banking: A Profit-Function Approach,” *Journal of Finance* 33 (1978): 259-80.

“Branching Restrictions and Commercial-Bank Costs,” *Journal of Business* 49 (1976): 402-07.

“Economies of Scale at Financial Institutions,” *Journal of Monetary Economics* 1 (1975): 233-40.

“Deposit-Rate Ceilings and Noncompetitive Bidding for U.S. Treasury Bills,” *Journal of Money, Credit, and Banking* 5 (1973): 201-12.

#### **OTHER PAPERS:**

“Commercial Banking,” *The New Palgrave Dictionary of Money and Finance*. Stockton Press, 1992.

“Expectations, Surprises, and Treasury Bill Rates: 1960-82: Discussion,” *Journal of Finance* (Papers and Proceedings, 1984): 696-98.

“Monetary Rules and Contracts: Why Theory Loses to Practice,” *Business Review* of the Federal Reserve Bank of Philadelphia, November/December, 1984.

“Revealing Real Interest Rates: Let the Market Do It,” *Business Review* of the Federal Reserve Bank of Philadelphia, March/April 1984 (with Aris Protopapadakis).

“Efficient Markets, Interest Rates, and Monetary Policy,” *Business Review* of the Federal Reserve Bank of Philadelphia, May/June 1981.

“On Active and Passive Monetary Policies: What Have We Learned from the Rational Expectations Debate?” *Business Review* of the Federal Reserve Bank of Philadelphia, November/December 1979.

“Regulation: Whence It Came and Whether It’s Here to Stay,” *Business Review* of the Federal Reserve Bank of Philadelphia, September/October, 1978.

“Inflation Expectations in the U.S.: A Brief Anatomy,” *Business Review* of the Federal Reserve Bank of Philadelphia, July/August 1977.

“Money Growth, Jobs, and Expectations: Does a Little Learning Ruin Everything?” *Business Review* of the Federal Reserve Bank of Philadelphia, January/February 1976.

“An Economic Approach to Family Size: A New Perspective on Population Growth,” *Business Review* of the Federal Reserve Bank of Philadelphia, January/February 1976.

“The Taxman Rebuffed: Income Taxes at Commercial Banks,” *Business Review* of the Federal Reserve Bank of Philadelphia, May 1974.

“Unit vs. Branch Banking: An Analysis of Relative Costs,” in *Changing Pennsylvania’s Branching Laws: An Economic Analysis*, Federal Reserve Bank of Philadelphia, 1973.

“The Economic Folklore of Party Politics: Myths or Realities?” *Business Review* of the Federal Reserve Bank of Philadelphia, November 1973.

“Interest-Rate Ceilings and the Treasury-Bill Market: Disintermediation and the Small Saver,” *New England Economic Review*, July/August 1973.

“Paying for Social Security: Is It Time to Retire the Payroll Tax?” *Business Review* of the Federal Reserve Bank of Philadelphia, April 1973.

“Inflation Insurance: An Escalator Clause for Securities,” *Business Review* of the Federal Reserve Bank of Philadelphia, October 1972.

“Stock-Market Commission Fees: Competition or Bust—or Be Busted?” *Business Review* of the Federal Reserve Bank of Philadelphia, April 1972.

#### **WORKING PAPERS:**

“Private Placements vs. Public Debt: An Analysis of Firm Funding Source Decisions: (with Aloysius Ro).

“Financial Covenants in Bank Loan Contracts” (with John Paglia).

“The Impact of the Transformation of Banking on CEO and Board of Director Compensation” (with Agus Harjoto).

“Equity Underwriting by Bank Holding Companies and Investment Banks: An Analysis of Relative Performance” (with Ivan Roten).

“Is There a Safety-Net Subsidy?: Some Evidence Based on Non-Bank Entry into Banking.”

“The Size and Composition of Commercial Lending Syndicates” (with Sang Lee).

#### **PROFESSIONAL ASSOCIATIONS:**

American Economic Association  
American Finance Association  
Financial Management Association

European Finance Association  
Southern Finance Association  
Eastern Finance Association  
Kentucky Economics Association

**PROFESSIONAL ACTIVITIES:**

Board of Directors, Eastern Finance Association, 1996-98.

Financial Institutions Track Chair, Financial Management Association Meetings, 1991.

Frequent presenter and discussant at professional meetings; have reviewed papers for:

*American Economic Review*  
*Journal of Political Economy*  
*Review of Economics and Statistics*  
*Journal of Finance*  
*Journal of Monetary Economics*  
*Journal of Money, Credit, and Banking*  
*Journal of the American Statistical Association*  
*Review of Economic Studies*  
*Journal of Financial Research*  
*Financial Review*  
*Economic Journal*  
*Southern Economic Journal*  
*Journal of Banking and Finance*  
*Financial Services Review*

**PROGRAMS FOR BANKERS (DOMESTIC):**

“Bank Tax Management”  
“Prospects for Financial Reform”  
“Asset/Liability Management Techniques”  
“The International Debt Problem”  
“Regulation/Deregulation: Where To From Here?”  
“What’s Wrong with Economic Policymaking in the United States?”  
“Federal Deficits: How Big A Problem?”  
“Strategic Planning and Economic Policy”  
“Trust Activities at Commercial Banks: An Overview”  
“Financial Market Outlook for the 1990s”  
“The European Monetary System”  
“Managing the Investment Portfolio”  
“Risk Management in Theory and Practice”  
“The Future of Banking”

“Determinants of Bank Shareholder Value”  
“The Transformation of the Financial System”  
“Risk Management: Fad or Fundamental?”

**PROGRAMS FOR BANKERS (INTERNATIONAL):**

Academic Director, 54<sup>th</sup> International Banking Summer School, La Jolla, California, 2001.

Lectures on Bank Management Techniques, Vienna, Austria, Summer 1988, 1989, 1990, and 1993.

Lectures on Bank Management, Zagreb, Croatia, April, 1992, December, 1992, September, 1993, and July, 1994.

Seminar Leader for Bank Simulation Program, Nemetria Institute, Foligno, Italy, October, 1992.

Seminar on Asset-Liability Management, Instituto Mexicano de Administracion Bancaria, Mexico City, January, 1993.

Seminar on Financial Markets, Mexico City, June, 1993.

Lectures to Academy of Management, Almaty, Kazakhstan, September, 1993.

Seminar Leader for Bank Simulation Analysis, Vladivostock, Russia, November, 1994 and Hbarask, Russia in February, 1995.

Seminar Leader for Stanford Bank Management Simulation Program, Vilnius, Lithuania, 1995.

Seminar Leader for Bank Simulation Analysis, Panama City, Panama, 1996.

Seminar in Principles of Bank Management, Nemetria Institute, Foligno, Italy, 1997, 1998, 1999.

**PUBLIC AND OTHER SERVICE:**

Vice Chairman, Committee on Business, Labor and the Economy, Kentucky Tomorrow Commission, 1985-86.

Board Member, Lexington Philharmonic Orchestra, 1986-87.

Board Member, First National Bank, Louisa, Kentucky, 1988-94.

Board of Directors, The Education Network, 1987-1991.

Investments Seminar Leader, Kentucky Telebanking Network. (Satellite TV Distribution of Programming), 1989-91.

TEAM Lexington, Mayor's Committee to Improve Efficiency in Local Government, 1994.

Donor Choice Committee, United Way of Lexington, 1994.

Mayor's Commission on Competitiveness, 1996.

National Science Foundation Reviewer, 1990, 1994, 1998, 1999.

Frequent speaker at meetings of professional associations and business groups (20-30 annually).