

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

Mirror Imaging LLC,

Plaintiff,

v.

**Austin Bancorp, Inc.; Austin Bank
Texas, National Association,**

Defendants.

Case No. _____

Patent Case

Jury Trial Demanded

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, **Mirror Imaging LLC** (“Mirror Imaging”), through its attorney, Isaac Rabicoff, complains of **Austin Bancorp, Inc. and Austin Bank Texas, National Association** (“Austin”) and alleges the following:

PARTIES

1. Plaintiff Mirror Imaging LLC is a limited liability company organized and existing under the laws of Michigan that maintains its principal place of business at 27500 Donald Court, Warren, Michigan, 48092.
2. Defendant Austin Bancorp, Inc. is a corporation organized and existing under the laws of Texas that maintains its principal place of business in Jacksonville, Texas.
3. Defendant Austin Bank National Association is a subsidiary of Austin Bancorp, Inc. that maintains its principal place of business in Jacksonville, Texas.

JURISDICTION

4. This is an action for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code.
5. This Court has exclusive subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
6. This Court has personal jurisdiction over Austin because it has engaged in

systematic and continuous business activities in the Eastern District of Texas. Specifically, Austin has branch bank locations in Marshall, Texas, and provides its full range of banking services to residents in this District. As described below, Austin has committed acts of patent infringement giving rise to this action within this District.

VENUE

7. Venue is proper in this District under 28 U.S.C. §§ 1391(b)-(d) and 1400(b) because Austin has committed acts of patent infringement in this District, and has a regular and established place of business in this District. Specifically, Austin has branch bank locations in Marshall, Texas, and provides its full range of banking services to residents in the Eastern District of Texas. In addition, Mirror Imaging has suffered harm in this District.

PATENTS-IN-SUIT

8. Mirror Imaging is the assignee of all right, title and interest in United States Patent Nos. 6,963,866 (the “866 Patent”), 7,552,118 (the “118 Patent”), 7,836,067 (the “067 Patent”), and 9,141,612 (the “612 Patent”), collectively the “Patents-in-Suit”, including all rights to enforce and prosecute actions for infringement and to collect damages for all relevant times against infringers of the Patents-in-Suit. Accordingly, Mirror Imaging possesses the exclusive right and standing to prosecute the present action for infringement of the Patents-in-Suit by Austin.

The ‘866 Patent

9. On November 8, 2005, the United States Patent and Trademark Office issued the ‘866 Patent. The ‘866 Patent is titled “Method of Obtaining an Electronically Stored Financial Document.” The application leading to the ‘866 Patent was filed on March 22, 2002, and is a continuation of an application filed on April 13, 2000, and claims priority from a provisional application filed on April 13, 1999. A true and correct copy of the ‘866 Patent is attached hereto as Exhibit A and incorporated herein by reference.

10. The ‘866 Patent is valid and enforceable.

11. The invention in the ‘866 Patent relates to a method that enables a financial

institution in a unique and highly efficient manner to retrieve electronically-stored financial documents having a specific document parameter. Ex. A at 2:38-40. Electronic storage of these financial documents allows financial institutions to eliminate paper copies *Id.* at 1:32-34. The electronic storing, downloading, and retrieving of the financial documents is particularly resource intensive, time consuming, and expensive. *Id.* at 1:54-60. This process becomes increasingly expensive if the client requests a particularly old financial document, because older financial documents frequently require more resources and time to locate and retrieve. *Id.* at 1:60-63.

12. The inventors Michael D. Schulze and Richard J. Gagnon recognized that due to the inefficiencies identified in the conventional methods used by financial institutions to obtain financial documents, it would be both novel and useful to invent a method that would enable a financial institution to obtain electronically-stored financial documents from different storage systems that reduces, if not eliminates, the back office production of the financial institution by providing a direct interface inter-linked with the different storage systems. With such an interface, the responsibility for retrieving financial documents from the different storage systems can be outsourced to third party entities while still providing the financial institution with efficient access to any financial documents electronically-stored. *Id.* at 2:21-2:34. The invention therefore provides a method that enables financial institutions to retrieve electronically-stored financial documents from different storage systems, allowing them to selectively store financial documents and to do so with unprecedented efficiency. *Id.* at 3:10–15.

The ‘118 Patent

13. On June 23, 2009, the United States Patent and Trademark Office issued the ‘118 Patent. The ‘118 Patent is titled “Method of Obtaining an Electronically Stored Financial Document.” The application leading to the ‘118 Patent was filed on August 12, 2005, and is a continuation of the application that issued as the ‘866 Patent. A true and correct copy of the ‘118 Patent is attached hereto as Exhibit B and incorporated herein by

reference.

14. The '118 Patent is valid and enforceable.

15. The '118 Patent is related to the '866 Patent and, therefore, also relates to a method for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed. Ex. B at 2:39-41

The '067 Patent

16. On November 16, 2010, the United States Patent and Trademark Office issued the '067 Patent. The '067 Patent is titled "Method of Obtaining Electronically Stored Financial Documents." The application leading to the '067 Patent was filed on June 22, 2009, and is a continuation of the application that issued as the '118 Patent. A true and correct copy of the '067 Patent is attached hereto as Exhibit C and incorporated herein by reference.

17. The '067 Patent is valid and enforceable.

18. The '067 Patent is related to the '866 Patent and, therefore, also relates to a method for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed. Ex. C. at 2:40-42.

The '612 Patent

19. On September 22, 2015, the United States Patent and Trademark Office issued the '612 Patent. The '612 Patent is titled "Method of Obtaining an Electronically Stored Financial Document." The application leading to the '612 Patent was filed on March 15, 2013, and is a continuation of an application that was filed on October 13, 2011, which is a continuation of an application that was filed on October 12, 2010, which is a continuation of the application that issued as the '067 Patent. A true and correct copy of the '612 Patent is attached hereto as Exhibit D and incorporated herein by reference.

20. The '612 Patent is valid and enforceable.

21. The '612 Patent is related to the '067 Patent and, therefore, also relates to a method for a financial institution to obtain electronically-stored financial documents having

a specific document parameter is disclosed. Ex. D. at 2:46-48.

COUNT I: INFRINGEMENT OF THE '866 PATENT

22. Mirror Imaging incorporates the above paragraphs herein by reference.

23. **Direct Infringement.** Austin has been and continues to directly infringe at least claim 1 of the '866 Patent in this District and elsewhere in the United States, by providing a system, for example Austin's Online Banking system, that performs the steps for a financial institution to obtain electronically-stored financial documents having a specific document parameter.

Austin performs a method for obtaining an electronically-stored financial document from a first storage system remotely-located from a second storage system wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents include at least one specific document parameter. For example, Austin's Online Banking system stores online statements and deposited check images in remotely located, separate storage systems based on the date associated with that document. *See, e.g.,* <https://www.austinbank.com/personal-banking/e-documents-faq.aspx>.

24. Austin performs the step of storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter. Austin further performs the step of storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter. For example, Austin's Online Banking system stores online statements and check images, and specifically stores check images for up to 1 year in a storage system that is retrievable online. After 1 year, check images are transferred to another storage system for archival and retrieval purposes for up to 7 years.

25. Austin performs the step of utilizing a computer terminal connected to the first and second storage systems through a processing unit. Austin further performs the step of receiving a request for at least one of the stored financial documents. Austin further

performs the step of inputting the request into the computer terminal. For example, Austin's Online Banking system has a computer terminal connected to its storage systems through a processing unit that stores check images, and allows retrieval of check images. Specifically, Austin's Online Banking system submits a request for check images, which is received via the computer terminal by entering the desired date range of the requested check images.

26. Austin performs the step of comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted. For example, Austin's Online Banking system compares the date range submitted to a predetermined date, for example 1 year of access to check images, and the check image is either retrieved for the requester or the requester receives notification that customer service must be contacted to request a check image from equal to or greater than 1 year ago.

27. Austin performs the step of automatically accessing the first storage system through the processing unit when the specific document parameter is greater than the predetermined parameter and automatically accessing the second storage system through the processing unit when the specific document parameter is less than or equal to the predetermined parameter. Austin further performs the step of retrieving the requested financial document, as defined by the inputted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter. For example, Austin's Online Banking system's processing unit automatically accesses, and then retrieves, check images from one storage system if the associated date is less than or equal to 1 year; and from another storage system if the associated date is greater than 1 year.

28. **Induced Infringement.** Austin has also actively induced, and continues to induce, the infringement of at least claim 1 of the '866 Patent by actively inducing its

customers, including merchants and end-users to use Austin's Online Banking system in an infringing manner as described above. Upon information and belief, Austin has specifically intended that its customers use its Online Banking system that infringe at least claim 1 of the '866 Patent by, at a minimum, providing access to, support for, training and instructions for, its Online Banking system to its customers to enable them to infringe at least claim 1 of the '866 Patent, as described above. Even where performance of the steps required to infringe at least claim 1 of the '866 Patent is accomplished by Austin and Austin's customer jointly, Austin's actions have solely caused all of the steps to be performed.

29. Mirror Imaging is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

30. Mirror Imaging will continue to be injured, and thereby caused irreparable harm, unless and until this Court enters an injunction prohibiting further infringement.

COUNT II: INFRINGEMENT OF THE '118 PATENT

31. Mirror Imaging incorporates the above paragraphs herein by reference.

32. Austin has been and continues to directly infringe at least claim 1 of the '118 Patent in this District and elsewhere in the United States, by providing a system, for example Austin's Online Banking system, that performs the steps for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed.

Austin performs a method of obtaining an electronically-stored financial document from a first storage system remotely-located from a second storage system wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents is associated with at least one specific document parameter. For example, Austin's Online Banking system stores online statements and deposited check images in remotely located, separate storage systems based on the date associated with that document. *See, e.g.,* <https://www.austinbank.com/personal-banking/e-documents-faq.aspx>.

33. Austin performs the step of storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter. Austin further performs the step of storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter. For example, Austin's Online Banking system stores online statements and check images, and specifically stores check images, for up to 1 year in a storage system that are retrievable online. After 1 year, check images are transferred to another storage system for archival and retrieval purposes for up to 7 years.

34. Austin performs the step of utilizing a computer terminal connected to the first and second storage systems through a processing unit. Austin further performs the step of submitting a request for at least one of the stored financial documents into the computer terminal. For example, Austin's Online Banking system has a computer terminal connected to its storage systems through a processing unit that store check images, and this computer terminal allows the requester to retrieve check images. Specifically, Austin's Online Banking requester submits a request for check images, into the computer terminal, by entering the desired date range.

35. Austin performs the step of comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted. For example, Austin's Online Banking system compares the date range submitted by the requester to a predetermined date, for example 1 year of access to check images, and the check image is either retrieved for the requester or the requester receives notice that customer service must be contacted to request a check image from equal to or greater than 1 year ago.

36. Austin performs the step of automatically accessing the first storage system through the processing unit when the specific document parameter is greater than the

predetermined parameter and automatically accessing the second storage system through the processing unit when the specific document parameter is less than or equal to the predetermined parameter. Austin further performs the step of retrieving the requested financial document, as defined by the inputted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter. For example, Austin's Online Banking system's processing unit automatically accesses, and then retrieves, check images from one storage system if the associated date is less than or equal to 1 year; and from another storage system if the associated date is greater than 1 year.

37. **Induced Infringement.** Austin has also actively induced, and continues to induce, the infringement of at least claim 1 of the '118 Patent by actively inducing its customers, including merchants and end-users to use Austin's Online Banking system in an infringing manner as described above. Upon information and belief, Austin has specifically intended that its customers use its Online Banking system that infringe at least claim 1 of the '118 Patent by, at a minimum, providing access to, support for, training and instructions for, its Online Banking system to its customers to enable them to infringe at least claim 1 of the '118 Patent, as described above. Even where performance of the steps required to infringe at least claim 1 of the '118 Patent is accomplished by Austin and Austin's customer jointly, Austin's actions have solely caused all of the steps to be performed.

38. Mirror Imaging is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

39. Mirror Imaging will continue to be injured, and thereby caused irreparable harm, unless and until this Court enters an injunction prohibiting further infringement.

COUNT III: INFRINGEMENT OF THE '067 PATENT

40. Mirror Imaging incorporates the above paragraphs herein by reference.

41. Austin has been and continues to directly infringe at least claim 53 of the '067 Patent in this District and elsewhere in the United States, by providing a system, for example Austin's Online Banking system, that performs the steps for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed.

Austin performs a method for obtaining an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents is stored as an electronic image and is associated with at least one specific document parameter. For example, Austin's Online Banking system stores online statements and deposited check images in separate storage systems based on the date associated with that document. *See, e.g.,* <https://www.austinbank.com/personal-banking/e-documents-faq.aspx>.

42. Austin performs the step of storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is less than a predetermined parameter. Austin further performs the step of storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is greater than or equal to the predetermined parameter. For example, Austin's Online Banking system stores online statements and check images, and specifically stores check images for up to 1 year in a storage system that is retrievable online. After 1 year, check images are transferred to another storage system for archival and retrieval purposes for up to 7 years.

43. Austin performs the step of utilizing a processing unit connected to the first and second storage systems. Austin further performs the step of receiving a request for one of the stored financial documents through the processing unit. For example, Austin's Online Banking system has a processing unit connected to its storage systems that store check

images, and this processing unit allows customers retrieval of check images. Specifically, Austin's Online Banking system receives a request for check images, to the processing unit.

