

Exhibit 5
Part 5
To Third Declaration of
Joseph N. Hosteny

- "Image systems garner NOAC spotlight (American Bankers' Association's National Operations and Automation Conference)," *Computer in Banking*, vol. 6, No. 7, p. 8(4), Jul., 1989.
- "Imaging products. Check Processing—IBM's ImagePlus High Performance Transaction System," *United States Banker*, vol. 100, No. 8, p. 23(3), Aug. 1990.
- "Imaging vendors shape processing," *Banking Management*, vol. 69, No. 4, p. 29, Apr. 1993.
- Imwalle, C. and Pratt, J., "250 U.S. banks to use NCR, Cincinnati Bell financial systems," AT&T News Release, May 4, 1993.
- "Industry Security Leader Racial Supports Visa/Mastercard Proposal for Internet," *PR Newswire*, Apr. 17, 1996.
- INSPEC search with abstracts.
- "Item processing leaps ahead with VisualImpact and Windows NT (Sponsored Supplement: Unlock Your Bank Office with Microsoft Back Office)," *US Banker*, vol. 105, No. 6, p. S4(3), Jun. 1995.
- Janusky, "FSTC Interbank Check Imaging," Apr. 29, 1996.
- Janusky, "FSTC Interbank Check Imaging," May 22, 1996.
- Joint Marketing & Referral Agreement Between ACS Image Solutions, Inc. and JPMorgan Chase Bank.
- Jones, J., "Broadway & Seymour Announces Client/Server Product for Item and Image Processing," *Business Wire*, p. 03201186, Mar. 20, 1995.
- Jones, J., "Broadway & Seymour announces new VISUAL-IMPACT release," *Business Wire*, p. 3291274, Mar. 29, 1996.
- Klein, M., "Terminal Data to supply NCR with document microfilmers," AT&T News Release, Oct. 13, 1993.
- Kraynak Maxfield, J., "Signet Processes Over 2,500 Documents/Hour in Unisys Check Imaging Tests," *PR Newswire*, p. 0409P8428, Apr. 9, 1991.
- Kriskern, J., "Engineering a visionary solution," *Datamation*, vol. 36, No. 8, Apr. 15, 1990.
- Kutler, J., "AT&T, IBM, Unisys join bank research group," *American Banker*, vol. 159, No. 124, p. 14(1), Jun. 29, 1994.
- Lubetkin, S., "Unisys enters image processing market with two new products and major financial and industrial customers (product announcement)," *PR Newswire*, p. 1011PH009, Oct. 11, 1989.
- Mantel, K., "Notes Gets in the Picture," *Datamation*, Jul. 15, 1992.
- Marjanovic, "Payment Groups Square Off Over Electronic Check Plan," *American Banker*, date unknown.
- Marjanovic, S., "Mich. National streamlines imaging with IBM system (check imaging)," *American Banker*, vol. 160, No. 176, Sep. 13, 1995.
- Marjanovic, Steven, "Home Loan Bank to Offer Check-Image Statements to Members' Customers," *American Banker*, vol. 159, No. 248, at 14(1), Dec. 29, 1994.
- Mazzola, J., "NCR and NYCH to develop image-based check notification system," AT&T News Release, Aug. 24, 1992.
- Mazzola, J. and Hendrickson, L., "NCR deposit processing technology speeds banking operations," AT&T News Release, Dec. 7, 1992.
- Mazzola, J. and Hendrickson, L., "Wachovia tests NCR's new imaging item processing system," AT&T News Release, Nov. 15, 1991.
- Mazzola, J., Hendrickson, L. and Gatati, G., "NCR signs DSI alliance for imaging statement processing," AT&T News Release, Jul. 20, 1992.
- Mazzola, J., Hendrickson, L., and Waters, R., "NCR, CKI to market image-based credit card chargeback system," Jan. 6, 1993.
- Mazzola, J. and O'Donohue, M., "Frost National Bank selects NCR over old mainframe environment," AT&T News Release, Apr. 28, 1993.
- McGinn, Janice, "IBM ImagePlus High Performance Transaction System (IBM Harnesses Image Processing to Make its 389x/XP Cheque Processors More Efficient)," *Computergram International*, No. 1389, at CG103210008, Mar. 21, 1990.
- McKee, K., and Gundlach, D., "Retail Banking Solution enhanced," AT&T News Release, May 21, 1990.
- Messmer, E., "Hurdles stand in way of electronic banking," *Network World*, p. 33, Sep. 4, 1995.
- "Microsoft Introduces SNA Server Version 3.0, Begins Beta Testing," Microsoft Press Release, Aug. 29, 2006, found at: <http://www.microsoft.com/presspass/press/1996/jun96/sna30pr.msp>.
- Moore, J., "IBM, Unisys test check systems for Fed Reserve," *Federal Computer Week*, vol. 6, No. 21, p. 6(2), Jul. 27, 1992.
- Moreau, Thierry, "Payment by Authenticated Facsimile Transmission, a Check Replacement Technology for Small and Medium Enterprises," Nov. 25, 2006, found at: <http://connotech.com/PAYPROC.HTM>.
- Morris, H.M. and Orth, R.H., Image system communications, *IBM Systems Journal*, vol. 29, No. 3, 1990, pp. 371-383.
- Murphy, P., "POD Check Imaging Faces Challenges (In 1995, vs. 1996, banks raised Investment in check imaging by 9% from \$198 mil and \$215 mil; new lost cost POD technology keeps costs down)," *Bank Technology News*, vol. 10, No. 3, p. 23, Mar. 1997.
- "NCReports: Financial Services Trends and Technologies," Issue 1, NCR, Jan. 1997.
- "NCReports: Financial Services Trends and Technologies," Issue 2, NCR, Jan. 1997.
- "NCReports: Financial Services Trends and Technologies," Issue 3, NCR, Jan. 1997.
- "NCReports: Financial Services Trends and Technologies," Issue 4, NCR, Jan. 1997.
- "NCReports: Financial Services Trends and Technologies," Issue 5, NCR, Jan. 1997.
- "NCReports: Financial Services Trends and Technologies," vol. 1, Issue 6, NCR, Jan. 1997.
- "NCReports: Financial Services Trends and Technologies," vol. 1, Issue 7, NCR, 1997.
- "NCReports: Financial Services Trends and Technologies," vol. 1, Issue 8, NCR, 1999.
- NCR 7780 Brochure, copyrighted 1989.
- "NCR—Hardware—7780 Mid-Range Item Processing Transport," at www.ncr.com/products/hardware/hw_7780_product.htm.
- "NCR—Hardware—7780, Technical Specifications," at www.ncr.com/products/hardware/nw_7780_ts_product.htm.
- "NCR offers new image-based Document Management System," AT&T News Release, Jun. 23, 1992.
- "NCR Unveils Client-Server Check Imaging," *Bank Technology News*, vol. 9, No. 3, p. 23, Mar. 1, 1996.

- Nixon, B., "Is check imaging for you? (automation in banking) (includes related article)," *Savings & Community Banker*, vol. 2, No. 10, p. 28(6), Oct. 1993.
- No1016v4[1].ppt—PowerPoint Presentation—FSTC—Interbank Check Image Project, Sep. 30 to Oct. 1, 1996.
- "NSSDC's Mass Storage System Evolves," March 1995, found on the web at the URL: http://nssdc.gsfc.nasa.gov/nssdc_news/march95/09_i_behnke_0395.html.
- O'Henev, S., "Prepare for the image revolution (Banker and Vendors) (image processing: includes related article listing image processing products) (buyers guide)," *Computers in Banking*, vol. 6, No. 10, p. 24(6), Oct. 1989.
- "On the imaging technology front," *American Banker*, vol. CLXI, No. 68, p. 26, Apr. 10, 1996.
- PACESBusReq3[1].doc—Microsoft Word Doc—"PACES Paperless Automated Check Exchange & Settlement—Business Requirement," Apr. 3, 1998.
- PacesOverview40[1].ppt—PowerPoint Presentation.
- PACESPRO[1].doc—Microsoft Word Doc—"PACES Paperless Automated Check Exchange & Settlement—Project Proposal," Apr. 23, 1998.
- PACESRequirements[1].doc—Microsoft Word Doc—"PACES Paperless Automated Check Exchange & Settlement—Requirements Document," Apr. 3, 1998.
- Plesums, C.A. and Bartels, R. W., *Large Scale Image Systems: USAA Case Study*, IBM Systems Journal, vol. 29, No. 3, 1990, pp. 343–355.
- "Preliminary Invalidity Contentions of Defendants J.P. Morgan Chase & Co. and JPMorgan Chase Bank," in *DataTreasury Corp. v. J.P. Morgan Chase & Co., et al.*, Cause No. 502CV124, In the United States District Court for the Eastern District of Texas, Texarkana Division.
- "Press Release, Cisco Partners with AT&T on Network Switch Manufacturing," Sep. 26, 1995, found on the web at <http://www.lucent.com/press/0995/950926.mma.html>.
- Press Release, "NCR Document Management System Includes Kodak, Ricoh Products," Apr. 6, 1993.
- Press Release, "NCR Introduces Scalable Image Item Processing Solution," Jan. 19, 1996.
- "Regions Bank Selects ImageSoft to Provide Image Solutions," *Business Wire*, at 9161220, Sep. 16, 1997.
- Rivest, R.L., Shamir, A., Adleman, L., "A Method for Obtaining Digital Signatures and Public-Key Cryptosystems," date unknown.
- Robinson, G., "Universal Card purchases BancTec Image-FIRST system," *AT&T News Release*, Dec. 22, 1992.
- Roldan, Jr., "Image Quality White Paper," FSTC, 1999.
- Roldan, M., "Paperless Automated Check Exchange and Settlement (PACBS) (status update) (PACES completes specification and design of image exchange environment and is accepted as part of SVPCO Image Strategy)," FSTC, at www.fstc.org/projects/paces/index.cfm, Jun. 22, 2000.
- Roldan, Mariano, Financial Services Technology Consortium, "PACES Paperless Automated Check Exchange & Settlement Project Overview, PACES Planning Meeting, New York City," Dec. 19, 1997.
- Schwartz, J., "Banks to Test Imaging for Clearing Checks," *Communications Week*, No. 420, p. 35, Sep. 14, 1992.
- Search Report for PCT/US00/33010, Jun. 21, 2002.
- Softchech Licenses 'Envision' Image Solution to West Suburban Bank, PR Newswire, at 116SETUU002, Jan. 16, 1996.
- "Special Report: Fine Tuning of the Terminal Picture," *Computerworld*, Aug. 1983.
- Spencer, H., "Scanning goes vertical: a big future for specialized check scanning; check scanning technology," *Advanced Imaging*, No. 10, vol. 12, p. 54, Oct. 1997.
- Stellwag, C., "New ATM from AT&T GIS features automated document processing," *AT&T News Release*, Nov. 29, 1994.
- Stellwag, C. and Bochonko, K., "NCR and Cincinnati Bell offer image processing service," *AT&T News Release*, Jan. 11, 1994.
- Stellwag, C. and Bochonko, K., "Norwest Bank selects NCR item processing systems for lockbox," *AT&T News Release*, Aug. 2, 1993.
- Stellwag, C., Graves, T., and Bochonko, K., "New Mexico uses NCR imaging systems for tax, revenue processing," *AT&T News Release*, Jul. 12, 1993.
- Stellwag, C., Proto, J., and Bochonko, K., "CashFlex selects NCR item processing systems for lockbox," *AT&T News Release*, Jul. 12, 1993.
- Stellwag, C., Roedel, R., and Bochonko, K., "NCR and Arkansas Systems announce strategic alliance," *AT&T News Release*, Jul. 12, 1993.
- Stellwag, C., Sanders, G., and Bochonko, K., "NCR and Signet Banking to provide item processing services," *AT&T News Release*, Jul. 13, 1993.
- "SurePOS ACE Electronic Payment Support PRPQ for 4690 OS," Version 1, Release 5, IBM, 1998, 2002.
- "The Check Information Age: Vision Executive Summary Image Archive Forum, Payment System Task Force," Jan. 27, 1998.
- "The Wachovia Story," Research, Development Manufacturing Corporation, 1993.
- Tracey, Brian, "IBM Unveils First Stage of Image-Check System," *Computers in Banking*, vol. 7, No. 4, at 12(3), Apr. 1990.
- Tucker, T., "Broadway rolls out check imaging system for community banks," *American Banker*, vol. 160, No. 61, p. 14(1), Mar. 30, 1995.
- "Understanding EDI," 1996.
- "Unisys Enhances Check Imager (Unisys Corp makes effort to appeal to wider range of financial institutions)," *American Banker*, vol. CLIX, No. 205, p. 15A, Oct. 24, 1994.
- Unisys, New York Clearing House, "A Proposal for an Image-Based Return Item Processing System," Jun. 1991, Unisys Document No. PDC 1010-16, JPMC-NYCH018091-018216.
- "Unisys Wins Contract to Supply Imaging Solution to Chase Manhattan/FISER V Check Processing Alliance," *Business Wire*, at 6121175, Jun. 12, 1995.
- "Unix-Based Image Statement Software," *ABA Banking Journal*, vol. 85, No. 2, at 80(1), Feb. 1993.
- "Verifone Software Links PCs to the Point of Sale," *American Banker*, vol. 158, No. 156, at 13A(1), Aug. 16, 1993.
- Vermeire, "Prosecution of Check Image Patent," letter to Hanna, Jul. 11, 1997.
- Wagner, M., "Banc One checks out Web," *Computerworld*, vol. 30, No. 35, p. 69, Aug. 26, 1996.
- Western Bank purchases NCR's Document Managing system, *AT&T News Release*, Aug. 31, 1993.
- BancTec's Proposal to the Federal Reserve Bank of Boston, "Technical Volume: Check Image Processing Archive and Retrieval System," Jul. 8, 1994, JPMC-BANCT 002960-003299.