44. Austin performs the step of comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been received. For example, Austin's Online Banking system compares the date range of the received request to a predetermined date, for example 1 year of access to check images, and the check image is either retrieved for the requester or the requester receives notification that customer service needs to be contacted to request a check image from equal to or greater than 1 year ago.

45. Austin performs the step of accessing the first storage system when the specific document parameter is less than the predetermined parameter and accessing the second storage system when the specific document parameter is greater than or equal to the predetermined parameter. Austin further performs the step of retrieving the requested financial document, as defined by the received request, in the first fixed medium when the specific document parameter is less than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is greater than or equal to the predetermined parameter. For example, Austin's Online Banking systems processing unit accesses and then retrieves check images from one storage system if the associated date is less than 1 year and one day; and from another storage system if the associated date is greater than or equal to 1 year and one day.

46. **Induced Infringement.** Austin has also actively induced, and continues to induce, the infringement of at least claim 53 of the '067 Patent by actively inducing its customers, including merchants and end-users to use Austin's Online Banking system in an infringing manner as described above. Upon information and belief, Austin has specifically intended that its customers use its Online Banking system that infringe at least claim 53 of the '067 Patent by, at a minimum, providing access to, support for, training and instructions

for, its Online Banking system to its customers to enable them to infringe at least claim 53 of the '067 Patent, as described above.

47. Mirror Imaging is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

48. Mirror Imaging will continue to be injured, and thereby caused irreparable harm, unless and until this Court enters an injunction prohibiting further infringement.

COUNT IV: INFRINGEMENT OF THE '612 PATENT

49. Mirror Imaging incorporates the above paragraphs herein by reference.

50. Austin has been and continues to directly infringe at least claim 1 of the '612 Patent in this District and elsewhere in the United States, by providing a system, for example Austin's Online Banking system, that performs the steps for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed.

Austin performs a method for accessing an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents has an electronic image and is associated with at least one specific document parameter. For example, Austin's Online Banking system stores online statements and deposited check images in separate storage systems based on the date associated with that document. *See, e.g.,* <https://www.austinbank.com/personal-banking/e-documents-faq.aspx>.

51. Austin performs the step of storing a plurality of images of the financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter, wherein the predetermined parameter includes a pre-selected numerical record date. Austin further performs the step of storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document

is less than or equal to the predetermined parameter. For example, Austin's Online Banking system stores online statements and check images, and specifically stores check images for up to 1 year in one storage system that is retrievable. After 1 year, check images are transferred to another storage system for archival and retrieval purposes for up to 7 years.

52. Austin performs the step of utilizing a processor that has access to the first and second storage systems. Austin further performs the step of receiving a request for an image of one of the stored financial documents into the processor. For example, Austin's Online Banking system has a processor that has access to storage systems that store check images, and this processor receives requests for specific check images. Specifically, Austin's Online Banking system receives a request, through the processor, corresponding to a specific date range, and for specific check images.

53. Austin performs the step of comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been received, wherein the specific document parameter of the financial document is a particular numerical sequence associated with the specific document parameter, and wherein the particular numerical sequence of the financial document includes a record date of the financial document. For example, Austin's Online Banking system compares the date range of the received request to a predetermined date, for example 1 year of access for check images, and the check image is either retrieved for the requester or the requester receives notification that customer service needs to be contacted to request a check image from equal to or greater than 1 year ago.

54. Austin performs the step of accessing the first storage system when the specific document parameter is greater than the predetermined parameter and accessing the second storage system when the specific document parameter is less than or equal to the predetermined parameter. Austin further performs the step of retrieving the image of the requested financial document from the accessed storage system as defined by the received

request. For example, Austin's Online Banking system's processor accesses and then retrieves check images from one storage system if the associated date is less than or equal to 1 year; and from another storage system if the associated date is greater than 1 year.

55. **Induced Infringement.** Austin has also actively induced, and continues to induce, the infringement of at least claim 1 of the '612 Patent by actively inducing its customers, including merchants and end-users to use Austin's Online Banking system in an infringing manner as described above. Upon information and belief, Austin has specifically intended that its customers use its Online Banking system that infringe at least claim 1 of the '612 Patent by, at a minimum, providing access to, support for, training and instructions for, its Online Banking system to its customers to enable them to infringe at least claim 1 of the '612 Patent, as described above.

56. Mirror Imaging is entitled to recover damages adequate to compensate it for such infringement in an amount no less than a reasonable royalty under 35 U.S.C. § 284.

57. Mirror Imaging will continue to be injured, and thereby caused irreparable harm, unless and until this Court enters an injunction prohibiting further infringement.

JURY DEMAND

58. Under Rule 38(b) of the Federal Rules of Civil Procedure, Mirror Imaging respectfully requests a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Mirror Imaging asks this Court to enter judgment against Austin, granting the following relief:

- A. A declaration that Austin has infringed the Patents-in-Suit;
- B. An award of damages to compensate Mirror Imaging for Austin's direct infringement of the Patents-in-Suit;
- C. An order that Austin and its officers, directors, agents, servants, employees, successors, assigns, and all persons in active concert or participation with them, be preliminarily and permanently enjoined from infringing the

Patents-in-Suit under 35 U.S.C. § 283;

- D. An award of damages, including trebling of all damages, sufficient to remedy Austin's willful infringement of the Patents-in-Suit under 35 U.S.C. § 284;
- E. A declaration that this case is exceptional, and an award to Mirror Imaging of reasonable attorneys' fees, expenses and costs under 35 U.S.C. § 285;
- F. An award of prejudgment and post-judgment interest; and
- G. Such other and relief as this Court or jury may deem proper and just.

Respectfully submitted,

/s/ Isaac Rabicoff
Counsel for Plaintiff

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Exhibit A

(12) **United States Patent**
Schulze et al.

(10) **Patent No.:** **US 6,963,866 B2**
 (45) **Date of Patent:** **Nov. 8, 2005**

(54) **METHOD OF OBTAINING AN ELECTRONICALLY STORED FINANCIAL DOCUMENT**

(75) Inventors: **Michael D. Schulze**, Troy, MI (US);
Richard J. Gagnon, Grosse Pointe Farms, MI (US)

(73) Assignee: **Mirror Imaging L.L.C.**, Southfield, MI (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 593 days.

(21) Appl. No.: **10/104,541**

(22) Filed: **Mar. 22, 2002**

(65) **Prior Publication Data**

US 2002/0138490 A1 Sep. 26, 2002

Related U.S. Application Data

(63) Continuation of application No. 09/548,490, filed on Apr. 13, 2000, now Pat. No. 6,446,072.

(60) Provisional application No. 60/129,021, filed on Apr. 13, 1999.

(51) **Int. Cl.**⁷ **G06F 17/30**

(52) **U.S. Cl.** **707/3; 707/10; 707/204; 707/205; 705/39; 705/35**

(58) **Field of Search** **707/3, 10, 204, 707/205, 1, 2, 7, 102, 104.1; 705/35, 39**

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Primary Examiner—Frantz Coby

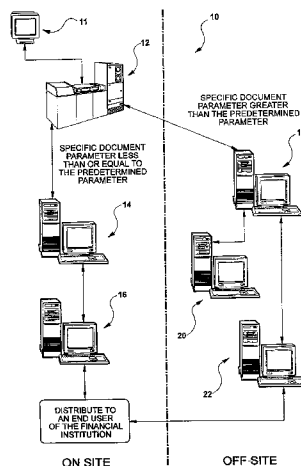
Assistant Examiner—Haythim Alaubaidd

(74) *Attorney, Agent, or Firm*—Howard & Howard

(57) **ABSTRACT**

A method for a bank to obtain an electronically-stored financial document is disclosed. The financial document includes a specific document parameter, such as a record date. The bank maintains the financial document in an off-site storage system when the record date is later than a pre-selected date and in an on-site storage system when the record date is earlier than or equal to the pre-selected date. The off-site storage system is remotely-located from the on-site storage system. The bank receives and inputs a request for the financial document from a client and compares the record date to the pre-selected date to determine if the record date is later than, earlier than, or equal to the pre-selected date. In processing the request, the bank utilizes a computer terminal, connected to the off-site and on-site storage systems through a processing unit, to access one of the storage systems in response to the comparison of the record date to the pre-selected date. After accessing the appropriate storage system, the bank retrieves the requested financial document. The bank then reproduces the requested financial document and distributes the requested financial document to the requesting client, or some other end user of the bank.

55 Claims, 4 Drawing Sheets



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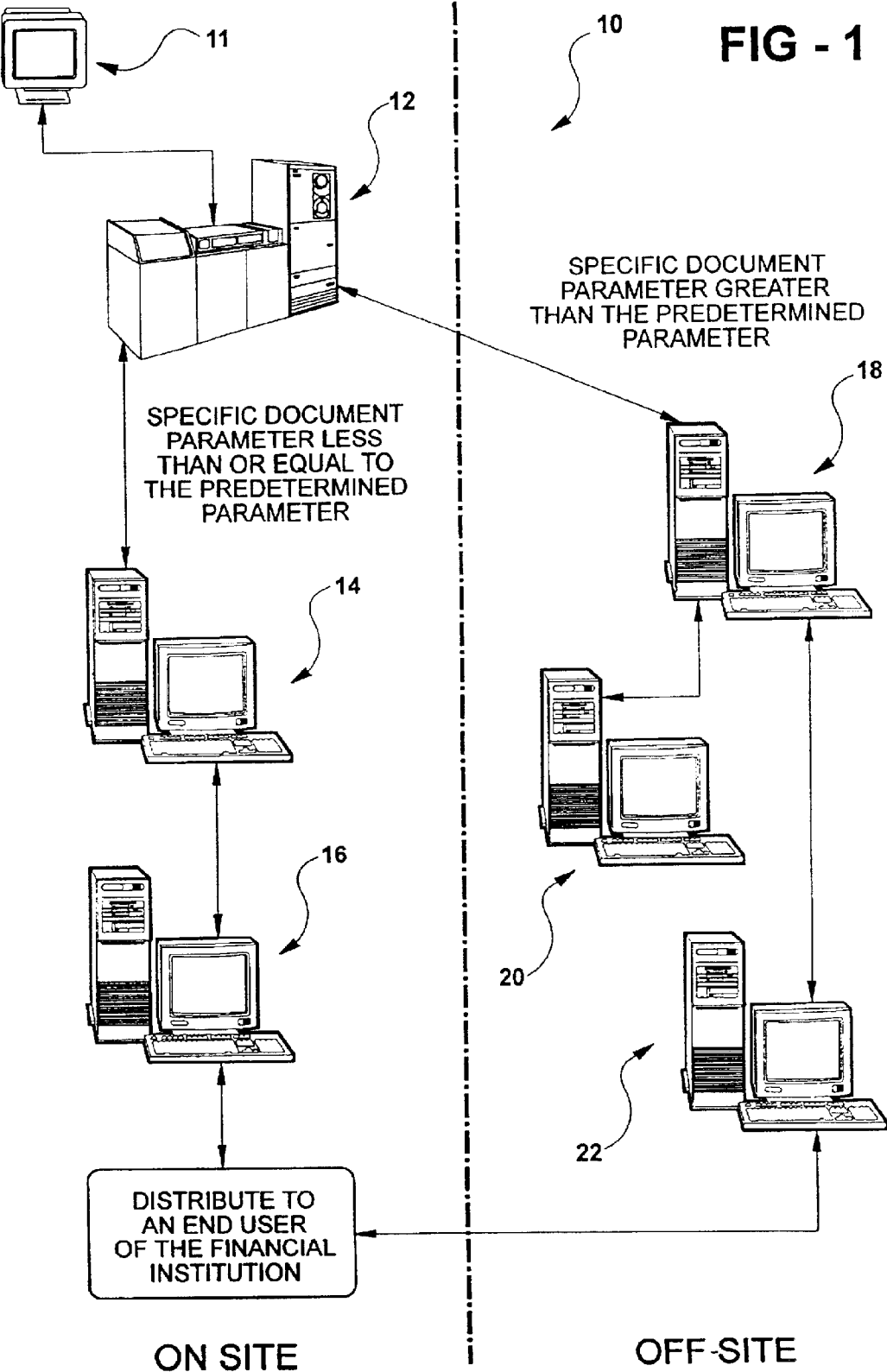
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FIG - 2

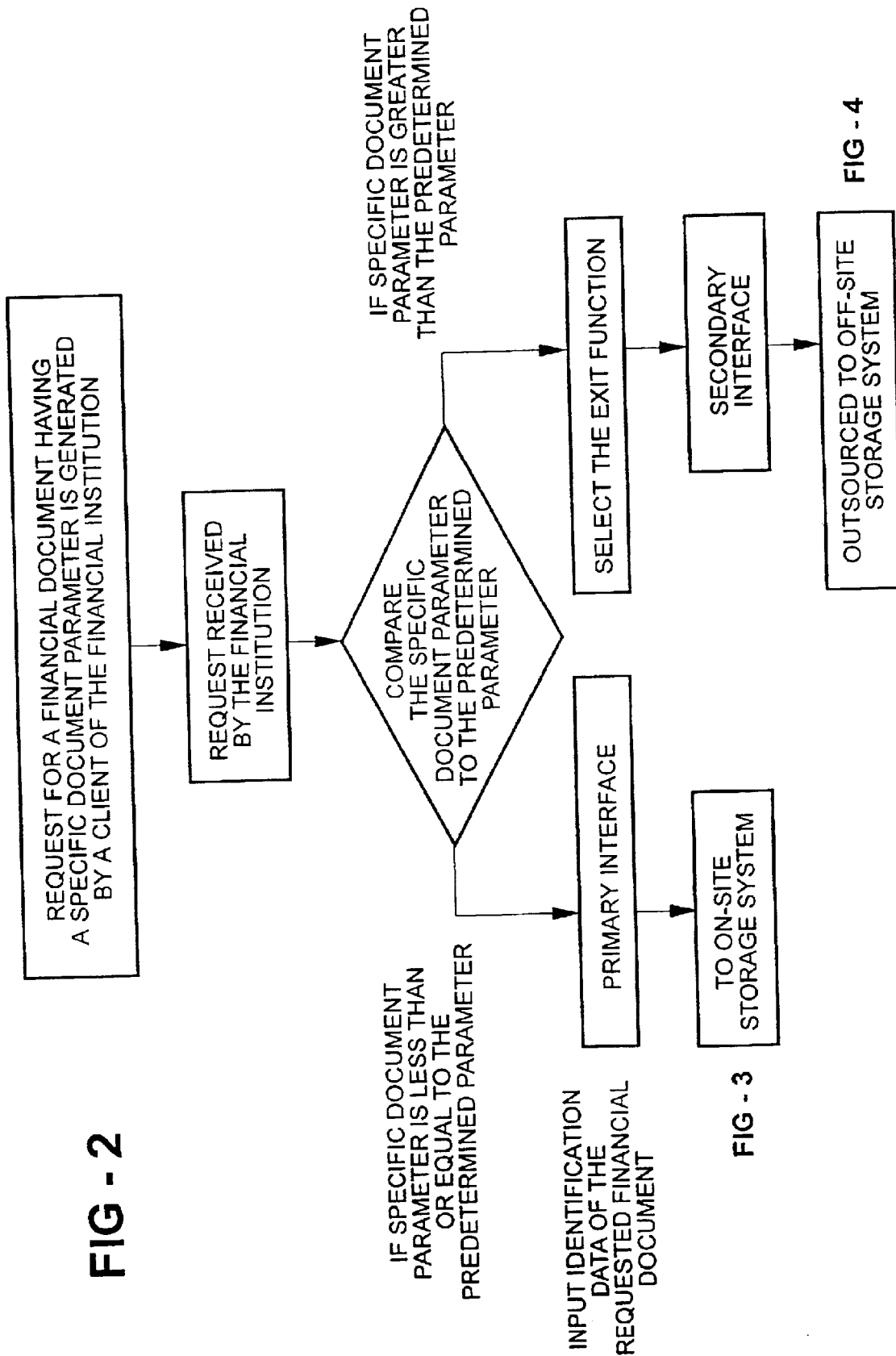
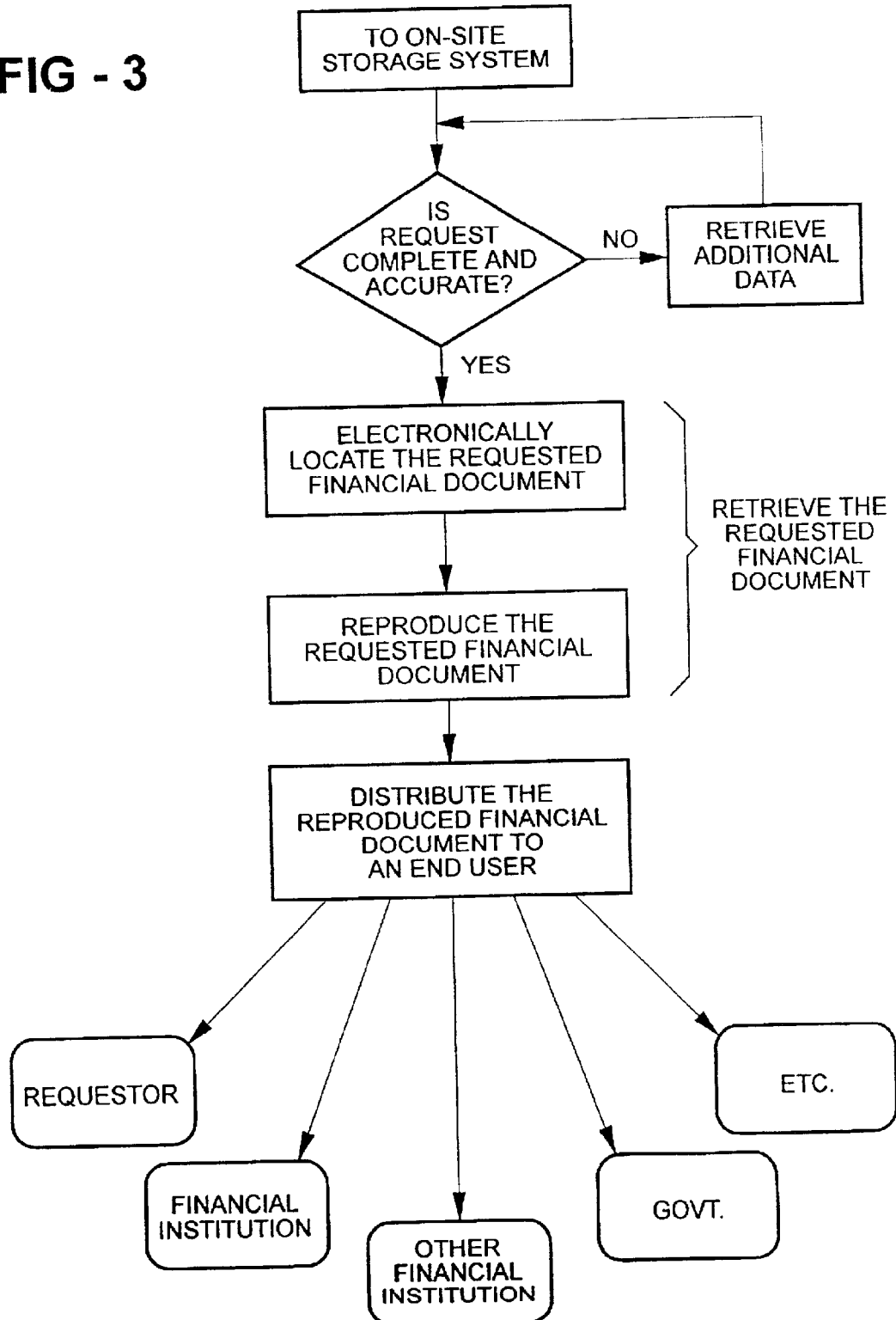


FIG - 3

FIG - 4

(ON-SITE STORAGE SYSTEM)

FIG - 3



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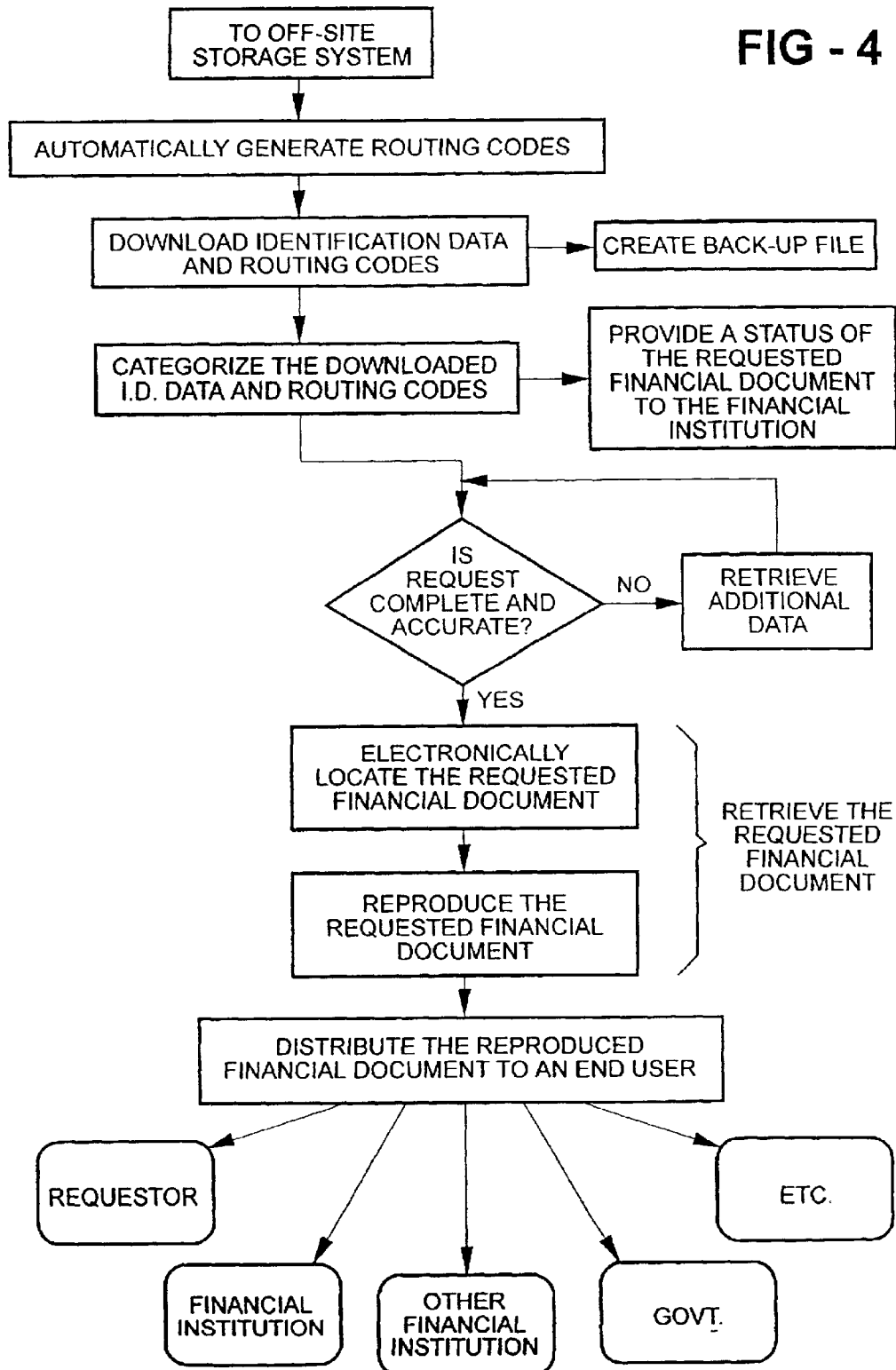
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(OFF-SITE STORAGE SYSTEM)

FIG - 4



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METHOD OF OBTAINING AN ELECTRONICALLY STORED FINANCIAL DOCUMENT

RELATED APPLICATIONS

This patent application is a continuation of U.S. patent application Ser. No. 09/548,490, filed Apr. 13, 2000, now U.S. Pat. No. 6,446,072 which in turn claims priority to and all the advantages of U.S. Provisional Patent Application Ser. No. 60/129,021, which was filed on Apr. 13, 1999.

BACKGROUND OF THE INVENTION

1) Technical Field

The subject invention relates to a method for a financial institution to obtain electronically-stored financial documents from an off-site storage system remotely-located from an on-site storage system.

2) Description of the Prior Art

Methods for obtaining electronically-stored financial documents are generally known in the art. Financial institutions, such as banks and credit unions, utilize such methods to rapidly and efficiently obtain financial documents for distribution to clients upon request. Such financial documents include paid checks, account statements, and other related documents. These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. Further, these financial documents are typically electronically-stored in an on-site storage system located at the financial institution or in an off-site storage system. Electronic storage of these financial documents permits financial institutions to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides a means of retrieving the information from the on-site and off-site storage systems.

Once the document is stored, the client may request an image of a particular stored document. Client requests are made to replace lost or stolen documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. The client's request is inputted into a computer terminal at the financial institution. More specifically, conventional methods for obtaining an electronically-stored financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal. The interface is inter-linked with the on-site storage system. Typically, all requests for a particular period are grouped together and subsequently downloaded for retrieval of the requested image by the financial institution. The financial institution retrieves the image, e.g. a photocopy of the check, and then distributes the photocopy to the client via facsimile, mail or hand delivery. The storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry as back office production. Back office production for financial institutions is particularly resource intensive, time consuming, and expensive. Also, back office production becomes increasingly expensive if the client requests a particularly old financial document because older financial documents frequently require more resources and time to locate and retrieve.

The majority of financial institutions electronically store financial documents only in an on-site storage system and not in an off-site storage system. Consequently, these financial institutions are unable to outsource the responsibilities

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for the back office production to third party entities to alleviate the expenses and resources associated with the back office production. These financial institutions realize a significant financial burden since the back office production is concentrated strictly at the financial institution.

Other financial institutions do electronically store financial documents in on-site and off-site storage systems. However, the methods utilized by these financial institutions to access the financial documents stored in the off-site storage system are deficient in that the interface utilized in such methods is only inter-linked with the on-site storage system. That is, there is no interface independently inter-linked with the off-site storage system. As a result, the financial documents stored in the off-site storage system can not be efficiently accessed. These financial institutions are still responsible for retrieving the requested financial documents through their back office production and their expenses remain high. One such method of retrieving documents from on-site and off-sited storage systems is disclosed in U.S. Pat. No. 5,784,610 to Copeland, III et al.