BancTec's Proposal to the Federal Reserve Bank of Boston, "Technical Volume: Total Solution Overview" Jul. 8, 1994, JPMC-BANCT 001017-001144.

"Interbank Check Imaging," FSTC General Meeting, Orlando, FL, Apr. 17, 1997 (Exhibit 20).

"MAGTEK© Company Background & Product Guide," date unknown (Exhibit MagTek D-7).

"MagTek Unveils Excella, a Dual-side Scanner for Check 21 Applications," May 10, 2004 (Exhibit MagTek D-8).

"PACES Models—FSTC Project," presentation by Mariano Roldan on Jul. 17, 1997 (Exhibit 21).

"PACES Paperless Automated Check Exchange & Settlement Next Step," presentation by John Fricke at New York, NY on Aug. 12, 1997 (Exhibit 19).

Press Release "MagTek Adds Enhanced Reading to Micrimage TM," Jan. 9, 2003 (Exhibit MagTek D-11).

Press Release "MagTek Upgrades Its Micrimage™ Check Reader/Scanner," Jun. 12, 2002 (Exhibit MagTek D-9).

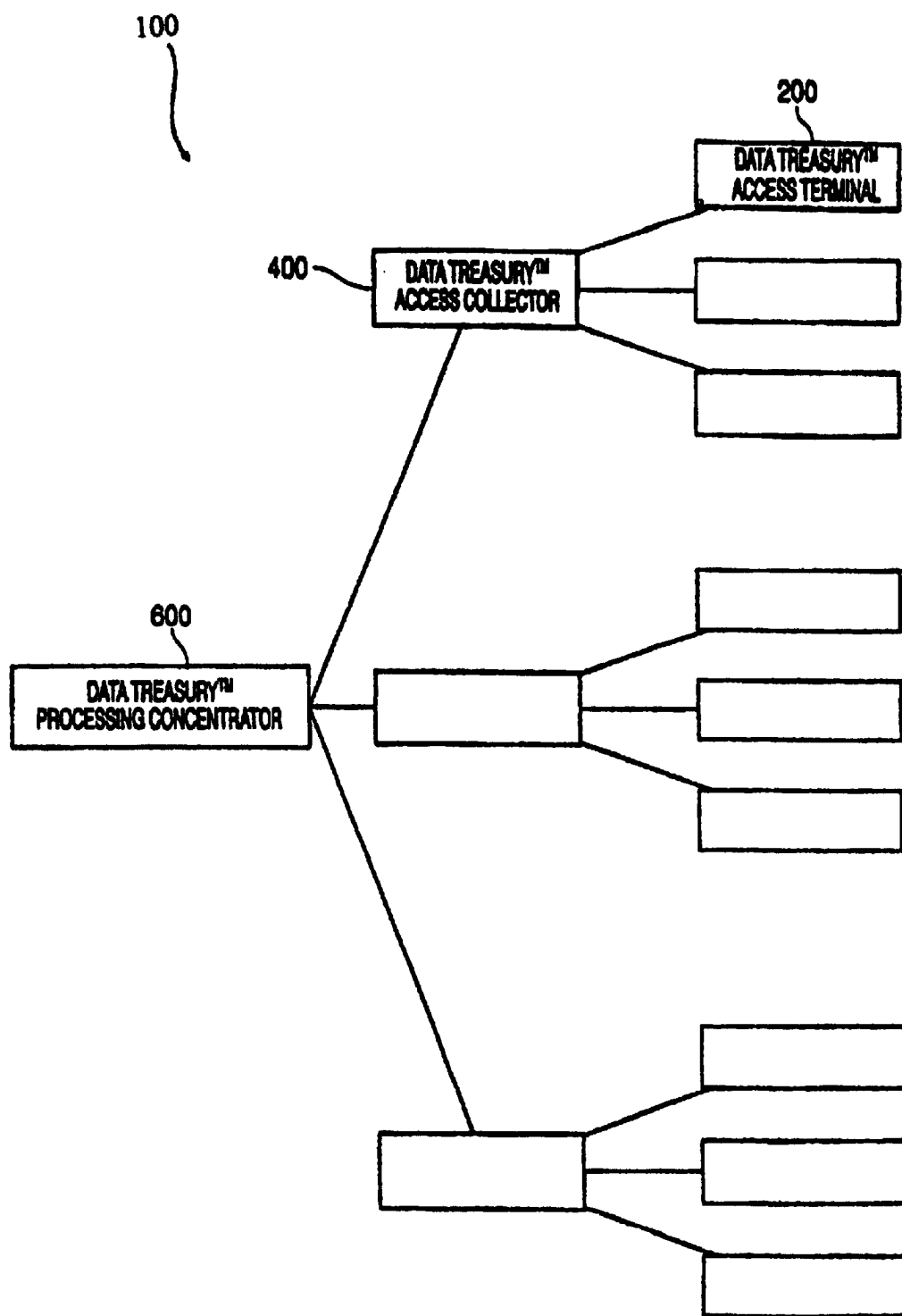
Press Release "MagTek's MICRImage Transmits Check Images at Speed of Ethernet," Feb. 14, 2002 (Exhibit D-10).

"The New Era of Check Scanning Technology," 2005 (Exhibit MagTek D-6).

"Imaging in Corporate Environments: Technology and Communication," Daniel Minoli, McGraw Hill, 1994.

"ANSI/ABA X9.46-1995, Draft version 0.13, American National Standard For Financial Image Interchange: Architecture, Overview and System Design Specification."

"ANSI/ABA X9.46-1997, American National Standard For Financial Image Interchange, Architecture, Overview and System Design Specification." Copyright 1996.

**FIG. 1 (Amended)**

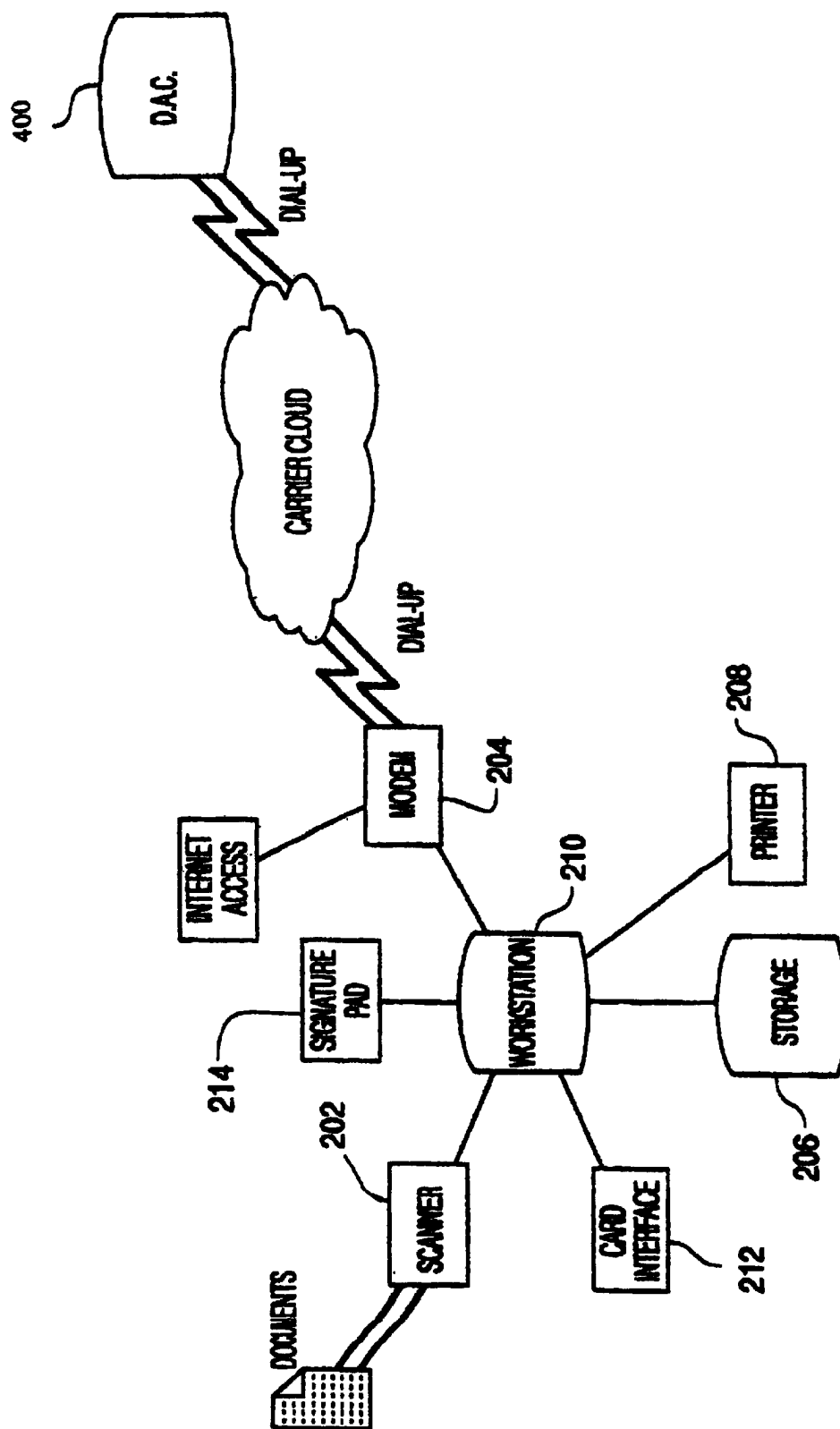


FIG. 2 (Amended)