Due to the inefficiencies identified in the conventional methods used by financial institutions to obtain financial documents, it is desirable to implement a method for a financial institution to obtain electronically-stored financial documents from both on-site and off-site storage systems that reduces, if not eliminates, the back office production of the financial institution by providing a direct interface inter-linked with the off-site storage system. With such an interface, the responsibility for retrieving financial documents from the off-site storage can be outsourced to third party entities while still providing the financial institution with efficient access to any financial documents electronically-stored in the off-site storage system.

SUMMARY OF THE INVENTION AND ADVANTAGES

A method for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed. The specific document parameter is typically a particular numerical sequence, such as a record date of the financial document. The method of the subject invention enables the financial institution to obtain the financial documents from a first or an off-site storage system. The first or off-site storage system is remotely-located from a second or an on-site storage system. In one embodiment, the financial documents of the financial institution are maintained in the first or off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. The financial documents that are less than or equal to the predetermined parameter are maintained in the second or on-site storage system.

When the financial institution receives a request for a financial document, the financial institution compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. A computer terminal located at the financial institution is connected to both the off-site and on-site storage systems through a processing unit. The processing unit is utilized to automatically access one of the storage systems in response to the comparison of the specific document parameter to the predetermined parameter. For instance, if it is determined that the specific document parameter is less than or equal to the predetermined document parameter, then the processing unit

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accesses the second or on-site storage system. On the other hand, if it is determined that the specific document parameter of the financial document is greater than the predetermined parameter, then the processing unit accesses the first or off-site storage system.

After the requested financial document is inputted, the requested document is then retrieved in order to reproduce the financial document, and distribute the financial document to an end user of the financial institution.

The subject invention therefore provides a method that enables financial institutions to obtain electronically-stored financial documents from an off-site storage system. As such, the financial institution can selectively store financial documents in either an on-site storage system or the off-site storage system, and the responsibility for the financial documents in the off-site storage system can be outsourced to a third party entity. Further, the documents can be stored in different fixed mediums, such as microfiche, microfilm, digitally, electronically, etc., and can be stored in different geographical locations. Therefore, the back office production of the financial institution associated with the retrieval and distribution of financial documents stored in the off-site storage system is strategically reduced or even completely eliminated.

BRIEF DESCRIPTION OF THE DRAWINGS

Other advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIG. 1 is a flow diagram schematically detailing an on-site storage system, and an off-site storage system in accordance with the subject invention;

FIG. 2 is a block diagram generally representing a method for a financial institution to obtain electronically-stored financial documents from the on-site and off-site storage systems;

FIG. 3 is a block diagram completing the method of obtaining electronically-stored financial documents from the on-site storage system; and

FIG. 4 is a block diagram completing the method of obtaining electronically-stored financial documents from the off-site storage system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views, a method for a financial institution to obtain an electronically-stored financial document is schematically shown at 10 in FIG. 1. The method introduced in the subject invention enables the financial institution to obtain the financial document from a first or an off-site storage system remotely located from a second or an on-site storage system. Preferably, the on-site storage system is located at the financial institution and the off-site storage system is located at a remote location distant from the financial institution. This allows the financial institution to 'outsource' the responsibilities associated with obtaining the financial document.

Methods for financial institutions to obtain electronically-stored documents are frequently used by such entities as banks, credit unions, and other financially-oriented institutions. For illustrative purposes only, the description of the

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subject invention is discussed with reference to banks. However, as appreciated by those skilled in the art, other businesses, such as insurance companies, may also utilize similar methods and incorporate the aspects of the subject invention.

Methods for banks to obtain electronically-stored financial documents are generally used by banks to rapidly and efficiently obtain financial documents for distribution to clients upon request. As described above, the financial documents for banks are usually paid checks, checking statements, and other related financial documents, and these documents include at least one specific document parameter. As appreciated by those skilled in the art, it is not the financial document (e.g. the paid check) itself that is electronically-stored. Rather, it is data included on the document such as a sequence number that is electronically stored to make up the financial document. The specific document parameter is preferably a particular numerical sequence. As appreciated, the specific document parameter of the financial document can include, but is not limited to, a record date or age of the document, a series number, or some other document identifying number of the financial document. More specifically, in the preferred embodiment of the subject invention, the particular numerical sequence of the financial document is the record date of the financial document. That is, the date that the particular financial document was created or posted.

The financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. As appreciated, the electronic storage of the financial documents is frequently created by taking an electronic photo image of the document and storing the photo image in a computer system. One such digital electronic storage device is sold by Kodak under the name of IMAGELINK™ Digital Workstation (IDW). Electronic storage of these financial documents permits banks to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides an efficient means of retrieving the information from the on-site and off-site storage systems. This will be discussed further herein below.

As described above, the financial documents are electronically-stored in either the on-site storage system located at the bank or in the off-site storage system remotely located from the on-site storage system. More specifically, the subject invention includes the step of maintaining the financial documents in the off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. Financial documents are maintained in the on-site storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter. As appreciated, the document parameter of the financial documents stored in the off-site storage system may be greater than or equal to the predetermined parameter with the on-site storage system having documents only less than the predetermined parameter.

Similar to the specific document parameter of the financial document, the predetermined parameter is also a numerical value. The predetermined parameter is specifically a numerical value predetermined by the bank. For instance, if the specific document parameter is a series number of a paid check and the series number is greater than the predetermined parameter which, in this case, would be an arbitrarily selected base series number, then the paid check would be stored in the off-site storage system.

In the preferred embodiment of the subject invention, the predetermined numerical value is a date pre-selected by the

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bank. For instance, the bank may pre-select a date that is one year before a current date—the current date being the actual date that the client requests the financial document. Of course, the bank may pre-select a date that is some other time period before a current date (e.g. two or three years) without varying from the scope of the subject invention. As such, if the record date of the particular financial document is older than one year, then the particular financial document is maintained in the off-site storage system. If the record date of the particular financial document is earlier than or equal to one year, then the particular financial document is maintained in the on-site storage system. As discussed above, the document having record dates equal to the one year may be stored in the off-site or on-site storage systems.

Once the financial document is maintained in the appropriate storage system, the bank is capable of receiving a request for the financial document from the client. In reality, the client is requesting an image of the stored financial document. As appreciated, clients request the image for various reasons. As discussed above, requests are typically made for replacing lost or stolen financial documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. Ultimately, the bank retrieves the image, reproduces the image, and distributes the reproduced image to the requesting client of the bank.

Referring now to FIG. 1, the method for banks to obtain electronically-stored financial documents is discussed in detail in accordance with a general scope of the subject invention. Initially, the requesting client requests a particular financial document, such as a paid check. The client is typically a customer of the bank or other financial institution. The client's request is inputted into a computer terminal 11 at the financial institution. The computer terminal 11 will be discussed in more detail hereinbelow.

From the computer terminal 11, the request is fed into a processing unit 12, which is illustrated as a mainframe computer 12 at the bank. In the preferred embodiment of the subject invention, if the client requests a financial document having a record date earlier than or equal to one year before the current date, then the request, and other requests like it, are processed at the bank in the on-site storage system. That is, the requests are grouped together and downloaded to a downloading terminal 14 at the bank. The downloading may occur at particular intervals such as at the end of each day, every three hours, etc. The sequence number of each check requested is then determined. A document terminal 16 subsequently creates or reproduces the document, i.e., a photocopy of the check. The photocopy is then distributed to the client via facsimile, mail, or hand delivery.

It is known in the art that the majority of requests for financial documents are requests for documents which were created in the most recent year. That is, if the pre-selected date is one year before the current date, as in the preferred embodiment, then the majority of requests are seeking financial documents having a record date earlier than or equal to the pre-selected date. The remaining document requests relate to financial documents that are older than one year. Since, as described in the Background of the Invention, retrieval of financial documents that are older than one year is particularly expensive, the preferred embodiment of the subject invention outsources all of the document requests which relate to documents having a record date later than one year before the current date. As appreciated, the particular time frame which is outsourced is not a critical feature of the subject invention and may be adjusted to meet the needs of any particular financial institution. In fact, all of the document requests, including the most recent, may be outsourced using the outsourcing procedure of the subject invention.

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In the preferred embodiment, if the client requests a financial document having a record date later than one year before the current date, then the request, and others like it, are grouped together and downloaded from the mainframe computer 12 to an outsourced downloading terminal 18. As above, the downloading may be at particular intervals as needed. The sequence number is determined by a sequencing terminal 20. The sequence number is then sent back to the outsourced downloading terminal 18. An outsourced document terminal 22 then creates or reproduces the desired document which is then distributed to either the client or the bank. As appreciated, two document retrieval operations, one for the bank to retrieve financial documents having record dates earlier than or equal to one year before the current date, and another to retrieve outsourced financial documents having record dates later than one year before the current date, preferably operate simultaneously. It is to be understood that the computer terminals and the accompanying PC bases are illustrated highly schematically in FIG. 1 and are not intended to be limiting in any manner. For instance, the schematic illustration of the outsourced document terminal 22 need not include a computer terminal and an accompanying PC base. Instead, the outsourced document terminal 22 is preferably some sort of printing device.

Referring to FIGS. 2 through 4, the method for banks to obtain electronically-stored financial documents is described in even greater detail. The request is first generated by the client. The request is then processed by the bank. The processing, retrieval and reproduction of the requested financial document is typically controlled by one interlinked computer software program. One such computer software program is a software program called Antinori Software Incorporated or ASI which is sold under the name of INNOVASION™ by Carreker-Antinori of Dallas, Tex. However, other frequently used software programs include PEGA™ and Sterling™. Any of these computer software systems can provide the necessary means for implementing the discussed procedures.

The processing of the request is completed by a customer service tracking system and the computer terminal 11. The customer service tracking system assists the financial institution in receiving the request. More specifically, the customer service tracking system gives branches, customer service, and other bank departments the capability to enter, log, track, route and monitor the status of all requests for financial documents. The customer service tracking system also provides the capability to enter, log, track, route and monitor the status of customer complaints and other customer service related items.

In accordance with one contemplated embodiment of the invention, a bank employee, such as a bank teller first determines a status of the requested document. More specifically, the employee compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the specific document parameter is a particular numerical sequence and the predetermined parameter is a predetermined numerical value, then the employee compares the particular numerical sequence of the financial document to the predetermined numerical value to determine if the particular numerical sequence is greater than, less than, or equal to the predetermined numerical value. Further, if as in the preferred embodiment, the particular numerical sequence is a record date of the financial document, and the predetermined numerical value is a pre-selected date, then the employee compares the record

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date of the financial document to the pre-selected date to determined if the record date is later than, earlier than, or equal to the pre-selected date.

The customer service tracking system enables a bank employee, such as a bank teller, to submit the request. More specifically, the employee utilizes the computer terminal 11 located at the bank and connected to both the off-site and on-site storage systems to access one of the storage systems in response to the comparison of the specific document parameter of the requested financial document to the predetermined parameter. For instance, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee preferably utilizes the computer terminal 11 to access the off-site storage system, and when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee preferably utilizes the computer terminal 11 to access the on-site storage system. As discussed above, the documents have a numerical sequence equal to the predetermined numerical value may be stored in either the off-site or on-site storage systems.

After the computer terminal 11 is utilized to access the desired storage system, the employee manually inputs identification data of the requested financial document into the computer terminal 11. More specifically, when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee inputs identification data into a primary interface and selects the requested document. Also, the primary interface preferably provides an option for the employee to select among several different output formats. The primary interface is inter-linked with the on-site storage system. In the preferred embodiment of the subject invention, the primary interface appears as follows and includes the identification data detailed below:

Account Number:	Prod Type:
Account Name:	Customer Code:
Address:	
City:	State:
Home Phone: ()	Zip Code:
Fax: ()	Work Phone: ()
Service Code:	
For Items Posted Within A Year	
Copy of Statement Only	Savings Items
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)
Check(s)/Deposit(s) <30 Items	Cash Letter Reconstruction
Statements and <30 Items	Lockbox
Statements and >30 Items	Legal Statement Only
Deposit Reconstruction	Legal Statement and Items
Regardless of Posting Date	
Missing Transactions	Returned Items
Online (Backdated/Unposted)Encoding	
Error/Wrong Account	
EXIT FUNCTION	

Alternatively, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee selects an exit function at the primary interface. The exit function distinguishes that the request is to be sent to an outsourcing third party entity. Upon selection of the exit function at the primary interface, a secondary interface, inter-linked with the exit function, is initiated. The secondary interface is inter-linked with the off-site storage system. The employee inputs identification data into the secondary interface and selects the requested

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document. Also, the secondary interface preferably provides an option for the employee to select among several different output formats. Preferably, routing, or service codes will be generated automatically upon the initiation of the secondary interface and the inputting of the identification data into the secondary interface. The routing codes enable the bank to recognize that the request is being sent to the outsourced third party entity. Furthermore, the routing codes are configured to automatically forward the inputted identification data to the off-site storage system. The inputted identification data and the routing codes are forwarded into the mainframe computer 12 introduced above for temporary storage before transfer to the off-site storage system. This temporary storage also serves to defend against unexpected power outages, computer malfunction, and the like. In the preferred embodiment of the subject invention, the secondary interface appears as follows and includes the identification data detailed below:

Account Number:	Prod Type:
Account Name:	Customer Code:
Address:	
City:	State:
Home Phone: ()	Zip Code:
Fax: ()	Work Phone: ()
Service Code:	
For Items Posted Prior to a Year	
Copy of Statement Only	Savings Items
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)
Check(s)/Deposit(s) < 30 Items	Cash Letter Reconstruction
Statements and < 30 Items	Lockbox
Statements and > 30 Items	Legal Statement Only
Deposit Reconstruction	Legal Statement and Items

Once the bank employee has inputted the necessary identification data into either the primary or secondary interface, then retrieval of the financial document can continue. Specifically, the requested financial document is retrieved as defined by the inputted identification data. Two separate document retrieval procedures are discussed hereinbelow. One document retrieval procedure is for the financial documents having a record date earlier than or equal to the pre-selected date—one year before the current date in this example. The other document retrieval procedure is for the financial documents having a record date later than the pre-selected date. As discussed above, the one year timing selected for the pre-selected date is simply shown as an example and any suitable time frame may be utilized. In fact, even all financial document retrievals may be outsourced to the third party entity. As also discussed above, the two separate document retrieval procedures will typically operate simultaneously.

With reference to the subject example, if the record date of the financial document is earlier than or equal to one year before the current date, the remaining steps occur at the bank. As discussed above, these steps are known as the back office production of the bank. The request is first categorized by a research automation system. The research automation system automates the entire workflow of a bank's research and photocopy departments by sending requests to the appropriate sequence for processing. The downloading terminal 14 serves to perform the research automation system's tasks.

Photocopy requests are routed to an image control system, statement requests are sent to a document retrieval system, and requests for financial adjustments are routed to an adjustment system. The document terminal 16 serves to

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perform these tasks. In the illustrated embodiment of the subject invention, the sample document request is for a paid check. Hence, the categorized sequence will be the image control system which handles photocopy requests.

Referring now to FIG. 3, after the request is categorized, the request is verified for completeness and accuracy. If the request is not complete then additional data is retrieved. The additional data is retrieved by using a sequence number retrieval system and/or an all items research system. Once the request is complete and accurate, then the image reference number can be determined. That is, once the request is complete and accurate, then the requested financial document can be electronically located in the on-site storage system. The reference number may be a routing, sequence, or any other type of indicator. The reference number is determined by the image control system. The image control system is an image retrieval and routing management system which works in conjunction with Kodak's IMAGELINK™ Digital Workstations (IDW). Specifically, the image control system first connects to a network node. The network node is any type of storage device as is known in the art. Preferably a Kodak network node is used. The network node drives the IDW to find the location of the image by using the reference number. Specifically, the employee is prompted to verify that the correct media is loaded in the IDW such that the IDW can locate the image. The reference number for the document is known and the document image is now verified and located.

The requested image can now be retrieved and reproduced. In other words a copy of the digitized document (the check) is created. The copy may be created by manually pulling the microfilm, microfiche, or the like and photocopying the document. The copy may also be made by printing the document from a digitized record. The photocopy of the check is then distributed to the requesting client or other end user of the financial institution. Other end users of the financial institution include, but are not limited to, other financial institutions and federal and state governments. Additional information such as a photocopy report, a statement of charges, a research report and/or a daily status report may also be produced for the requesting client, the other end user, and/or the financial institution. The document retrieval system incorporated at the bank and the method for obtaining electronically-stored financial documents from the on-site storage system is now completed.

Continuing with the subject example, if the record date of the financial document is later than one year before the current date, the automated retrieval of the financial document is outsourced to the third party entity. To begin, a separate file is automatically generated at the bank by the input of the identification data into the secondary interface. Referring specifically to FIG. 4, the routing codes direct the request created on the separate file to be routed separately to the outsourced third party entity. In the preferred embodiment of the subject invention, additional user ID's are created to allow only selected users into the secondary interface. The identification data stored in the separate file and the routing codes are downloaded to the off-site storage system for retrieval of the requested financial documents by the outsourced downloading terminal 18. Preferably, the identification data and routing codes are grouped into batches of common requests for optimum retrieval of the requested financial document by the outsourced third party entity at the off-site storage system. The downloading step may occur at any suitable predetermined interval. Preferably, the downloading will occur three times a day. The downloaded documents are known in the industry as a basket of requests.

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The subject method further includes the step of creating a back-up file of the downloaded identification data and routing codes in the off-site storage system. The back-up file acts as an emergency information source in case the mainframe computer 12 at the financial institution has a catastrophic failure. In addition, the outsourced third party entity is in direct connection with the mainframe computer 12 of the bank wherein the outsourced third party entity may produce a backup directory of each database file. This database backup is an additional safe guard for the financial institution.

The downloaded identification data and routing codes are then categorized for processing in the off-site storage system. The research automation system categorizes this information in a like fashion as discussed above. In fact, the outsourced third party entity uses the same computer software package as the financial institution such that the flow of information is optimum and not interrupted. As discussed above, the subject example request is for a paid check. Hence, the request will be categorized into the image control system and a sequence number will be determined by the sequencing terminal 20. Also, a status to update the progress of the requested financial document is provided to the financial institution.

After the request is categorized, the request, specifically the inputted identification data, is verified for completeness and accuracy. If the request is not complete or accurate, then additional data is retrieved. In a similar fashion as above, the additional data is retrieved by using the sequence number retrieval system and/or the all items research system. As appreciated, the outsourced third party entity may retrieve this information from the mainframe computer 12, via its direct line, or from its own backup database files. Once the request is complete and accurate, the image reference number can be determined. Again, as above, the reference number is determined by the image control system.

The requested image is then retrieved. More specifically, the requested financial document is electronically located in the off-site storage system. Additionally, the requested financial document is also reproduced after the document is electronically located in the off-site storage system by the outsourced document terminal 22. In other words, a copy of the digitized document (the check) is created. A status file is then created for the completed transaction. Also, a status of the request is sent to the financial institution wherein the institution may update their records. The status updates, as well as the information connections, create a two way information exchange between the outsourced third party entity and the bank.

The photocopy of the check is then distributed or digitally transferred to the requesting client, the financial institution, or other end users of the financial institution. In the preferred embodiment of the subject invention, the photocopy of the request is distributed to the requesting client, etc. based on the routing codes. That is, in addition to directing the request to be separately routed to the outsourced third party entity, the routing codes also indicate an appropriate distribution for the request client or other end user. The request is now completed.

A special circumstance occurs when the record date of one portion of the client's request is earlier than or equal to one year before the current date, and when the record date of another portion of the client's request is later than one year before the current date. These types of requests are known in the industry as spanned requests. One solution is to incorporate an additional interface utilized when the

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employee of the bank is utilizing the computer terminal **11** and comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the request is a spanned request, then the request will be split into two separate requests which can be handled simultaneously. A special notation would be put onto the requests such that they may be put back together before distributing the documents to the client or other end user. Another solution simply notifies the inputting employee that two requests should be entered separately. A third solution sends the request to the back office production at the bank wherein the back office employees notify the outsourced third party entity by a separate request to retrieve the requested financial documents.

The invention has been described in an illustrative manner, and it is to be understood that the terminology which has been used is intended to be in the nature of words of description rather than of limitation. Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims, wherein reference numerals are merely for convenience and are not to be in any way limiting, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A method of obtaining an electronically-stored financial document from a first storage system remotely-located from a second storage system wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents include at least one specific document parameter, said method comprising the steps of:

storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter;

storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;

utilizing a computer terminal connected to the first and second storage systems through a processing unit;

receiving a request for at least one of the stored financial documents;

inputting the request into the computer terminal;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted;

automatically accessing the first storage system through the processing unit when the specific document parameter is greater than the predetermined parameter and automatically accessing the second storage system through the processing unit when the specific document parameter is less than or equal to the predetermined parameter; and

retrieving the requested financial document, as defined by the inputted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter.

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2. A method as set forth in claim **1** wherein the first and second fixed mediums are different from each other.

3. A method as set forth in claim **2** wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

4. A method as set forth in claim **3** wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on one of microfilm and microfiche.

5. A method as set forth in claim **3** wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

6. A method as set forth in claim **5** wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents on an electronic disc media.

7. A method as set forth in claim **5** wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in an electronically retrievable memory.

8. A method as set forth in claim **2** wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

9. A method as set forth in claim **8** wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as storing a plurality of financial documents on one of microfilm or microfiche.

10. A method as set forth in claim **1** wherein the first and second fixed mediums are the same.

11. A method as set forth in claim **10** wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a first fixed electronic medium, and wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a second fixed electronic medium.

12. A method as set forth in claim **1** wherein the specific document parameter of the financial document is a particular numerical sequence.

13. A method as set forth in claim **12** wherein the specific document parameter of the financial document is a specific document age.

14. A method as set forth in claim **13** wherein the specific document age of the financial document is a record date of the financial document and the predetermined parameter is a pre-selected date.

15. A method as set forth in claim **12** wherein the specific document parameter of the financial document is a specific account number.

16. A method as set forth in claim **12** wherein the specific document parameter of the financial document is a specific check number.

17. A method as set forth in claim **12** wherein the specific document parameter of the financial document is a specific payment date.

18. A method as set forth in claim **12** wherein the specific document parameter of the financial document is a specific monetary amount.

19. A method as set forth in claim **1** further including the step of reproducing the requested financial document after

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the requested financial document has been retrieved from the associated storage system.

20. A method as set forth in claim 19 further including the step of distributing the reproduced financial document to a financial institution based on routing codes.

21. A method as set forth in claim 1 wherein the step of automatically accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

22. A method as set forth in claim 1 further including an outsourcing institution associated with the second storage system.

23. A method for a financial institution to obtain a stored financial document from an off-site storage system remotely-located from an on-site storage system wherein the financial document includes at least one specific document parameter with the specific document parameter being defined as a specific document age, said method comprising the steps of:

maintaining the financial document in the off-site storage system when the specific document age of the financial document is greater than a predetermined age;

maintaining the financial document in the on-site storage system when the specific document age of the financial document is less than or equal to the predetermined age;

utilizing a computer terminal associated with the financial institution and connected to the off-site and on-site storage systems through a processing unit;

receiving a request for the financial document;

inputting the request into the computer terminal;

comparing the specific document age of the requested financial document to the predetermined age to determine if the specific document age is greater than, less than, or equal to the predetermined age after the request has been inputted;

automatically accessing the off-site storage system through the processing unit when the specific document age is greater than the predetermined age and automatically accessing the on-site storage system through the processing unit when the specific document age is less than or equal to the predetermined age; and

automatically retrieving the requested financial document from the accessed storage system as defined by the inputted request.

24. A method as set forth in claim 23 further including the step of processing the request to locate the requested financial document.

25. A method as set forth in claim 24 further including the step of reproducing the requested financial document after the request has been processed and retrieved.

26. A method as set forth in claim 25 wherein the steps of processing the request, retrieving the requested financial document, and reproducing the requested financial document are controlled by an interlinked computer program.

27. A method as set forth in claim 23 further including the step of feeding the request from the computer terminal into the processing unit.

28. A method as set forth in claim 27 further including the step of downloading the request from the processing unit into a downloading terminal.

29. A method as set forth in claim 28 further including the step of transmitting the request from the downloading terminal to a document terminal.

30. A method as set forth in claim 29 further including the step of reproducing the requested financial document through the document terminal.

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31. A method as set forth in claim 30 further including the step of distributing the reproduced financial document to the financial institution based on routing codes.

32. A method as set forth in claim 27 further including the step of categorizing the request.

33. A method as set forth in claim 27 further including the step of determining a sequence number of the requested financial document after the request has been inputted.

34. A method as set forth in claim 33 further including the step of determining an image reference number of the requested financial document.

35. A method as set forth in claim 23 wherein the step of retrieving the requested financial document is further defined by electronically locating the requested financial document in the off-site storage system.

36. A method as set forth in claim 23 wherein the step of automatically accessing the off-site and on-site storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

37. A method as set forth in claim 23 further including the step of inputting identification data of the requested financial document into the computer terminal through a primary interface inter-linked with the on-site storage system when the specific document age of the financial document is less than or equal to the predetermined age.

38. A method as set forth in claim 37 further including the step of inputting identification data of the requested financial document into the computer terminal by selecting an exit function at the primary interface when the specific document age of the financial document is greater than the predetermined age.

39. A method as set forth in claim 38 wherein the step of selecting the exit function is further defined by initiating a secondary interface inter-linked with the off-site storage system and inputting identification data into the secondary interface.

40. A method as set forth in claim 39 wherein the step of retrieving the requested financial document is further defined as retrieving the requested financial document as defined by the inputted identification data.

41. A method as set forth in claim 23 further including the step of storing the financial document in a fixed medium at one of the off-site and on-site storage systems based on the specific document age of the financial document.

42. A method as set forth in claim 41 wherein the step of storing the financial document in a fixed medium is further defined as electronically storing the financial document in a fixed electronic medium.

43. A method as set forth in claim 41 wherein the step of storing the financial document in a fixed medium is further defined as storing the financial document on microfilm.

44. A method as set forth in claim 41 wherein the step of storing the financial document in a fixed medium is further defined as storing the financial document on microfiche.