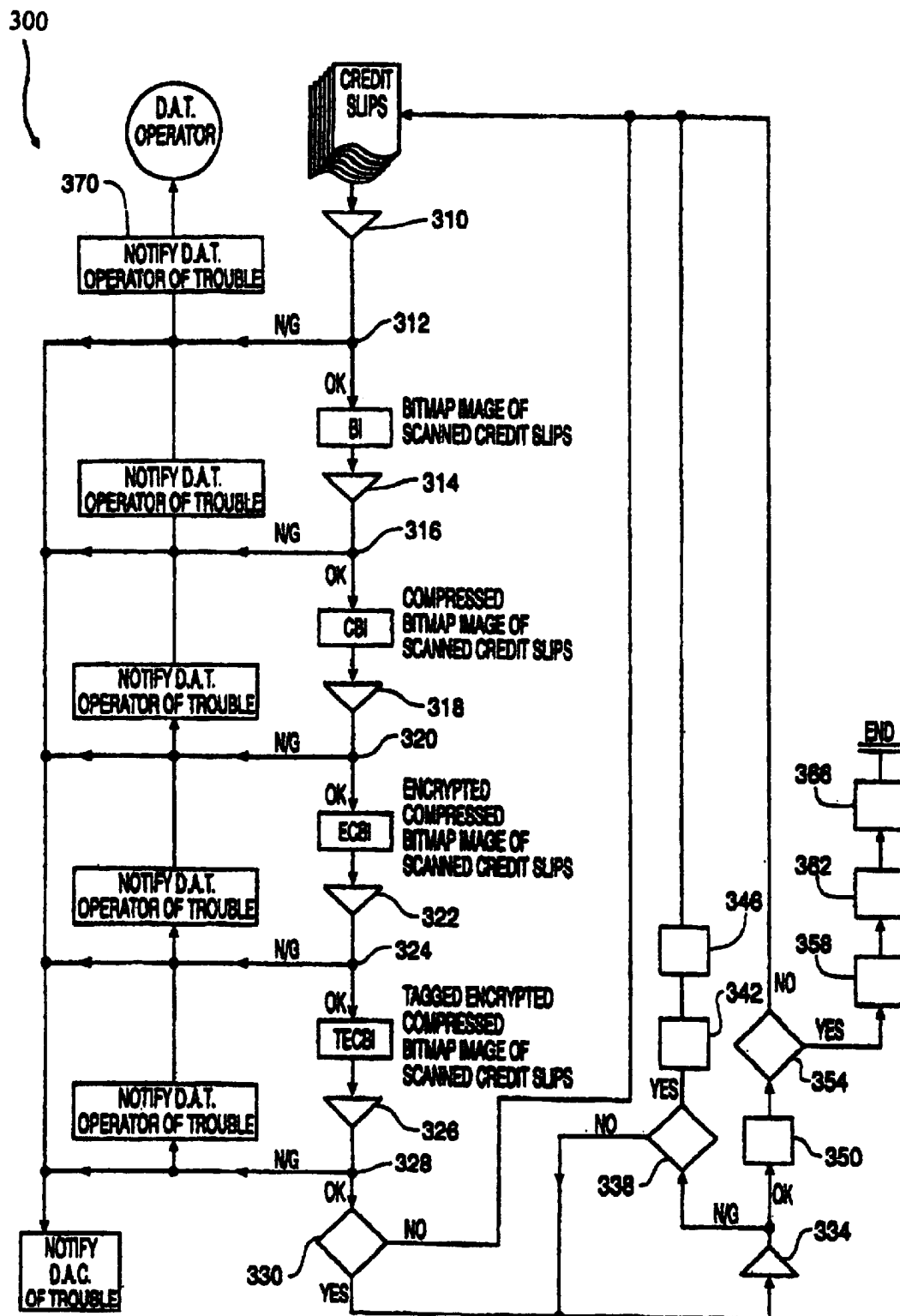
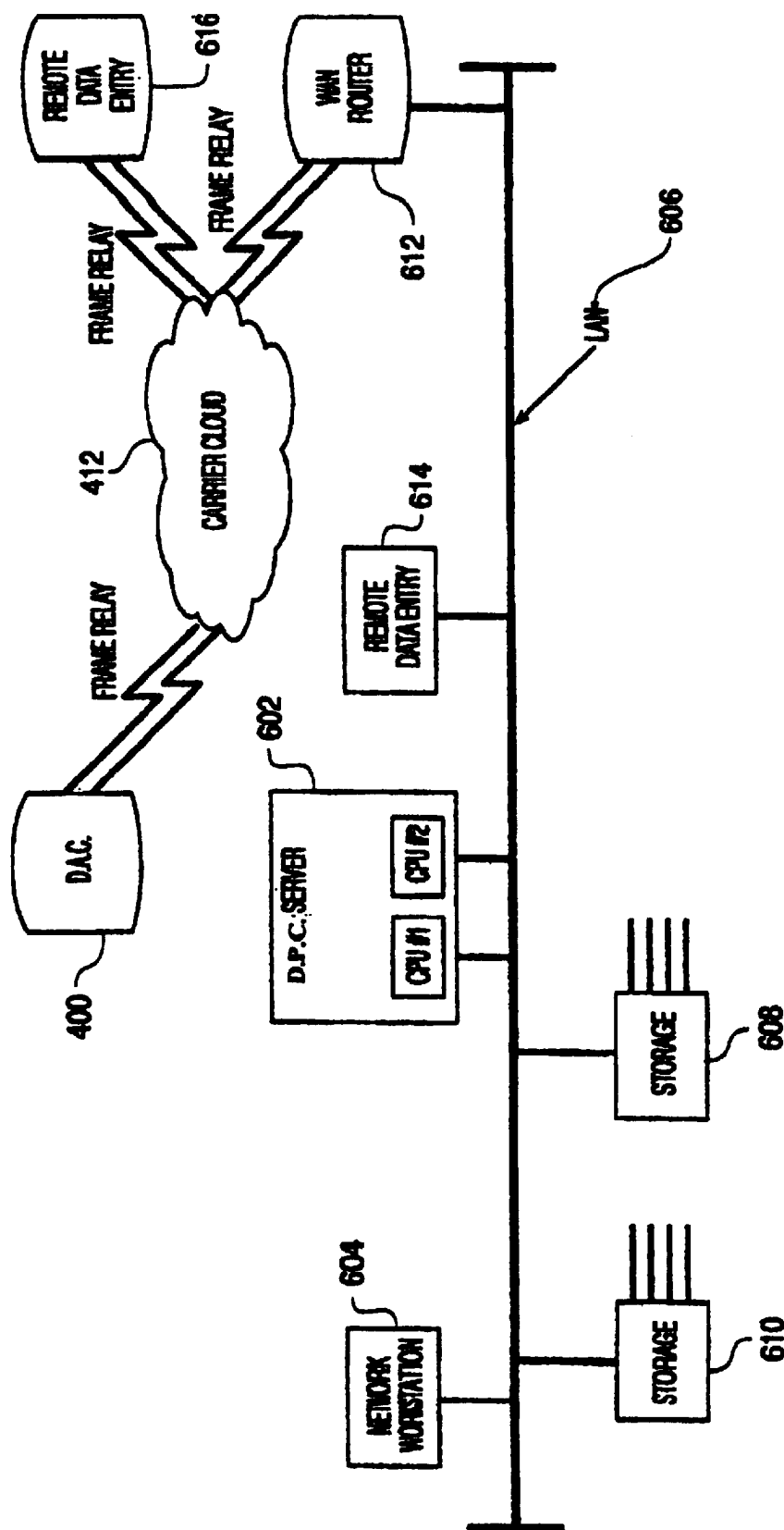


FIG. 3A (Amended)

**FIG. 6 (Amended)**

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EX PARTE

REEXAMINATION CERTIFICATE

ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS
INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

ONLY THOSE PARAGRAPHS OF THE
SPECIFICATION AFFECTED BY AMENDMENT
ARE PRINTED HEREIN.

Column 6, lines 7–19:

The use of glyph technology in the DataTreasury™ System **100** improves the accuracy, cost and performance of the system. Xerox DataGlyph™ Technology includes error correction codes which can be referenced to correct scanning errors or to correct damage to the document caused by ink spills or ordinary wear. DataGlyph™ Technology also leads to decreased system cost since the system will require less manual intervention for data entry and correction because of the improved accuracy associated with DataGlyph™ elements. Since DataGlyph™ elements represent a large amount of information in a small amount of space, the DAT scanner **[100] 202** will require a small amount of time to input a large amount of information.

Column 15, lines 53–62:

A DPC LAN **606** facilitates communication among the devices which are connected to the LAN **606** including the DPC server **602** and the network workstation **604**. In the preferred embodiment, the DPC LAN **606** uses a switched 100BaseT/10BaseT communication hardware layer protocol like the DAC LAN **406** discussed earlier. In the preferred embodiment, the DPC LAN **[406] 606** is a high speed OC2 network topology backbone supporting TCP/IP. The CISCO Catalyst 5500 Network Switch supports the DPC LAN **606** connectivity among the devices connected to the LAN **606**.

Column 20, lines 11–20:

FIG. **7** is a flow chart **700** describing the polling of the DACs **[300] 400** by a DPC **600** and the transmission of the TECBIs from the DACs **[300] 400** to the DPC **600**. In step **702**, the DPC **600** reads the address of the first DAC **[300] 400** in its region for polling. In step **704**, the DPC **600** connects with a DAC **[300] 400** for transmission. The DPC **600** determines whether the connection to the DAC **[300] 400** was successful in step **706**. If the call to the DAC **[300] 400** was unsuccessful, the DPC **600** will record the error condition in the session summary report and will report the error to the DPC **600** manager in step **722**.

Column 20, lines 21–25:

If the connection to the DAC **[300] 400** was successful, the DPC **600** will verify that the DAC **[300] 400** is ready to transmit in step **708**. If the DAC **[300] 400** is not ready to transmit, the DPC **600** will record the error condition in the session summary report and will report the error to the DPC **600** manager in step **722**.

Column 20, lines 26–33:

If the DAC **[300] 400** is ready to transmit in step **708**, the DAC **[300] 400** will transmit a TECBI packet header to the DPC **600** in step **710**. The DPC **600** will determine whether the transmission of the TECBI packet header was successful

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in step **712**. If the transmission of the TECBI packet header was unsuccessful, the DPC **600** will record the error condition in the session summary report and will report the error to the DPC **600** manager in step **722**.

5 Column 20, lines 34–41:

If the transmission of the TECBI packet header was successful in step **712**, the DAC **[300] 400** will transmit a TECBI package to the DPC **600** in step **714**. The DPC **600** will determine whether the transmission of the TECBI packet was successful in step **716**. If the transmission of the TECBI packet header was unsuccessful, the DPC **600** will record the error condition in the session summary report and will report the error to the DPC **600** manager in step **722**.

15 Column 20, lines 49–59:

If the TECBI packet header matched the TECBI packet in step **718**, the DPC **600** will set the status of the TECBI packet to indicate that it was received at the DPC **600** in step **720**. The DPC **600** will also transmit the status to the DAC **[300] 400** to indicate successful completion of the polling and transmission session in step **720**. Next, the DPC **600** will determine whether TECBIs have been transmitted from all of the DACs **[300] 400** in its region in step **724**. If all DACs **[300] 400** in the DPC's **600** region have transmitted TECBIs to the DPC **600**, the DPC **600** will compile a DAC **[300] 400** status report in step **728** before terminating the session.

Column 20, lines 60–65:

If one or more DACs **[300] 400** in the DPC's **600** region have not transmitted TECBIs to the DPC **600**, the DPC **600** will get the address of the next DAC **[300] 400** in the region in step **726**. Next, control returns to step **704** where the next DAC **[300] 400** in the DPC's **600** region will be polled as previously discussed.

THE DRAWING FIGURES HAVE BEEN
CHANGED AS FOLLOWS:

Reference number **100** added to FIG. **1**.

Reference number **300** changed to **400** in FIG. **2**.

Reference number **300** added to FIG. **3A**.

Text "D.A.C." changed to "D.P.C." in box **602** of FIG. **6**.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

The patentability of claims **26–50** is confirmed.

Claim **1** is determined to be patentable as amended.

Claims **2–25**, dependent on an amended claim, are determined to be patentable.

New claims **51–123** are added and determined to be patentable.

1. A system for central management, storage and report generation of remotely captured paper transactions from documents and receipts comprising:

one or more remote data access subsystems for capturing and sending paper transaction data and subsystem identification information comprising at least one imaging subsystem for capturing the documents and receipts and at least one data access controller for managing the capturing and sending of the transaction data;

at least one central data processing subsystem for processing, sending, verifying and storing the paper

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transaction data and the subsystem identification information comprising a management subsystem for managing the processing, sending and storing [of the] of the transaction data; and

at least one communication network for the transmission of the transaction data within and between said one or more data access subsystems and said at least one data processing subsystem, with the data access subsystem providing encrypted subsystem identification information and encrypted paper transaction data to the data processing subsystem.

51. A system as in claim 1 wherein said one or more data access subsystems also capture electronic transactions from at least one of credit cards and debit cards.

52. A system as in claim 1 further comprising at least one card interface for capturing electronic transaction data.

53. A system as in claim 1 further comprising at least one signature interface for capturing an electronic signature.

54. A system as in claim 1 further comprising at least one biometric interface for capturing biometric data.

55. A system as in claim 1 wherein the system automatically generates at least one of credit card statements, bank statements, and tax reports.

56. A system as in claim 1 wherein said at least one central data processing subsystem polls said one or more remote data access subsystems for transaction data.

57. A system as in claim 1 wherein said transaction data comprises more than one type of transaction data.

58. A system as in claim 1 further comprising at least one data collecting subsystem for collecting and sending electronic transaction data and paper transaction data, the at least one data collecting subsystem further comprising a management subsystem for managing the collecting and sending of the electronic transaction data and the paper transaction data.

59. A system as in claim 1 further comprising at least one data collecting subsystem for collecting and sending at least electronic transaction data, the at least one data collecting subsystem further comprising a management subsystem for managing the collecting and sending of the at least electronic transaction data.

60. A system as in claim 1 further comprising at least one data collecting subsystem for collecting and sending at least the paper transaction data, the at least one data collecting subsystem further comprising a management subsystem for managing the collecting and sending of at least the paper transaction data.

61. A method as in claim 26 further comprising capturing electronic transaction data.

62. A method as in claim 26 further comprising capturing an electronic signature.

63. A method as in claim 26 further comprising capturing biometric data.

64. A method as in claim 26 further comprising automatically generating at least one of credit card statements, bank statements, and tax reports.

65. A method as in claim 26 wherein said transaction data comprises more than one type of transaction data.

66. A method as in claim 26 wherein said capturing and sending occurs at a plurality of remote locations; said collecting, processing, sending and storing occurs at a plurality of central locations; and further comprising:

collecting and sending transaction data at a plurality of intermediate locations;

managing the collecting and sending of the transaction data; and

transmitting the transaction data within the intermediate locations and between the intermediate locations and the remote locations and the central locations.

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67. A method as in claim 26 wherein said capturing and sending occurs at a plurality of remote locations; said collecting, processing, sending and storing occurs at a plurality of central locations; and further comprising:

collecting and sending the paper transaction data at a plurality of intermediate locations;

managing the collecting and sending of the paper transaction data; and

transmitting the paper transaction data within the intermediate locations and between the intermediate locations and the remote locations and the central locations.

68. A method as in claim 26 wherein said capturing and sending occurs at a plurality of remote locations; said collecting, processing, sending and storing occurs at a plurality of central locations; and further comprising:

collecting and sending electronic transaction data at a plurality of intermediate locations;

managing the collecting and sending of the electronic transaction data; and

transmitting the electronic transaction data within the intermediate locations and between the intermediate locations and the remote locations and the central locations.

69. A method as in claim 26 wherein said capturing and sending occurs at a plurality of remote locations; said collecting, processing, sending and storing occurs at a plurality of central locations; and further comprising:

collecting and sending electronic transaction data and the paper transaction data at a plurality of intermediate locations;

managing the collecting and sending of the electronic transaction data and the paper transaction data; and

transmitting the paper transaction data and the electronic transaction data within the intermediate locations and between the intermediate locations and the remote locations and the central locations.

70. A communication network as in claim 42 wherein said at least one central data processing subsystem automatically generates at least one of credit card statements, bank statements, and tax reports.

71. A communication network as in claim 42 wherein said at least one central data processing subsystem polls said at least one intermediate data collecting subsystem for transaction data.

72. A communication network as in claim 42 wherein the said data comprises more than one type of transaction data.

73. A communication network as in claim 42 wherein said one or more remote data processing subsystems comprise a plurality of remote data processing subsystems and said at least one intermediate data collecting subsystem comprises a plurality of intermediate data collecting subsystems.

74. A communication network as in claim 42 wherein said one or more remote data processing subsystems comprise a plurality of remote data processing subsystems, said at least one intermediate data collecting subsystem comprises a plurality of intermediate data collecting subsystems, and said at least one central subsystem comprises a plurality of central subsystems.

75. A method as in claim 46 further comprising automatically generating at least one of credit card statements, bank statements, and tax reports.

76. A method as in claim 46 further comprising automatically generating credit card statements.

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77. A method as in claim 46 further comprising automatically generating bank statements.

78. A method as in claim 46 further comprising automatically generating tax reports.

79. A method as in claim 46 further comprising polling the remote locations.

80. A method as in claim 46 further comprising polling the intermediate locations.

81. A method as in claim 46 wherein said data comprises more than one type of transaction data.

82. A method as in claim 46 wherein said one or more remote subsystems comprise a plurality of remote subsystems and said at least one intermediate subsystem comprises a plurality of intermediate subsystems.

83. A method as in claim 46 wherein said one or more remote subsystems comprise a plurality of remote subsystems, said at least one intermediate subsystem comprises a plurality of intermediate subsystems and said at least one central subsystem comprises a plurality of central subsystems.

84. A communication network for the transmission of data within and between one or more remote data processing subsystems that provide remote data processing subsystem identification information, at least one intermediate data collecting subsystem and at least one central data processing subsystem forming a tiered architecture wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one intermediate data collecting subsystem and each of said at least one intermediate data collecting subsystem communicate with a corresponding some of said one or more remote data processing subsystems, said remote data processing subsystem including an imaging subsystem for capturing images of documents and receipts, comprising:

at least one first local area network for transmitting data within a corresponding one of said one or more remote data processing subsystems;

at least one second local area network for transmitting data within a corresponding one of said at least one intermediate data collecting subsystem;

at least one third local area network for transmitting data within a corresponding one of said at least one central data processing subsystem; and

at least one wide area network for transmitting data between said one or more remote data processing subsystems, said at least one intermediate data collecting subsystem and said at least one central data processing subsystem.

85. A communication network as in claim 84 further comprising:

at least one first modem for connecting said at least one first local area network of said one or more remote data processing subsystems to a corresponding one of said at least one second local area network through said at least one wide area network;

at least one bank of modems for connecting said at least one second local area network of said at least one intermediate data collecting subsystem to a corresponding some of said at least one first local area network of said one or more remote data processing subsystems through said at least one wide area network;

at least one first wide area network router for connecting a corresponding one of said at least one second local area network of said at least one intermediate data collecting subsystem to said at least one wide area network; and

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at least one second wide area network router for connecting a corresponding one of said at least one third local area network of said at least one central data processing subsystem to said at least one wide area network.

86. A communication network as in claim 85 wherein said at least one first wide area network and said at least one second wide area network comprise a carrier cloud which utilizes a frame relay method for transmitting the transaction data.

87. A communication network as in claim 86 wherein said at least one second local area network and said at least one third local area network further comprise a corresponding one of at least one network switch for routing data within said at least one second local area network and said at least one third local area network; and further wherein said data comprises at least one of, (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, and (b) paper transactions from documents and receipts.

88. A method for transmitting data within and between one or more remote subsystems that provide remote subsystem identification information, at least one intermediate subsystem and at least one central subsystem in a tiered manner wherein each of the central subsystems communicate with at least one intermediate subsystem and each of the intermediate subsystems communicate with at least one remote subsystems comprising:

capturing an image of documents and receipts and extracting data therefrom;

transmitting data within remote locations;

transmitting data from each remote location to corresponding intermediate locations;

transmitting data within the intermediate locations;

transmitting data from each intermediate location to corresponding central locations; and

transmitting data within the central locations.

89. A method as in claim 88 wherein said transmitting data from each remote location to corresponding intermediate locations step comprises:

connecting each remote location to a corresponding intermediate location; and

connecting the intermediate locations to corresponding remote locations.

90. A method as in claim 89 wherein said transmitting data from each intermediate location to corresponding central locations comprises:

connecting each intermediate location to an external communication network; and connecting the corresponding central locations to the external communication network.

91. A method as in claim 90 wherein said transmitting data from each intermediate location to corresponding central locations step further comprises:

packaging the transaction data into frames; and

transmitting the frames through the external communication network.

92. A method as in claim 88 wherein said data is obtained from at least one of, (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, and (b) paper transactions from documents and receipts.

93. A communication network for the transmission of data within and between one or more remote data processing subsystems, at least one intermediate data collecting sub-

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system and at least one central data processing subsystem forming a tiered architecture wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one intermediate data collecting subsystem and each of said at least one intermediate data collecting subsystem communicate with a corresponding some of said one or more remote data processing subsystems, said remote data processing subsystem including an imaging subsystem for capturing images of documents and receipts, comprising:

at least one first local area network for transmitting data within a corresponding one of said one or more remote data processing subsystems;

at least one second local area network for transmitting data within a corresponding one of said at least one intermediate data collecting subsystem;

at least one third local area network for transmitting data within a corresponding one of said at least one central data processing subsystem; and

at least one wide area network for transmitting data between said one or more remote data processing subsystems, said at least one intermediate data collecting subsystem and said at least one central data processing subsystem;

wherein the at least one intermediate data collecting subsystem calls the one or more remote data processing subsystems.

94. A communication network as in claim 93 further comprising:

at least one first modem for connecting said at least one first local area network of said one or more remote data processing subsystems to a corresponding one of said at least one second local area network through said at least one wide area network;

at least one bank of modems for connecting said at least one second local area network of said at least one intermediate data collecting subsystem to a corresponding some of said at least one first local area network of said one or more remote data processing subsystems through said at least one wide area network;

at least one first wide area network router for connecting a corresponding one of said at least one second local area network of said at least one intermediate data collecting subsystem to said at least one wide area network; and

at least one second wide area network router for connecting a corresponding one of said at least one third local area network of said at least one central subsystem to said at least one wide area network.

95. A communication network as in claim 94 wherein said at least one first wide area network and said at least one second wide area network comprise a carrier cloud which utilizes a frame relay method for transmitting the data.

96. A communication network as in claim 95 wherein said at least one second local area network and said at least one third local area network further comprise a corresponding one of at least one network switch for routing data within said at least one second local area network and said at least one third local area network; and further wherein said data comprises at least one of, (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, and (b) paper transactions from documents and receipts.

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97. A method for transmitting data within and between one or more remote subsystems, at least one intermediate subsystem and at least one central subsystem in a tiered manner wherein each of the central subsystems communicate with at least one intermediate subsystem and each of the intermediate subsystems communicate with at least one remote subsystems comprising:

capturing an image of documents and receipts and extracting data therefrom;

transmitting data within remote locations;

transmitting data from each remote location to corresponding intermediate locations;

transmitting data within the intermediate locations;

the intermediate locations calling the remote locations;

transmitting data from each intermediate location to corresponding central locations; and

transmitting data within the central locations.

98. A method as in claim 97 wherein said transmitting data from each remote location to corresponding intermediate locations step comprises:

connecting each remote location to a corresponding intermediate location; and

connecting the intermediate locations to corresponding remote locations.