45. A method for a financial institution to obtain a stored financial document from an off-site storage system remotely-located from an on-site storage system wherein the financial document includes at least one specific document parameter with the specific document parameter being defined as a specific document age, said method comprising the steps of:

providing an outsourcing institution associated with the off-site storage system and a requestor;

associating the financial institution with the on-site storage system wherein the outsourcing institution, requestor, and financial institution are different from each other;

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maintaining the financial document with the outsourcing institution in the off-site storage system when the specific document age of the financial document is greater than a predetermined age;

maintaining the financial document with the financial institution in the on-site storage system when the specific document age of the financial document is less than or equal to the predetermined age;

utilizing a computer terminal located at the financial institution and connected to the off-site and on-site storage systems through a processing unit;

receiving a request from the requestor for the financial document at the financial institution;

inputting the request into the computer terminal at the financial institution after the request is received;

comparing the specific document age of the requested financial document to the predetermined age to determine if the specific document age is greater than, less than, or equal to the predetermined age after the request has been inputted;

automatically accessing the off-site storage system through the processing unit when the specific document age is greater than the predetermined age and automatically accessing the on-site storage system through the processing unit when the specific document age is less than or equal to the predetermined age; and

automatically retrieving the requested financial document from the accessed storage system as defined by the inputted request.

46. A method as set forth in claim **45** further including the step of processing the request to locate the requested financial document.

47. A method as set forth in claim **46** further including the step of reproducing the requested financial document after the request has been processed and retrieved.

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48. A method as set forth in claim **47** wherein the steps of processing the request, retrieving the requested financial document, and reproducing the requested financial document are controlled by a single computer program.

49. A method as set forth in claim **45** wherein the step of automatically accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

50. A method as set forth in claim **45** wherein the steps of storing a plurality of financial documents in the first and second storage systems are further defined as storing the financial documents in a fixed medium at one of the first and second storage systems based on the specific document age of the financial document.

51. A method as set forth in claim **50** wherein the step of storing the plurality of financial documents in a fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

52. A method as set forth in claim **50** wherein the step of storing the plurality of financial documents in a fixed medium is further defined as storing a plurality of financial documents on microfilm.

53. A method as set forth in claim **50** wherein the step of storing the plurality of financial documents in a fixed medium is further defined as storing a plurality of financial documents on microfiche.

54. A method as set forth in claim **45** further including the step of reproducing the requested financial document after the requested financial document has been retrieved from the associated storage system.

55. A method as set forth in claim **54** further including the step of distributing the reproduced financial document to a financial institution based on routing codes.

* * * * *

Exhibit B

US007552118B2

(12) **United States Patent**
Schulze et al.

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(45) **Date of Patent:** ***Jun. 23, 2009**

(54) **METHOD OF OBTAINING AN ELECTRONICALLY-STORED FINANCIAL DOCUMENT**

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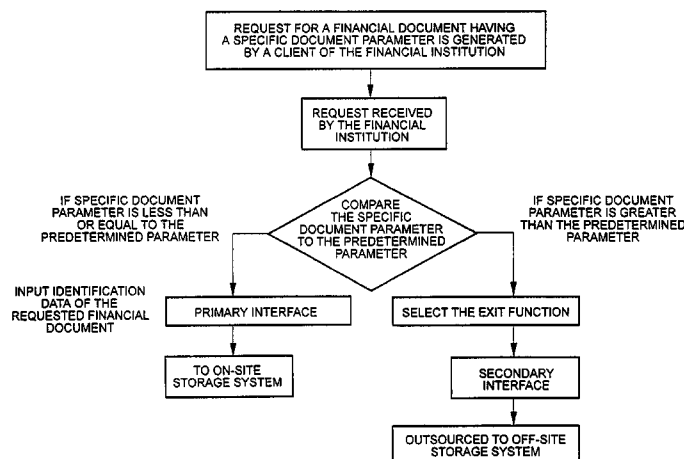
(58) **Field of Classification Search** None
See application file for complete search history.

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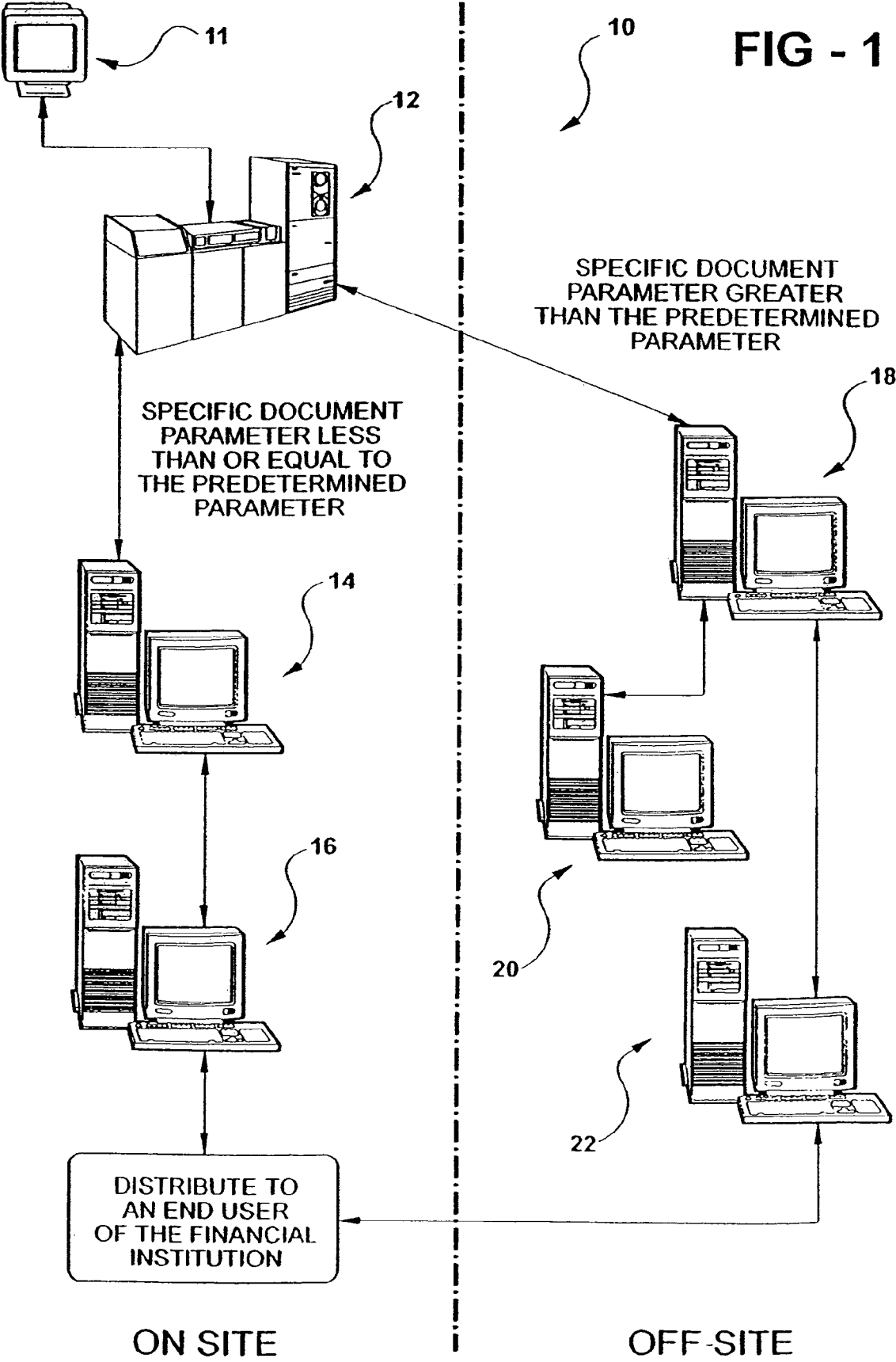
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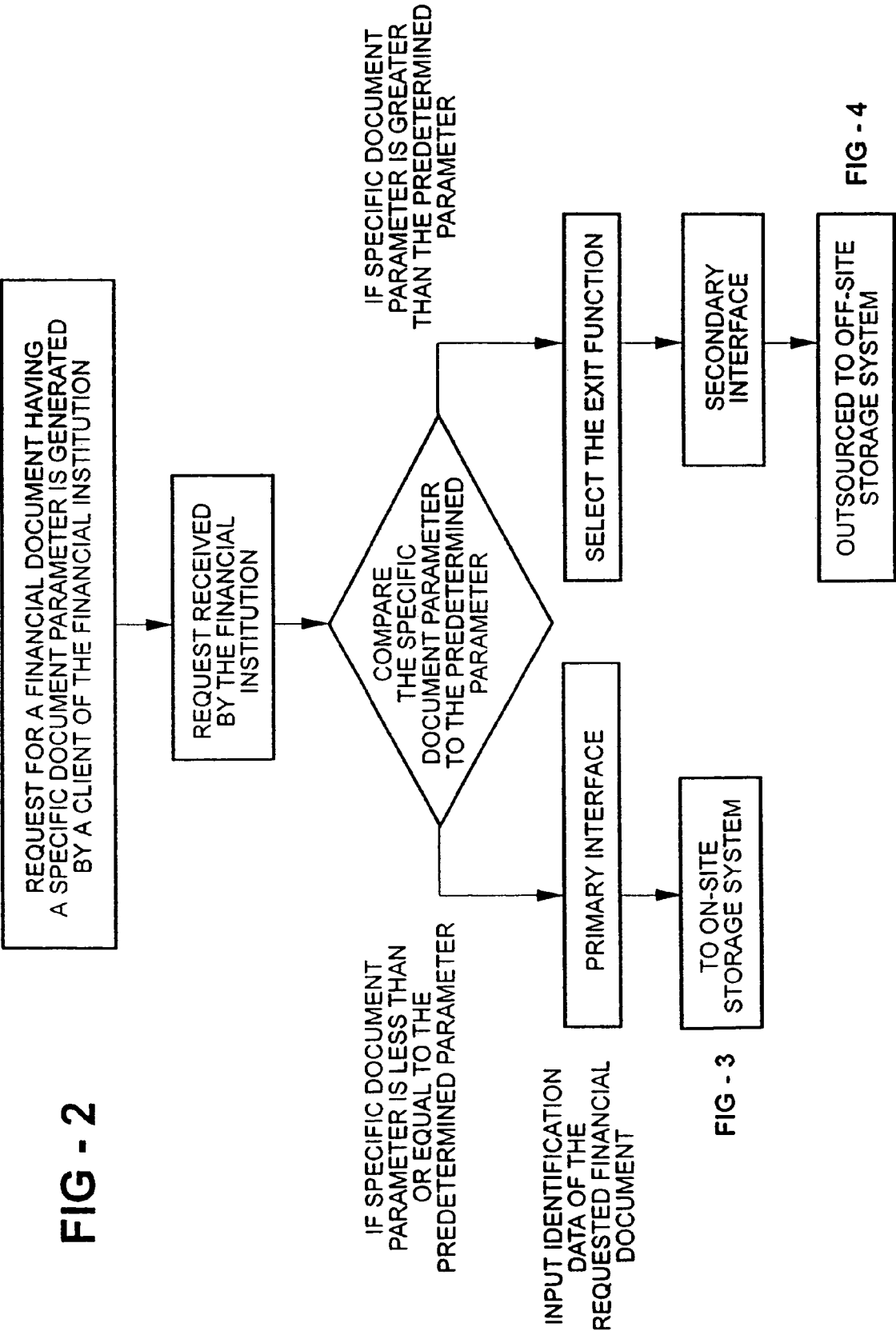
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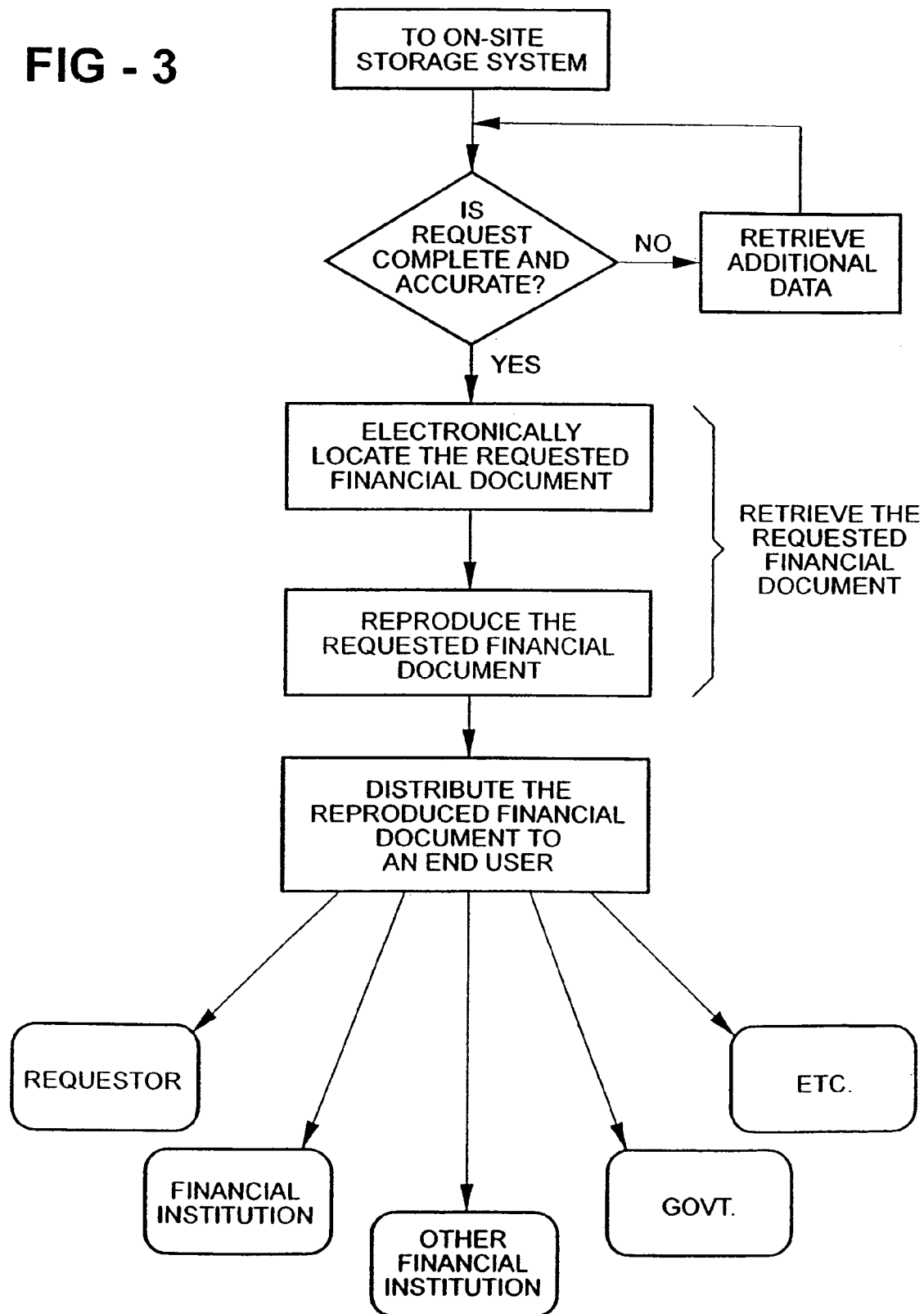
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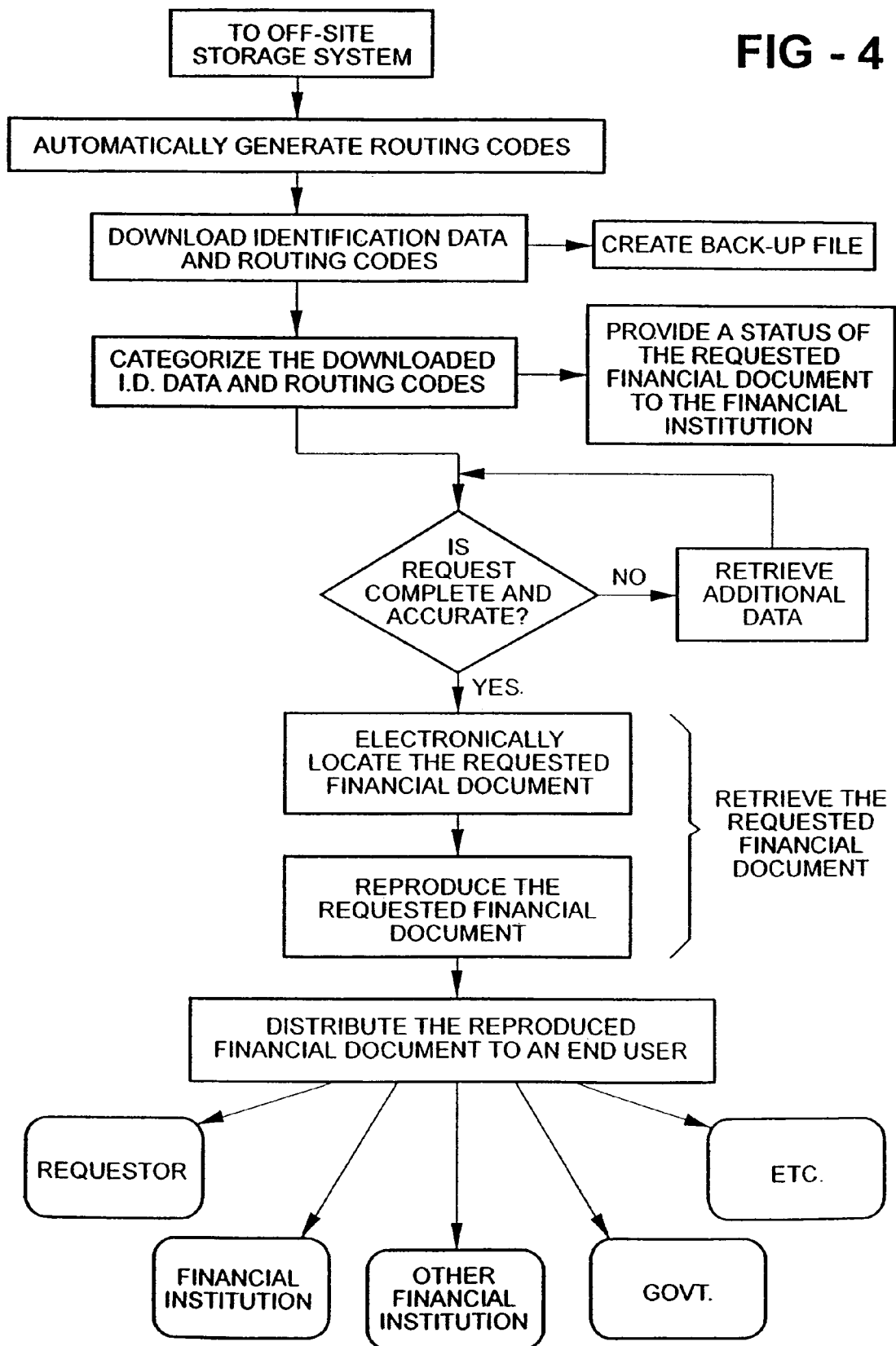
(ON-SITE STORAGE SYSTEM)