99. A method as in claim 98 wherein said transmitting data from each intermediate location to corresponding central locations comprises:

connecting each intermediate location to an external communication network; and

connecting the corresponding central locations to the external communication network.

100. A method as in claim 99 wherein said transmitting data from each intermediate location to corresponding central locations further comprises:

packaging the data into frames; and

transmitting the frames through the external communication network.

101. A method as in claim 97 wherein said data is obtained from at least one of, (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, and (b) paper transactions from documents and receipts.

102. A communication network for the transmission of data comprising data from credit card transactions within and between one or more remote data processing subsystems, at least one intermediate data collecting subsystem and at least one central data processing subsystem forming a tiered architecture wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one intermediate data collecting subsystem and each of said at least one data collecting subsystem communicate with a corresponding some of said one or more remote data processing subsystems, said remote data processing subsystem including an imaging subsystem for capturing images of documents and receipts, comprising:

at least one first local area network that transmits data comprising data from credit card transactions within a corresponding one of said one or more remote data processing subsystems;

at least one second local area network that transmits data comprising data from credit card transactions within a corresponding one of said at least one intermediate data collecting subsystem;

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at least one third local area network that transmits data comprising data from credit card transactions within a corresponding one of said at least one central data processing subsystem; and

at least one wide area network that transmits data comprising data from credit card transactions between said one or more remote data processing subsystems, said at least one intermediate data collecting subsystem and said at least one central data processing subsystem.

103. A communication network as in claim 102 further comprising:

at least one first modem for connecting said at least one first local area network of said one or more remote data processing subsystems to a corresponding one of said at least one second local area network through said at least one wide area network;

at least one bank of modems for connecting said at least one second local area network of said at least one intermediate subsystem to a corresponding some of said at least one first local area network of said one or more remote data processing subsystems through said at least one wide area network;

at least one first wide area network router for connecting a corresponding one of said at least one second local area network of said at least one intermediate data collecting subsystem to said at least one wide area network; and

at least one second wide area network router for connecting a corresponding one of said at least one third local area network of said at least one central data processing subsystem to said at least one wide area network.

104. A communication network as in claim 103 wherein said at least one first wide area network and said at least one second wide area network comprise a carrier cloud which utilizes a frame relay method for transmitting the data.

105. A communication network as in claim 104 wherein said at least one second local area network and said at least one third local area network further comprise a corresponding one of at least one network switch for routing data within said at least one second local area network and said at least one third local area network; and wherein said transmitted data further comprises data from at least one of, (a) electronic transactions from smart cards and debit cards, signature data or biometric data, or (b) paper transactions from documents and receipts.

106. A method for transmitting data comprising data from credit card transactions within and between one or more remote subsystems, at least one intermediate subsystem and at least one central subsystem in a tiered manner wherein each of the central subsystems communicate with at least one intermediate subsystem and each of the intermediate subsystems communicate with at least one remote subsystems, comprising:

capturing an image of documents and receipts and extracting data comprising data from credit card transactions therefrom;

transmitting data comprising data from credit card transactions within remote locations;

transmitting data comprising data from credit card transactions from each remote location to corresponding intermediate locations;

transmitting data comprising data from credit card transactions within the intermediate locations;

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transmitting data comprising data from credit card transactions from each intermediate location to corresponding central locations; and

transmitting data comprising data from credit card transactions within the central locations.

107. A method as in claim 106 wherein said transmitting data from each remote location to corresponding intermediate locations step comprises:

connecting each remote location to a corresponding intermediate location; and

connecting the intermediate locations to corresponding remote locations.

108. A method as in claim 107 wherein said transmitting data from each intermediate location to corresponding central locations comprises:

connecting each intermediate location to an external communication network; and

connecting the corresponding central locations to the external communication network.

109. A method as in claim 108 wherein said transmitting data from each intermediate location to corresponding central locations step further comprises:

packaging the data into frames; and

transmitting the frames through the external communication network.

110. A communication network for the transmission of data comprising data from internet transactions within and between one or more remote data processing subsystems, at least one intermediate data collecting subsystem and at least one central data processing subsystem forming a tiered architecture wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one intermediate data collecting subsystem and each of said at least one intermediate data collecting subsystem communicate with a corresponding some of said one or more remote data processing subsystems, said remote data processing subsystem including an imaging subsystem for capturing images of documents and receipts, comprising:

at least one first local area network that transmits data comprising data from internet transactions within a corresponding one of said one or more remote data processing subsystems;

at least one second local area network that transmits data comprising data from internet transactions within a corresponding one of said at least one intermediate data collecting subsystem;

at least one third local area network that transmits data comprising data from internet transactions within a corresponding one of said at least one central data processing subsystem; and

at least one wide area network that transmits data comprising data from internet transactions between said one or more remote data processing subsystems, said at least one intermediate data collecting subsystem and said at least one central data processing subsystem.

111. A communication network as in claim 110 further comprising:

at least one first modem for connecting said at least one first local area network of said one or more remote data processing subsystems to a corresponding one of said at least one second local area network through said at least one wide area network;

at least one bank of modems for connecting said at least one second local area network of said at least one

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intermediate data collecting subsystem to a corresponding some of said at least one first local area network of said one or more remote data processing subsystems through said at least one wide area network;

at least one first wide area network router for connecting a corresponding one of said at least one second local area network of said at least one intermediate data collecting subsystem to said at least one wide area network; and

at least one second wide area network router for connecting a corresponding one of said at least one third local area network of said at least one central data processing subsystem to said at least one wide area network.

112. A communication network as in claim 111 wherein said at least one first wide area network and said at least one second wide area network comprise a carrier cloud which utilizes a frame relay method for transmitting the data.

113. A communication network as in claim 112 wherein said at least one second local area network and said at least one third local area network further comprise a corresponding one of at least one network switch for routing data within said at least one second local area network and said at least one third local area network; and wherein said transmitted data further comprises data from at least one of, (a) electronic transactions from credit cards, smart cards and debit cards, signature data or biometric data, and (b) paper transactions from documents and receipts.

114. A method for transmitting data comprising data from internet transactions within and between one or more remote subsystems, at least one intermediate subsystem and at least one central subsystem in a tiered manner wherein each of the central subsystems communicate with at least one intermediate subsystem and each of the intermediate subsystems communicate with at least one remote subsystems comprising:

capturing an image of documents and receipts and extracting data comprising data from internet transactions therefrom;

transmitting data comprising data from internet transactions within remote locations;

transmitting data comprising data from internet transactions from each remote location to corresponding intermediate locations;

transmitting data comprising data from internet transactions within the intermediate locations;

transmitting data comprising data from internet transactions from each intermediate location to corresponding central locations; and

transmitting data comprising data from internet transactions within the central locations.

115. A method as in claim 114 wherein said transmitting data from each remote location to corresponding intermediate locations comprises:

connecting each remote location to a corresponding intermediate location; and

connecting the intermediate locations to corresponding remote locations.

116. A method as in claim 115 wherein said transmitting data from each intermediate location to corresponding central locations comprises:

connecting each intermediate location to an external communication network; and

connecting the corresponding central locations to the external communication network.

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117. A method as in claim 116 wherein said transmitting data from each intermediate location to corresponding central locations step further comprises:

packaging the data into frames; and

transmitting the frames through the external communication network.

118. A communication network for the transmission of data in a secure manner comprising:

at least one remote data processing subsystem;

at least one intermediate data collecting subsystem;

at least one central data processing subsystem;

said at least one remote data processing subsystem, said at least one intermediate data collecting subsystem, and said at least one central data processing subsystem forming a tiered architecture;

said data being transmitted in a secure manner within and between said at least one remote data processing subsystem, said at least one intermediate data collecting subsystem, and said at least one central data processing subsystem;

wherein each of said at least one central data processing subsystem communicate with a corresponding some of said at least one intermediate data collecting subsystem and each of said at least one intermediate data collecting subsystem communicate with a corresponding some of said at least one remote data processing subsystem;

said remote data processing subsystem including an imaging subsystem for capturing images of documents and receipts;

said communication network further including:

at least one first local area network for transmitting data within a corresponding one of said at least one remote data processing subsystem;

at least one second local area network for transmitting data within a corresponding one of said at least one intermediate data collecting subsystem;

at least one third local area network for transmitting data within a corresponding one of said at least one central data processing subsystem; and

at least one wide area network for transmitting data between said at least one remote data processing subsystem, said at least one intermediate data collecting subsystem and said at least one central data processing subsystem.

119. A communication network as in claim 118 wherein said at least one remote data processing subsystem uniquely identifies the remote data processing subsystem used by a customer.

120. A communication network as in claim 118 wherein said at least one remote data processing subsystem uniquely identifies the remote data processing subsystem used by a customer and at least one of, encrypts and tags the data.

121. A method for transmitting data in a secure manner within and between at least one remote subsystem, at least one intermediate subsystem and at least one central subsystem, said method comprising:

arranging said at least one remote subsystem, said at least one intermediate subsystem, and said at least one central subsystem in a tiered manner;

each of said at least one central subsystem communicating with said at least one intermediate subsystem;

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each of said at least one intermediate subsystem commu-
 nicating with said at least one remote subsystem;
 capturing an image of documents and receipts and
 extracting data therefrom;
 transmitting data within remote locations;
 transmitting data from each remote location to corre-
 sponding intermediate locations;
 transmitting data within the intermediate locations;
 transmitting data from each intermediate location to
 corresponding central locations; and

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transmitting data within the central locations.

122. The method as in claim 121 further comprising
 uniquely identifying the at least one remote subsystem used
 by a customer.

123. The method as in claim 121 further comprising:
 uniquely identifying the at least one remote subsystem
 used by a customer; and
 at least one of, encrypting and tagging data.

* * * * *



US005910988C1

(12) **EX PARTE REEXAMINATION CERTIFICATE** (5957th)
United States Patent
Ballard

(10) **Number:** **US 5,910,988 C1**
(45) **Certificate Issued:** **Oct. 23, 2007**

(54) **REMOTE IMAGE CAPTURE WITH
CENTRALIZED PROCESSING AND
STORAGE**

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Reexamination Request:

No. 90/007,829, Nov. 25, 2005

Reexamination Certificate for:

Patent No.: **5,910,988**
Issued: **Jun. 8, 1999**
Appl. No.: **08/917,761**
Filed: **Aug. 27, 1997**

Certificate of Correction issued Oct. 12, 1999.

(51) **Int. Cl.**
G06K 9/00 (2006.01)
G06K 17/00 (2006.01)
G06Q 20/00 (2006.01)
H04L 9/00 (2006.01)

(52) **U.S. Cl.** **705/75**
(58) **Field of Classification Search** None
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,205,780 A	6/1980	Burns et al.
4,264,808 A	4/1981	Owens et al.
4,268,715 A	5/1981	Atalla
4,321,672 A	3/1982	Braun et al.
4,404,649 A	9/1983	Nunley et al.
4,652,990 A	3/1987	Pailen et al.
4,675,815 A	6/1987	Kuroki et al.
4,723,283 A	2/1988	Nagasawa et al.
4,745,267 A	5/1988	Davis et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CA	2131667	6/1995
EP	0593209 A	4/1994
EP	0661654 A2	7/1995
WO	WO 90/04837 A	5/1990
WO	WO 91/06058 A	5/1991
WO	WO 97/07468	2/1997
WO	WO 97/22060	6/1997
WO	WO 98/47100 A	10/1998
WO	WO 98/58356 A	12/1998

OTHER PUBLICATIONS

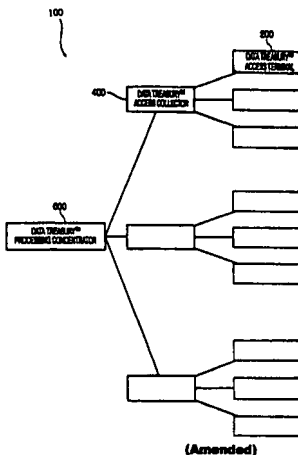
"About FSTC: FSTC History," FSTC, 2003.
American National Standard For Financial Image Inter-
change ("ANSI"): Architecture, Overview and System
Design Specification, X9.xx 0.7, dated: 1994.
Anderson, "Electronic Check and Check Law," letter to
Robert Ballen, Apr. 8, 1996.

(Continued)

Primary Examiner—Peter C. English

(57) **ABSTRACT**

A system for remote data acquisition and centralized processing and storage is disclosed called the DataTreasury™ System. The DataTreasury™ System provides comprehensive support for the processing of documents and electronic data associated with different applications including sale, business, banking and general consumer transactions. The system retrieves transaction data at one or more remote locations, encrypts the data, transmits the encrypted data to a central location, transforms the data to a usable form, performs identification verification using signature data and biometric data, generates informative reports from the data and transmits the informative reports to the remote location(s). The DataTreasury™ System has many advantageous features which work together to provide high performance, security, reliability, fault tolerance and low cost. First, the network architecture facilitates secure communication between the remote location(s) and the central processing facility. A dynamic address assignment algorithm performs load balancing among the system's servers for faster performance and higher utilization. Finally, a partitioning scheme improves the error correction process.



U.S. PATENT DOCUMENTS

4,748,557 A	5/1988	Tamada et al.	5,633,930 A	5/1997	Davis et al.
4,755,940 A	7/1988	Brachtel et al.	5,642,419 A	6/1997	Rosen
4,757,543 A	7/1988	Tamada et al.	5,659,616 A	8/1997	Sudia
4,771,460 A	9/1988	Tamada et al.	5,668,897 A	9/1997	Stolfo
4,858,121 A	8/1989	Barber et al.	5,682,549 A	10/1997	Tanaka et al.
4,882,779 A	11/1989	Rahtgen	5,708,810 A	1/1998	Kern et al.
4,910,774 A	3/1990	Barakat	5,754,673 A	5/1998	Brooks
4,922,503 A	5/1990	Leone	5,760,916 A	6/1998	Dellert et al.
4,941,125 A	7/1990	Boyne	5,784,610 A	7/1998	Copeland, III et al.
4,961,142 A	10/1990	Elliott et al.	5,790,260 A	8/1998	Meyers
4,962,531 A	10/1990	Sipman et al.	5,832,463 A	11/1998	Funk
4,977,595 A	12/1990	Ohta et al.	5,832,464 A	11/1998	Houvener et al.
4,985,921 A	1/1991	Schwartz	5,857,034 A	1/1999	Tsuchiya et al.
5,003,594 A	3/1991	Shinagawa	5,870,725 A	2/1999	Bellinger et al.
5,014,311 A	5/1991	Schrenk	5,884,271 A	3/1999	Pitroda
5,016,277 A	5/1991	Hamilton	5,926,288 A	7/1999	Dellert et al.
5,053,607 A	10/1991	Carlson et al.	5,930,778 A	7/1999	Geer
5,054,096 A	10/1991	Beizer	5,973,731 A	10/1999	Schwab
5,081,680 A	1/1992	Bennett	6,032,137 A	2/2000	Ballard
5,123,047 A	6/1992	Rosenow	6,108,104 A	8/2000	Tesavis
5,159,548 A	10/1992	Caslayka	6,115,509 A	9/2000	Yeskel
5,163,098 A	11/1992	Dahbura	6,145,738 A	11/2000	Stinson et al.
5,168,444 A	12/1992	Cukor et al.			
5,170,466 A	12/1992	Rogan et al.			
5,175,766 A	12/1992	Hamilton			
5,185,798 A	2/1993	Hamada et al.			
5,195,133 A	3/1993	Kapp et al.			
5,200,993 A	4/1993	Wheeler			
5,214,697 A	5/1993	Saito			
5,233,656 A	8/1993	Langrand et al.			
5,235,433 A	8/1993	Clarkson et al.			
5,241,600 A	8/1993	Hillis			
5,256,863 A	10/1993	Ferguson et al.			
5,259,025 A	11/1993	Monroe et al.			
5,274,567 A	12/1993	Kallin			
5,287,497 A	2/1994	Behera			
5,317,637 A	5/1994	Pichlmaier et al.			
5,321,816 A	6/1994	Rogan et al.			
5,326,959 A	7/1994	Perazza			
5,337,358 A	8/1994	Axelrod et al.			
5,341,428 A	8/1994	Schatz			
5,343,529 A	8/1994	Goldfine et al.			
5,373,550 A	12/1994	Campbell et al.			
5,396,558 A	3/1995	Ishiguro et al.			
5,408,531 A	4/1995	Nakajima			
5,440,634 A	8/1995	Jones et al.			
5,446,796 A	8/1995	Ishiguro et al.			
5,454,575 A	10/1995	Del Buono			
5,473,143 A	12/1995	Vak et al.			
5,484,988 A	1/1996	Hills et al.			
5,502,765 A	3/1996	Ishiguro et al.			
5,506,691 A	4/1996	Bednar			
5,524,073 A	6/1996	Stambler			
5,528,705 A	6/1996	Reasoner, Jr. et al.			
5,539,822 A	7/1996	Lett			
5,539,825 A	7/1996	Akiyama et al.			
5,544,043 A	8/1996	Miki			
5,544,255 A	8/1996	Smithies et al.			
5,557,518 A	9/1996	Rosen			
5,577,121 A	11/1996	Davis et al.			
5,596,642 A	1/1997	Davis et al.			
5,602,936 A	2/1997	Green et al.			
5,604,802 A	2/1997	Holloway			
5,608,800 A	3/1997	Hoffmann et al.			
5,615,269 A	3/1997	Micali			
5,621,796 A	4/1997	Davis et al.			
5,621,797 A	4/1997	Rosen			
5,623,547 A	4/1997	Jones et al.			
5,625,694 A	4/1997	Lee et al.			
5,629,981 A	5/1997	Nerlikar			

OTHER PUBLICATIONS

Ansi6v4[1].ppt—PowerPoint Presentation—FSTC—Financial Services Technology Consortium, Sep. 30 to Oct. 1, 1996.

"AT&T Global offers one-step imaging," American Banker, vol. 159, No. 39, p. 14A(1), Feb. 28, 1994.

"AT&T Partners with Fiserv to Form Single Source Provider for Leading Image Item Processing Solutions," PR Newswire, at 913CL011, Sep. 13, 1995.

ATZEL, (email to Hambro, Oct. 9, 2001).

"At Your Service . . .," Federal Reserve Bank of Kansas City, 1995.

"Baby boomers, Generation X are both addicted to ATM," AT&T News Release, Feb. 28, 1995.

"BancTec Inc. has received another order for its image statement processing product (First National Bank of Chicago orders)," Nov. 13, 1991.

BancTec's Proposal to the Federal Reserve Bank of Boston, "Technical Volume: Check Image Processing Archive and Retrieval System," Jul. 8, 1994, JPMC-BANCT 002960-003299 and JPMC-BANCT 001017-001144.

Banet, B., "Document image processing, 1991: The imaging edge," Seybold Rep. on Publishing Sys., vol. 20, No. 19, Jun. 24, 1991.

"Bank Automation News," Finance & Banking Newsletter, vol. 9, Iss. 6, Apr. 2, 1997.

"Banks to Check Out Imaging (Solutions)," Communications Week International, 1992, No. 093, p. 46, Oct. 19, 1992.

Barhel, M., "NCR and Unisys exchange check images in a pivotal test (computer makers test compatibility of check imaging systems)," American Banker, vol. 158, No. 67, p. 3(1), Apr. 8, 1993.

Barthel, Matt, "Unisys, BancTec offer PC-based imaging: high-tech check statements produced; community banks are market," American Banker, vol. 157, No. 195, p. 3(1), Oct. 8, 1992.

Bartholomew, D., "More Checks on Checks—Bank of America plan to convert to an IBM imaging system that screens checks faster and more thoroughly (spotlight)," Informationweek, 1994, No. 504, p. 32, Dec. 5, 1994.

- "Bill Processing: US West Re-Engineers with \$7.2 Million Unisys Image-based Remittance Processing Solution," *EDGE*, on & about AT&T, vol. 10, No. 378, Oct. 23, 1995.
- Blankenhorn, D., "Cincinnati Bell and Unisys go into bank imaging," *Newsbytes*, p. NEW10240020, Oct. 24, 1990.
- Block, V., "USAA Federal gets imaging system," *American Banker*, vol. 159, No. 49, p. 6A(1), Mar. 14, 1994.
- Booker, E., "Bank to test scalable NCR imaging for check processing," *Computerworld*, p. 66, Dec. 14, 1992.
- Brown, J., "Imaging may dramatically alter bank data networks," *Network World*, vol. 6, No. 19, p. 6(2), May 15, 1989.
- Buchok, J., "OCR gets processing credit," *Computing Canada*, vol. 19, No. 26, Dec. 20, 1993.
- "Chase's New Image," *Information Week*, No. 517, at 14, Mar. 6, 1995.
- Check[1].ptt—PowerPoint Presentation—Current Check Flow, Dec. 12, 1995.
- "Check Image Exchange Project (a.k.a. Interbank Check Imaging Project)," at www.fstc.org/projects/imaging/index.cfm.
- "Check-Image Interchange Inches Closer," *Bank Technology News*, vol. 10, No. 1, p. 19+, Jan. 1997.
- "Checks & Checking: Check Imaging at the Teller Station (Alliance Integration & Services Introduces Imaging System that can be Installed at Bank Teller Stations)," *Bank Technology News*, vol. 9, No. 10, at 37, Oct. 1996.
- "Chemical Chooses IBM Check Imaging (Chemical Banking Corp to install IBM's Image Plus High Performance Transaction System to process 9 mil checks daily)," *Bank Technology News*, vol. 8, No. 9, p. 11, Sep. 1995.
- "Cincinnati Bell: CBIS & Unisys in Major Imaging Agreement," *EDGE*, on & about AT&T, vol. 5, No. 118, Oct. 29, 1990.
- "Cincinnati Bell Information Systems (Integrator Briefs)," *Computer Reseller News*, 1993, No. 534, p. 129, Jul. 12, 1993.
- Complaint in *DataTreasury Corp. v. Bank One Corp.*, Cause No. 3-03CV0059-K, In the United States District Court for the Northern District of Texas, Dallas Division.
- Complaint in *DataTreasury Corp. v. First Data Corporation, et al.*, Cause No. 502CV094, In the United States District Court for the Eastern District of Texas, Texarkana Division.
- Complaint in *DataTreasury Corp. v. RDM Corp., a.k.a. Research Development and Manufacturing Corp.*, Cause No. 3-02CV2641-M, in the United States District Court for the Northern District of Texas, Dallas Division.
- Complaint in *DataTreasury Corp. v. Ingenico S.A., et al.*, Cause No. 502CV095, In the United States District Court for the Eastern District of Texas, Texarkana Division.
- Complaint in *DataTreasury Corp. v. J.P. Morgan Chase & Co., et al.*, Cause No. 502CV124, In the United States District Court for the Eastern District of Texas, Texarkana Division.
- "Computerm Announces Remote Check Imaging Support for VMC 8200 High-Speed Channel Extension System," *PR Newswire* at 408LAM012, Apr. 8, 1996.
- "Computerm Eases Remote Imaging," *American Banker*, vol. 158, No. 156, at 13A(1), Aug. 16, 1993.
- "Computerm Enables Boatmen's Bancshares to Execute Remote Check Imaging," *PR Newswire* at 408LAM013, Apr. 8, 1996.
- Cooney, M., "Frame relay comes to Computer extenders," *Network World*, Jun. 28, 1993.
- Cortese, Amy, "Image Yields Interest at Banks (Collaboration Results in Imaging System to Automate Check Processing)," *ComputerWorld*, at 6, Mar. 19, 1990.
- Costanzo, C., "As Banks Cling to the Conventional, Check-Imaging Struts Its Stuff," *Bank Technology News*, p. 1, Mar. 1994.
- Crockett, B., "Systematics to use deposited-check imaging; installation at firm's N.J. center would be the first to out-source," *American Banker*, vol. 158, No. 95, p. 3(1), May 19, 1993.
- Crone, "Reducing Data Processing Costs with a Remote Item Processing System," *Bank Administration*, Oct. 1986, pp. 44-46.
- Daly, B., "Unisys Acquires Visual Impact Solution for Check Processing, Archive and Image Delivery," *Business Wire*, p. 9181204, Sep. 18, 1997.
- Daly, B., "Unisys provides services to Bank of the West to support retail banking," *Business Wire*, p. 9180098, Sep. 18, 1995.
- "Data Compression Over Frame Relay Implementation Agreement FRF9," Jan. 22, 1996, downloaded at <http://www.frforum.com/5000/Approved/FRF9/frf9.pdf>.
- "Defendants' Final Invalidity Construction Pursuant to Fourth Amended Docket Control Order and Patent Local Rules 3-3 and 3-6," pp. 1-21, Civil Action No. 5:03-CV-039 (DF), Dec. 13, 2005.
- "Defendants Ingenico S.A. and Ingenico, Inc.'s Preliminary Invalidity Contentions," in *DataTreasury Corp. v. Ingenico S.A., et al.*, Cause No. 502CV095, In the United States District Court of Texas, Texarkana Division.
- "Defendants' Preliminary Invalidity Construction Pursuant to Patent Local Rules 3-3 and 3-4," in *DataTreasury Corp. v. First Data Corporation, et al.*, Cause No. 502CV094, In the United States District Court of Texas, Texarkana Division.
- Depompa, Barbara, "IBM Adds Image-Based Check Processing," *MIS Week*, vol. 11, No. 12, at 12(1), Mar. 19, 1990.
- Description of the IBM "3174 Network Processor," Oct. 7, 1992, found on the web at the URL: <http://ecc400.com/ibm/controllers/314prod.htm> and <http://www.commercecomputer.com/3174.html>.
- Dinan, Painter & Rodite, "ImagePlus High Performance Transaction System," *IBM Systems Journal*, vol. 20, No. 3, 1990, pp. 421-434.
- Document Image Report, IntraFed Touts Remote Services, vol. 6, Issue 25, Dec. 11, 1996.
- Dowell, "Security," email to fstc-image, Apr. 27, 1996.
- Durham, D., "Broadway & Seymour to Invest in Two Strategic Initiatives," *Business Ire*, p. 03151248, Mar. 15, 1995.
- eCheck: Homepage, 2003.
- Electronic Imaging '88—Advanced Printing of Paper Summaries, vol. 1, Anaheim, California, Mar. 1988.
- Electronic Imaging '88—Advanced Printing of Paper Summaries, vol. 1, Oct. 3-6, 1988, Boston, MA.
- E-mail of May 10, 2006 titled "USPTO Reexam. C.N 90/007,829, Requested Date: Nov. 25, 2005" from "PT" <admin@patentrakker.com>.
- "Entrust Encryption and Digital Signature Explained," date unknown.

- Evankovitch, S., "Computer earns MCI 'Level 1' approval; Computer's industry exclusive native Frame Relay interface passes test for interoperability with MCI's Frame Relay services," *Business Wire*, Apr. 12, 1995.
- Evans, J., "The end of the paper wait: document imaging (includes related articles on successful document imaging implementations at Borgess Medical Center, the Huntington Internal Medicine Group, the University of Alabama Health Services Foundation and Quest Diagnostic) (Industry Trend or Event)," *Health Management Technology*, vol. 18, No. 2, p. 16(5), Feb. 1997.
- Fassett, W., "Impact of Imaging," *Bank Management*, vol. 67, No. 11, p. 56, Nov. 1991.
- Federal Reserve Bank of Boston, "Request For Proposal For Check Image Processing And Archival And Retrieval Systems For The Federal Reserve," Apr. 21, 1994, JPMC 152558-152803.
- Feighery, M., "NCR demonstrates systems for Insurance and accounting industry," *AT&T News Release*, May 31, 1992.
- Feighery, M. and Bochonko, K., "NCR demonstrates full line of retail products at NRF conference," *AT&T News Release*, Jan. 18, 1993.
- FileNet Product Brochure, "Introducing the Age of Document-Image Processing," *The PC Connection*, and *Wide-Area Image Communication and System Networking*, 1998, 14 pages.
- "Financial EDI over the Internet," *Bank of America*, 1996.
- Financial Services Technology Consortium ("FSTC") Interbank Check Imaging Project White Paper, dated: Jun. 20, 1994.
- Fisher, M., "IBM, Customers continue work on document image processor," *Datamation*, vol. 34, No. 19, Oct. 1, 1988.
- Fitch, "Digital image systems speed return items, exceptions," *Corporate Cashflow*, May 1996.
- Fitch, T., "Check image capture speeds up positive pay reconciliation," *Corporate Cashflow*, Feb. 1995.
- Friedman, D., "Nixdorf Computer Introduced DCPA Image—A Sophisticated Document Image Processing System With Unique Capabilities," *PR Newswire*, Aug. 15, 1989.
- FSTC Check Image Interchange Project, dated: May 25, 1995.
- FSTC Check Image Interchange Project Pilot Phase 1A: Preliminary Architecture and Project Plan, dated: Jun. 30, 1995.
- "FSTC Check Image Quality Subproject," date unknown.
- FSTC Compilation of ANSI X9.46, Data Structure Reference, dated: Jul. 31, 1995.
- "FSTC Demonstrate Interbank Check Image Pilot; Multi-Vendor System Speeds check Clearing, Cuts Fraud—FSTC Pilot Lays Foundation for Paper Check Truncation," at www.fstc.org/projects/imaging/public/information.cfm, Dec. 12, 1995.
- "FSTC Image Exchange," May 21, 1996.
- FSTC Image Quality Functional Requirements, dated: Jul. 26, 1995.
- FSTC Interbank Check Imaging: Unisys Monthly Status Report, Jun. 26, 1996.
- "FSTC Interbank check Imaging: Unisys Monthly Status Report," Jul. 22, 1996.
- FSTC Pilot Overview, dated: Apr. 3, 1995.
- "FSTC: Projects—Check Image Exchange Project—Project Participants," at www.fstc.org/projects/imaging/participants.cfm.
- FSTC Projects: The Bank Internet Payment System (BIPS): Leading the Way to Electronic Commerce, FSTC, 2003.
- Garvey, M., "Check Processing Goes Digital—Chase Manhattan Bank to store checks electronically, saving time and money," *Informationweek*, 1997, No. 648, p. 20, Sep. 15, 1997.
- Gawen, "PC Based Document Image Processing and Signature Verification," *Proceedings of the Information & Image Management Conference*, 1991, pp. 389-391.
- "Global Concepts—Payment Systems Consulting," at www.global-concepts.com/image_archive.htm.
- Griffith, M. and Mazzola, J., "National City, NCR form strategic imaging partnership," *AT&T News Release*, Nov. 9, 1992.
- Gullo, K., "NCR, Unisys plan check imaging for IBM Systems," *American Banker*, vol. 156, No. 249, p. 1(2), Dec. 30, 1991.
- Haig, J., "Unisys integrates retail/wholesale lockbox solution for remittance processors," *Business Wire*, p. 03251075, Mar. 25, 1997.
- Haig, J., "Unisys solution will support check processing at Vermont Federal," *Business Wire*, p. 5201185, May 20, 1996.
- Helm, Sylvia, "Banks check into image processing," *Computers in Banking*, vol. 7, No. 3, p. 25(7), Mar. 1, 1990.
- Helm, S., "Who's doing what in image processing (includes definition of image processing)," *ABA Banking Journal*, vol. 83, No. 1, p. 31(3), January, 1991.
- "High Volume Data Capture Sans Paper" in *Bank Systems Technology*, May, 1996, p. 35.
- Homa, "MICR Technology Helps Eliminate POS Check Fraud," *Chain Store Age Executive*, Sep. 1991.
- Horine, J., "AT&T and Fiserv team to offer imaging solutions," Sep. 13, 1995.
- "Huntington BancShares in the Forefront of Technology with Purchase of Unisys Check Imaging System," *PR Newswire*, p. 1, Oct. 11, 1989.
- IBM Electronic Payment Systems Support/Check Processing Control Systems: Progress Reference and Operations Manual, dated: June, 1986.
- "IBM FSTC Pilot Status".
- IBM Product Announcement 190-040, (IBM 3898 Image Processor), dated: Mar. 13, 1990.
- IBM's Proposal to the Federal Reserve Bank of Boston, Nov. 7, 1991, "IBM Proposal For FRB Phase Four: Image Archive System," JPMC 279955-280128, Yeskel Exhibit 1.
- IBM Systems Journal, vol. 29, No. 3, 1990 (entire journal).
- "IBM X9.46 Pilot Status—Summary," date unknown.
- "Ibnamed, A Load Balancing Name Server Written in Perl," Sep. 17, 1995, located at the web at URL www.stanford.edu/~schemers/docs/Ibnamed/Ibnamed.html.
- "Ibnamed, A Load Balancing Name Server Written in Perl," Oct. 15, 2002, found on the web at the URL www.stanford.edu/~schemers/docs/Ibnamed/Ibnamed.html.
- "ICI Project Security Work Session," May 10, 1996.
- Image Archive Forum Flow Nos. 1-13, Sep. 1997.
- Image Archive Forum Methodology and Value, Sep. 19, 1997.
- Image Archive Forum, "Payment Systems Task Force Economic Framework," Jan. 27, 1998.
- ImagePlus brochure by IBM, 1991.
- "Image Processing Survival Guide, vol. 11: Sure-Fire Strategies for Implementing Image Remittance," *Philips Business Information, Inc.*, 1996.

- "Image systems garner NOAC spotlight (American Bankers' Association's National Operations and Automation Conference)," *Computer in Banking*, vol. 6, No. 7, p. 8(4), Jul., 1989.
- "Imaging products. Check Processing—IBM's ImagePlus High Performance Transaction System," *United States Banker*, vol. 100, No. 8, p. 23(3), Aug. 1990.
- "Imaging vendors shape processing," *Banking Management*, vol. 69, No. 4, p. 29, Apr. 1993.
- Imwalle, C. and Pratt, J., "250 U.S. banks to use NCR, Cincinnati Bell financial systems," *AT&T News Release*, May 4, 1993.
- "Industry Security Leader Racial Supports Visa/Mastercard Proposal for Internet," *PR Newswire*, Apr. 17, 1996.
- INSPEC search with abstracts.
- "Item processing leaps ahead with VisualImpact and Windows NT (Sponsored Supplement: Unlock Your Bank Office with Microsoft Back Office)," *US Banker*, vol. 105, No. 6, p. S4(3), Jun. 1995.
- Janusky, "FSTC Interbank Check Imaging," Apr. 29, 1996.
- Janusky, "FSTC Interbank Check Imaging," May 22, 1996.
- Joint Marketing & Referral Agreement Between ACS Image Solutions, Inc. and JPMorgan Chase Bank.
- Jones, J., "Broadway & Seymour Announces Client/Server Product for Item and Image Processing," *Business Wire*, p. 03201186, Mar. 20, 1995.
- Jones, J., "Broadway & Seymour announces new VISUAL-IMPACT release," *Business Wire*, p. 3291274, Mar. 29, 1996.
- Klein, M., "Terminal Data to supply NCR with document microfilmers," *AT&T News Release*, Oct. 13, 1993.
- Kraynak Maxfield, J., "Signet Processes Over 2,500 Documents/Hour in Unisys Check Imaging Tests," *PR Newswire*, p. 0409P8428, Apr. 9, 1991.
- Kriskern, J., "Engineering a visionary solution," *Datamation*, vol. 36, No. 8, Apr. 15, 1990.
- Kutler, J., "AT&T, IBM, Unisys join bank research group," *American Banker*, vol. 159, No. 124, p. 14(1), Jun. 29, 1994.
- Lubetkin, S., "Unisys enters image processing market with two new products and major financial and industrial customers (product announcement)," *PR Newswire*, p. 1011PH009, Oct. 11, 1989.
- Mantel, K., "Notes Gets in the Picture," *Datamation*, Jul. 15, 1992.
- Marjanovic, "Payment Groups Square Off Over Electronic Check Plan," *American Banker*, date unknown.
- Marjanovic, S., "Mich. National streamlines imaging with IBM system (check imaging)," *American Banker*, vol. 160, No. 176, Sep. 13, 1995.
- Marjanovic, Steven, "Home Loan Bank to Offer Check-Image Statements to Members' Customers," *American Banker*, vol. 159, No. 248, at 14(1), Dec. 29, 1994.
- Mazzola, J., "NCR and NYCH to develop image-based check notification system," *AT&T News Release*, Aug. 24, 1992.
- Mazzola, J. and Hendrickson, L., "NCR deposit processing technology speeds banking operations," *AT&T News Release*, Dec. 7, 1992.
- Mazzola, J. and Hendrickson, L., "Wachovia tests NCR's new imaging item processing system," *AT&T News Release*, Nov. 15, 1991.
- Mazzola, J., Hendrickson, L. and Gatati, G., "NCR signs DSI alliance for imaging statement processing," *AT&T News Release*, Jul. 20, 1992.
- Mazzola, J., Hendrickson, L., and Waters, R., "NCR, CKI to market image-based credit card chargeback system," Jan. 6, 1993.
- Mazzola, J. and O'Donohue, M., "Frost National Bank selects NCR over old mainframe environment," *AT&T News Release*, Apr. 28, 1993.
- McGinn, Janice, "IBM ImagePlus High Performance Transaction System (IBM Harnesses Image Processing to Make its 389x/XP Cheque Processors More Efficient)," *Computergram International*, No. 1389, at CG103210008, Mar. 21, 1990.
- McKee, K., and Gundlach, D., "Retail Banking Solution enhanced," *AT&T News Release*, May 21, 1990.
- Messmer, E., "Hurdles stand in way of electronic banking," *Network World*, p. 33, Sep. 4, 1995.
- "Microsoft Introduces SNA Server Version 3.0, Begins Beta Testing," *Microsoft Press Release*, Aug. 29, 2006, found at: <http://www.microsoft.com/presspass/press/1996/jun96/sna30pr.msp>.
- Moore, J., "IBM, Unisys test check systems for Fed Reserve," *Federal Computer Week*, vol. 6, No. 21, p. 6(2), Jul. 27, 1992.
- Moreau, Thierry, "Payment by Authenticated Facsimile Transmission, a Check Replacement Technology for Small and Medium Enterprises," Nov. 25, 2006, found at: <http://connotech.com/PAYPROC.HTM>.
- Morris, H.M. and Orth, R.H., *Image system communications*, IBM Systems Journal, vol. 29, No. 3, 1990, pp. 371-383.
- Murphy, P., "POD Check Imaging Faces Challenges (In 1995, vs. 1996, banks raised investment in check imaging by 9% from \$198 mil and \$215 mil; new lost cost POD technology keeps costs down)," *Bank Technology News*, vol. 10, No. 3, p. 23, Mar. 1997.
- "NCRreports: Financial Services Trends and Technologies," Issue 1, NCR, Jan. 1997.
- "NCRreports: Financial Services Trends and Technologies," Issue 2, NCR, Jan. 1997.
- "NCRreports: Financial Services Trends and Technologies," Issue 3, NCR, Jan. 1997.
- "NCRreports: Financial Services Trends and Technologies," Issue 4, NCR, Jan. 1997.
- "NCRreports: Financial Services Trends and Technologies," Issue 5, NCR, Jan. 1997.
- "NCRreports: Financial Services Trends and Technologies," vol. 1, Issue 6, NCR, Jan. 1997.
- "NCRreports: Financial Services Trends and Technologies," vol. 1, Issue 7, NCR, 1997.
- "NCRreports: Financial Services Trends and Technologies," vol. 1, Issue 8, NCR, 1999.
- NCR 7780 Brochure, copyrighted 1989.
- "NCR—Hardware—7780 Mid-Range Item Processing Transport," at www.ncr.com/products/hardware/hw_7780_product.htm.
- "NCR—Hardware—7780, Technical Specifications," at www.ncr.com/products/hardware/nw_7780_ts_product.htm.
- "NCR offers new image-based Document Management System," *AT&T News Release*, Jun. 23, 1992.
- "NCR Unveils Client-Server Check Imaging," *Bank Technology News*, vol. 9, No. 3, p. 23, Mar. 1, 1996.

- Nixon, B., "Is check imaging for you? (automation in banking) (includes related article)," *Savings & Community Banker*, vol. 2, No. 10, p. 28(6), Oct. 1993.
- No1016v4[1].ppt—PowerPoint Presentation—FSTC—Interbank Check Image Project, Sep. 30 to Oct. 1, 1996.
- "NSSDC's Mass Storage System Evolves," March 1995, found on the web at the URL: http://nssdc.gsfc.nasa.gov/nssdc_news/march95/09_i_behnke_0395.html.
- O'Heney, S., "Prepare for the image revolution (Banker and Vendors) (image processing: includes related article listing image processing products) (buyers guide)," *Computers in Banking*, vol. 6, No. 10, p. 24(6), Oct. 1989.
- "On the imaging technology front," *American Banker*, vol. CLXI, No. 68, p. 26, Apr. 10, 1996.
- PACESBusReq3[1].doc—Microsoft Word Doc—"PACES Paperless Automated Check Exchange & Settlement—Business Requirement," Apr. 3, 1998.
- PacesOverview40[1].ppt—PowerPoint Presentation.
- PACESPRO[1].doc—Microsoft Word Doc—"PACES Paperless Automated Check Exchange & Settlement—Project Proposal," Apr. 23, 1998.
- PACESRequirements[1].doc—Microsoft Word Doc—"PACES Paperless Automated Check Exchange & Settlement—Requirements Document," Apr. 3, 1998.
- Plesums, C.A. and Bartels, R. W., *Large Scale Image Systems: USAA Case Study*, IBM Systems Journal, vol. 29, No. 3, 1990, pp. 343–355.
- "Preliminary Invalidity Contentions of Defendants J.P. Morgan Chase & Co. and JPMorgan Chase Bank," in *DataTreasury Corp. v. J.P. Morgan Chase & Co., et al.*, Cause No. 502CV124, In the United States District Court for the Eastern District of Texas, Texarkana Division.
- "Press Release, Cisco Partners with AT&T on Network Switch Manufacturing," Sep. 26, 1995, found on the web at <http://www.lucent.com/press/0995/950926.mma.html>.
- Press Release, "NCR Document Management System Includes Kodak, Ricoh Products," Apr. 6, 1993.
- Press Release, "NCR Introduces Scalable Image Item Processing Solution," Jan. 19, 1996.
- "Regions Bank Selects ImageSoft to Provide Image Solutions," *Business Wire*, at 9161220, Sep. 16, 1997.
- Rivest, R.L., Shamir, A., Adleman, L., "A Method for Obtaining Digital Signatures and Public-Key Cryptosystems," date unknown.
- Robinson, G., "Universal Card purchases BancTec Image-FIRST system," AT&T News Release, Dec. 22, 1992.
- Roldan, Jr., "Image Quality White Paper," FSTC, 1999.
- Roldan, M., "Paperless Automated Check Exchange and Settlement (PACBS) (status update) (PACES completes specification and design of image exchange environment and is accepted as part of SVPCO Image Strategy)," FSTC, at www.fstc.org/projects/paces/index.cfm, Jun. 22, 2000.
- Roldan, Mariano, Financial Services Technology Consortium, "PACES Paperless Automated Check Exchange & Settlement Project Overview, PACES Planning Meeting, New York City," Dec. 19, 1997.
- Schwartz, J., "Banks to Test Imaging for Clearing Checks," *Communications Week*, No. 420, p. 35, Sep. 14, 1992.
- Search Report for PCT/US00/33010, Jun. 21, 2002.
- Softchec Licenses 'Envision' Image Solution to West Suburban Bank, PR Newswire, at 116SETUU002, Jan. 16, 1996.
- "Special Report: Fine Tuning of the Terminal Picture," *Computerworld*, Aug. 1983.
- Spencer, H., "Scanning goes vertical: a big future for specialized check scanning; check scanning technology," *Advanced Imaging*, No. 10, vol. 12, p. 54, Oct. 1997.
- Stellwag, C., "New ATM from AT&T GIS features automated document processing," AT&T News Release, Nov. 29, 1994.
- Stellwag, C. and Bochonko, K., "NCR and Cincinnati Bell offer image processing service," AT&T News Release, Jan. 11, 1994.
- Stellwag, C. and Bochonko, K., "Norwest Bank selects NCR item processing systems for lockbox," AT&T News Release, Aug. 2, 1993.
- Stellwag, C., Graves, T., and Bochonko, K., "New Mexico uses NCR imaging systems for tax, revenue processing," AT&T News Release, Jul. 12, 1993.
- Stellwag, C., Proto, J., and Bochonko, K., "CashFlex selects NCR item processing systems for lockbox," AT&T News Release, Jul. 12, 1993.
- Stellwag, C., Roedel, R., and Bochonko, K., "NCR and Arkansas Systems announce strategic alliance," AT&T News Release, Jul. 12, 1993.
- Stellwag, C., Sanders, G., and Bochonko, K., "NCR and Signet Banking to provide item processing services," AT&T News Release, Jul. 13, 1993.
- "SurePOS ACE Electronic Payment Support PRPQ for 4690 OS," Version 1, Release 5, IBM, 1998, 2002.
- "The Check Information Age: Vision Executive Summary Image Archive Forum, Payment System Task Force," Jan. 27, 1998.
- "The Wachovia Story," Research, Development Manufacturing Corporation, 1993.
- Tracey, Brian, "IBM Unveils First Stage of Image-Check System," *Computers in Banking*, vol. 7, No. 4, at 12(3), Apr. 1990.
- Tucker, T., "Broadway rolls out check imaging system for community banks," *American Banker*, vol. 160, No. 61, p. 14(1), Mar. 30, 1995.
- "Understanding EDI," 1996.
- "Unisys Enhances Check Imager (Unisys Corp makes effort to appeal to wider range of financial institutions)," *American Banker*, vol. CLIX, No. 205, p. 15A, Oct. 24, 1994.
- Unisys, New York Clearing House, "A Proposal for an Image-Based Return Item Processing System," Jun. 1991, Unisys Document No. PDC 1010-16, JPMC-NYCH018091-018216.
- "Unisys Wins Contract to Supply Imaging Solution to Chase Manhattan/FISER V Check Processing Alliance," *Business Wire*, at 6121175, Jun. 12, 1995.
- "Unix-Based Image Statement Software," *ABA Banking Journal*, vol. 85, No. 2, at 80(1), Feb. 1993.
- "Verifone Software Links PCs to the Point of Sale," *American Banker*, vol. 158, No. 156, at 13A(1), Aug. 16, 1993.
- Vermeire, "Prosecution of Check Image Patent," letter to Hanna, Jul. 11, 1997.
- Wagner, M., "Banc One checks out Web," *Computerworld*, vol. 30, No. 35, p. 69, Aug. 26, 1996.
- Western Bank purchases NCR's Document Managing system, AT&T News Release, Aug. 31, 1993.
- BancTec's Proposal to the Federal Reserve Bank of Boston, "Technical Volume: Check Image Processing Archive and Retrieval System," Jul. 8, 1994, JPMC-BANCT 002960-003299.