FIG - 3



(OFF-SITE STORAGE SYSTEM)

FIG - 4



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METHOD OF OBTAINING AN ELECTRONICALLY-STORED FINANCIAL DOCUMENT

RELATED APPLICATIONS

This patent application is a continuation of U.S. patent application Ser. No. 10/104,541, filed on Mar. 22, 2002 now U.S. Pat. No. 6,963,866 which is a continuation of U.S. patent application Ser. No. 09/548,490, filed on Apr. 13, 2000, now U.S. Pat. No. 6,446,072, which in turn claims priority to and all the advantages of U.S. Provisional Patent Application Ser. No. 60/129,021 which was filed on Apr. 13, 1999.

BACKGROUND OF THE INVENTION

1) Technical Field

The subject invention relates to a method for a financial institution to obtain electronically-stored financial documents from an off-site storage system remotely-located from an on-site storage system.

2) Description of the Prior Art

Methods for obtaining electronically-stored financial documents are generally known in the art. Financial institutions, such as banks and credit unions, utilize such methods to rapidly and efficiently obtain financial documents for distribution to clients upon request. Such financial documents include paid checks, account statements, and other related documents. These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. Further, these financial documents are typically electronically-stored in an on-site storage system located at the financial institution or in an off-site storage system. Electronic storage of these financial documents permits financial institutions to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides a means of retrieving the information from the on-site and off-site storage systems.

Once the document is stored, the client may request an image of a particular stored document. Client requests are made to replace lost or stolen documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. The client's request is inputted into a computer terminal at the financial institution. More specifically, conventional methods for obtaining an electronically-stored financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal. The interface is inter-linked with the on-site storage system. Typically, all requests for a particular period are grouped together and subsequently downloaded for retrieval of the requested image by the financial institution. The financial institution retrieves the image, e.g. a photocopy of the check, and then distributes the photocopy to the client via facsimile, mail or hand delivery. The storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry as back office production. Back office production for financial institutions is particularly resource intensive, time consuming, and expensive. Also, back office production becomes increasingly expensive if the client requests a particularly old financial document because older financial documents frequently require more resources and time to locate and retrieve.

The majority of financial institutions electronically store financial documents only in an on-site storage system and not in an off-site storage system. Consequently, these financial institutions are unable to outsource the responsibilities for the

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back office production to third party entities to alleviate the expenses and resources associated with the back office production. These financial institutions realize a significant financial burden since the back office production is concentrated strictly at the financial institution.

Other financial institutions do electronically store financial documents in on-site and off-site storage systems. However, the methods utilized by these financial institutions to access the financial documents stored in the off-site storage system are deficient in that the interface utilized in such methods is only inter-linked with the on-site storage system. That is, there is no interface independently inter-linked with the off-site storage system. As a result, the financial documents stored in the off-site storage system can not be efficiently accessed. These financial institutions are still responsible for retrieving the requested financial documents through their back office production and their expenses remain high. One such method of retrieving documents from on-site and off-sited storage systems is disclosed in U.S. Pat. No. 5,784,610 to Copeland, III et al.

Due to the inefficiencies identified in the conventional methods used by financial institutions to obtain financial documents, it is desirable to implement a method for a financial institution to obtain electronically-stored financial documents from both on-site and off-site storage systems that reduces, if not eliminates, the back office production of the financial institution by providing a direct interface inter-linked with the off-site storage system. With such an interface, the responsibility for retrieving financial documents from the off-site storage can be outsourced to third party entities while still providing the financial institution with efficient access to any financial documents electronically-stored in the off-site storage system.

SUMMARY OF THE INVENTION AND ADVANTAGES

A method for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed. The specific document parameter is typically a particular numerical sequence, such as a record date of the financial document. The method of the subject invention enables the financial institution to obtain the financial documents from an off-site storage system. The off-site storage system is remotely-located from an on-site storage system. The financial documents of the financial institution are maintained in the off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. The financial documents that are less than or equal to the predetermined parameter are maintained in the on-site storage system.

When the financial institution receives a request for a financial document, the financial institution compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. A computer terminal located at the financial institution is connected to both the off-site and on-site storage systems. The computer terminal is utilized to access one of the storage systems in response to the comparison of the specific document parameter to the predetermined parameter. For instance, if it is determined that the specific document parameter is less than or equal to the predetermined document parameter, then the computer terminal accesses the on-site storage system. On the other hand, if it is determined that the specific document parameter of the financial docu-

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ment is greater than the predetermined parameter, then the computer terminal accesses the off-site storage system.

After the computer terminal accesses the appropriate storage system, identification data of the requested financial document is inputted into the computer. More specifically, to access the on-site storage system, the identification data is input into a primary interface that is specifically inter-linked with the on-site storage system. To access the off-site storage system, an exit function is selected at the primary interface and the identification data is then input into a secondary interface that is initiated upon selection of the exit function. The secondary interface is specifically inter-linked with the off-site storage system.

Finally, after the identification data of the requested financial document is inputted, the requested document is then retrieved in order to reproduce the financial document, and distribute the financial document to an end user of the financial institution.

The subject invention therefore provides a method that enables financial institutions to obtain electronically-stored financial documents from an off-site storage system via a secondary interface that is specifically inter-linked with the off-site storage system and the financial documents electronically-stored in that system. As such, the financial institution can selectively store financial documents in either an on-site storage system or the off-site storage system, and the responsibility for the financial documents in the off-site storage system can be outsourced to a third party entity. Therefore, the back office production of the financial institution associated with the retrieval and distribution of financial documents stored in the off-site storage system is strategically reduced or even completely eliminated.

BRIEF DESCRIPTION OF THE DRAWINGS

Other advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIG. 1 is a flow diagram schematically detailing an on-site storage system, and an off-site storage system in accordance with the subject invention;

FIG. 2 is a block diagram generally representing a method for a financial institution to obtain electronically-stored financial documents from the on-site and off-site storage systems;

FIG. 3 is a block diagram completing the method of obtaining electronically-stored financial documents from the on-site storage system; and

FIG. 4 is a block diagram completing the method of obtaining electronically-stored financial documents from the off-site storage system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views, a method for a financial institution to obtain an electronically-stored financial document is schematically shown at 10 in FIG. 1. The method introduced in the subject invention enables the financial institution to obtain the financial document from an off-site storage system remotely located from an on-site storage system. Preferably, the on-site storage system is located at the financial institution and the off-site storage system is located at a remote location distant from the

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financial institution. This allows the financial institution to 'outsource' the responsibilities associated with obtaining the financial document.

Methods for financial institutions to obtain electronically-stored documents are frequently used by such entities as banks, credit unions, and other financially-oriented institutions. For illustrative purposes only, the description of the subject invention is discussed with reference to banks. However, as appreciated by those skilled in the art, other businesses, such as insurance companies, may also utilize similar methods and incorporate the aspects of the subject invention.

Methods for banks to obtain electronically-stored financial documents are generally used by banks to rapidly and efficiently obtain financial documents for distribution to clients upon request. As described above, the financial documents for banks are usually paid checks, checking statements, and other related financial documents, and these documents include at least one specific document parameter. As appreciated by those skilled in the art, it is not the financial document (e.g. the paid check) itself that is electronically-stored. Rather, it is data included on the document such as a sequence number that is electronically stored to make up the financial document. The specific document parameter is preferably a particular numerical sequence. As appreciated, the specific document parameter of the financial document can include, but is not limited to, a record date or age of the document, a series number, or some other document identifying number of the financial document. More specifically, in the preferred embodiment of the subject invention, the particular numerical sequence of the financial document is the record date of the financial document. That is, the date that the particular financial document was created or posted.

The financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. As appreciated, the electronic storage of the financial documents is frequently created by taking an electronic photo image of the document and storing the photo image in a computer system. One such digital electronic storage device is sold by Kodak under the name of IMAGELINK™ Digital Workstation (IDW). Electronic storage of these financial documents permits banks to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides an efficient means of retrieving the information from the on-site and off-site storage systems. This will be discussed further herein below.

As described above, the financial documents are electronically-stored in either the on-site storage system located at the bank or in the off-site storage system remotely located from the on-site storage system. More specifically, the subject invention includes the step of maintaining the financial documents in the off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. Financial documents are maintained in the on-site storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter. As appreciated, the document parameter of the financial documents stored in the off-site storage system may be greater than or equal to the predetermined parameter with the on-site storage system having documents only less than the predetermined parameter.

Similar to the specific document parameter of the financial document, the predetermined parameter is also a numerical value. The predetermined parameter is specifically a numerical value predetermined by the bank. For instance, if the specific document parameter is a series number of a paid check and the series number is greater than the predetermined

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parameter which, in this case, would be an arbitrarily selected base series number, then the paid check would be stored in the off-site storage system.

In the preferred embodiment of the subject invention, the predetermined numerical value is a date pre-selected by the bank. For instance, the bank may pre-select a date that is one year before a current date—the current date being the actual date that the client requests the financial document. Of course, the bank may pre-select a date that is some other time period before a current date (e.g. two or three years) without varying from the scope of the subject invention. As such, if the record date of the particular financial document is older than one year, then the particular financial document is maintained in the off-site storage system. If the record date of the particular financial document is earlier than or equal to one year, then the particular financial document is maintained in the on-site storage system. As discussed above, the document having record dates equal to the one year may be stored in the off-site or on-site storage systems.

Once the financial document is maintained in the appropriate storage system, the bank is capable of receiving a request for the financial document from the client. In reality, the client is requesting an image of the stored financial document. As appreciated, clients request the image for various reasons. As discussed above, requests are typically made for replacing lost or stolen financial documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. Ultimately, the bank retrieves the image, reproduces the image, and distributes the reproduced image to the requesting client of the bank.

Referring now to FIG. 1, the method for banks to obtain electronically-stored financial documents is discussed in detail. Initially, the requesting client requests a particular financial document, such as a paid check. The client is typically a customer of the bank or other financial institution. The client's request is inputted into a computer terminal 11 at the financial institution. The computer terminal 11 will be discussed in more detail hereinbelow.

From the computer terminal 11, the request is fed into a mainframe computer 12 at the bank. In the preferred embodiment of the subject invention, if the client requests a financial document having a record date earlier than or equal to one year before the current date, then the request, and other requests like it, are processed at the bank in the on-site storage system. That is, the requests are grouped together and downloaded to a downloading terminal 14 at the bank. The downloading may occur at particular intervals such as at the end of each day, every three hours, etc. The sequence number of each check requested is then determined. A document terminal 16 subsequently creates or reproduces the document, i.e., a photocopy of the check. The photocopy is then distributed to the client via facsimile, mail, or hand delivery.

It is known in the art that the majority of requests for financial documents are requests for documents which were created in the most recent year. That is, if the pre-selected date is one year before the current date, as in the preferred embodiment, then the majority of requests are seeking financial documents having a record date earlier than or equal to the pre-selected date. The remaining document requests relate to financial documents that are older than one year. Since, as described in the Background of the Invention, retrieval of financial documents that are older than one year is particularly expensive, the preferred embodiment of the subject invention outsources all of the document requests which relate to documents having a record date later than one year before the current date. As appreciated, the particular time frame which is outsourced is not a critical feature of the

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subject invention and may be adjusted to meet the needs of any particular financial institution. In fact, all of the document requests, including the most recent, may be outsourced using the outsourcing procedure of the subject invention.

In the preferred embodiment, if the client requests a financial document having a record date later than one year before the current date, then the request, and others like it, are grouped together and downloaded from the mainframe computer 12 to an outsourced downloading terminal 18. As above, the downloading may be at particular intervals as needed. The sequence number is determined by a sequencing terminal 20. The sequence number is then sent back to the outsourced downloading terminal 18. An outsourced document terminal 22 then creates or reproduces the desired document which is then distributed to either the client or the bank. As appreciated, two document retrieval operations, one for the bank to retrieve financial documents having record dates earlier than or equal to one year before the current date, and another to retrieve outsourced financial documents having record dates later than one year before the current date, preferably operate simultaneously. It is to be understood that the computer terminals and the accompanying PC bases are illustrated highly schematically in FIG. 1 and are not intended to be limiting in any manner. For instance, the schematic illustration of the outsourced document terminal 22 need not include a computer terminal and an accompanying PC base. Instead, the outsourced document terminal 22 is preferably some sort of printing device.

Referring to FIGS. 2 through 4, the method for banks to obtain electronically-stored financial documents is described in even greater detail. The request is first generated by the client. The request is then processed by the bank. The processing, retrieval and reproduction of the requested financial document is typically controlled by one interlinked computer software program. One such computer software program is a software program called Antinori Software Incorporated or ASI which is sold under the name of INNOVATION™ by Carreker-Antinori of Dallas, Tex. However, other frequently used software programs include PEGAT™ and Sterling™. Any of these computer software systems can provide the necessary means for implementing the discussed procedures.

The processing of the request is completed by a customer service tracking system and the computer terminal 11. The customer service tracking system assists the financial institution in receiving the request. More specifically, the customer service tracking system gives branches, customer service, and other bank departments the capability to enter, log, track, route and monitor the status of all requests for financial documents. The customer service tracking system also provides the capability to enter, log, track, route and monitor the status of customer complaints and other customer service related items.

A bank employee, such as a bank teller first determines a status of the requested document. More specifically, the employee compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the specific document parameter is a particular numerical sequence and the predetermined parameter is a predetermined numerical value, then the employee compares the particular numerical sequence of the financial document to the predetermined numerical value to determine if the particular numerical sequence is greater than, less than, or equal to the predetermined numerical value. Further, if as in the preferred embodiment, the particular numerical sequence is a record date of the financial document, and the predetermined

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numerical value is a pre-selected date, then the employee compares the record date of the financial document to the pre-selected date to determine if the record date is later than, earlier than, or equal to the pre-selected date.

The customer service tracking system enables a bank employee, such as a bank teller, to submit the request. More specifically, the employee utilizes the computer terminal 11 located at the bank and connected to both the off-site and on-site storage systems to access one of the storage systems in response to the comparison of the specific document parameter of the requested financial document to the predetermined parameter. For instance, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee preferably utilizes the computer terminal 11 to access the off-site storage system, and when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee preferably utilizes the computer terminal 11 to access the on-site storage system. As discussed above, the documents have a numerical sequence equal to the predetermined numerical value may be stored in either the off-site or on-site storage systems.

After the computer terminal 11 is utilized to access the desired storage system, the employee manually inputs identification data of the requested financial document into the computer terminal 11. More specifically, when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee inputs identification data into a primary interface and selects the requested document. Also, the primary interface preferably provides an option for the employee to select among several different output formats. The primary interface is inter-linked with the on-site storage system. In the preferred embodiment of the subject invention, the primary interface appears as follows and includes the identification data detailed below:

Account Number:	Prod Type:
Account Name:	Customer Code:
Address:	
City:	State:
Zip Code:	
Home Phone: ()	Work Phone: ()
Fax: ()	
Service Code:	
For Items Posted Within A Year	
Copy of Statement Only	Savings Items
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)
Check(s)/Deposit(s)<30 Items	Cash Letter Reconstruction
Statements and<30 Items	Lockbox
Statements and>30 Items	Legal Statement Only
Deposit Reconstruction	Legal Statement and Items
Regardless of Posting Date	
Missing Transactions	Returned Items
Online (Backdated/Unposted) Encoding Error/Wrong Account	
EXIT FUNCTION	

Alternatively, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee selects an exit function at the primary interface. The exit function distinguishes that the request is to be sent to an outsourcing third party entity. Upon selection of the exit function at the primary interface, a secondary interface, inter-linked with the exit function, is initiated. The secondary interface is inter-linked with the off-site storage system. The employee inputs identification data into the secondary interface and selects the requested document. Also, the secondary interface preferably provides an option for the employee to select among several different output

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formats. Preferably, routing, or service codes will be generated automatically upon the initiation of the secondary interface and the inputting of the identification data into the secondary interface. The routing codes enable the bank to recognize that the request is being sent to the outsourced third party entity. Furthermore, the routing codes are configured to automatically forward the inputted identification data to the off-site storage system. The inputted identification data and the routing codes are forwarded into the mainframe computer 12 introduced above for temporary storage before transfer to the off-site storage system. This temporary storage also serves to defend against unexpected power outages, computer malfunctions, and the like. In the preferred embodiment of the subject invention, the secondary interface appears as follows and includes the identification data detailed below:

Account Number:	Prod Type:
Account Name:	Customer Code:
Address:	
City:	State:
Zip Code:	
Home Phone: ()	Work Phone: ()
Fax: ()	
Service Code:	
For Items Posted Prior to a Year	
Copy of Statement Only	Savings Items
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)
Check(s)/Deposit(s)<30 Items	Cash Letter Reconstruction
Statements and<30 Items	Lockbox
Statements and>30 Items	Legal Statement Only
Deposit Reconstruction	Legal Statement and Items

Once the bank employee has inputted the necessary identification data into either the primary or secondary interface, then retrieval of the financial document can continue. Specifically, the requested financial document is retrieved as defined by the inputted identification data. Two separate document retrieval procedures are discussed hereinbelow. One document retrieval procedure is for the financial documents having a record date earlier than or equal to the pre-selected date—one year before the current date in this example. The other document retrieval procedure is for the financial documents having a record date later than the pre-selected date. As discussed above, the one year timing selected for the pre-selected date is simply shown as an example and any suitable time frame may be utilized. In fact, even all financial document retrievals may be outsourced to the third party entity. As also discussed above, the two separate document retrieval procedures will typically operate simultaneously.

With reference to the subject example, if the record date of the financial document is earlier than or equal to one year before the current date, the remaining steps occur at the bank. As discussed above, these steps are known as the back office production of the bank. The request is first categorized by a research automation system. The research automation system automates the entire workflow of a bank's research and photocopy departments by sending requests to the appropriate sequence for processing. The downloading terminal 14 serves to perform the research automation system's tasks.

Photocopy requests are routed to an image control system, statement requests are sent to a document retrieval system, and requests for financial adjustments are routed to an adjustment system. The document terminal 16 serves to perform these tasks. In the illustrated embodiment of the subject invention, the sample document request is for a paid check. Hence, the categorized sequence will be the image control system which handles photocopy requests.

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Referring now to FIG. 3, after the request is categorized, the request is verified for completeness and accuracy. If the request is not complete then additional data is retrieved. The additional data is retrieved by using a sequence number retrieval system and/or an all items research system. Once the request is complete and accurate, then the image reference number can be determined. That is, once the request is complete and accurate, then the requested financial document can be electronically located in the on-site storage system. The reference number may be a routing, sequence, or any other type of indicator. The reference number is determined by the image control system. The image control system is an image retrieval and routing management system which works in conjunction with Kodak's IMAGELINK™ Digital Workstations (IDW). Specifically, the image control system first connects to a network node. The network node is any type of storage device as is known in the art. Preferably a Kodak network node is used. The network node drives the IDW to find the location of the image by using the reference number. Specifically, the employee is prompted to verify that the correct media is loaded in the IDW such that the IDW can locate the image. The reference number for the document is known and the document image is now verified and located.

The requested image can now be retrieved and reproduced. In other words a copy of the digitized document (the check) is created. The copy may be created by manually pulling the microfilm, microfiche, or the like and photocopying the document. The copy may also be made by printing the document from a digitized record. The photocopy of the check is then distributed to the requesting client or other end user of the financial institution. Other end users of the financial institution include, but are not limited to, other financial institutions and federal and state governments. Additional information such as a photocopy report, a statement of charges, a research report and/or a daily status report may also be produced for the requesting client, the other end user, and/or the financial institution. The document retrieval system incorporated at the bank and the method for obtaining electronically-stored financial documents from the on-site storage system is now completed.

Continuing with the subject example, if the record date of the financial document is later than one year before the current date, the automated retrieval of the financial document is outsourced to the third party entity. To begin, a separate file is automatically generated at the bank by the input of the identification data into the secondary interface. Referring specifically to FIG. 4, the routing codes direct the request created on the separate file to be routed separately to the outsourced third party entity. In the preferred embodiment of the subject invention, additional user ID's are created to allow only selected users into the secondary interface. The identification data stored in the separate file and the routing codes are downloaded to the off-site storage system for retrieval of the requested financial documents by the outsourced downloading terminal 18. Preferably, the identification data and routing codes are grouped into batches of common requests for optimum retrieval of the requested financial document by the outsourced third party entity at the off-site storage system. The downloading step may occur at any suitable predetermined interval. Preferably, the downloading will occur three times a day. The downloaded documents are known in the industry as a basket of requests.

The subject method further includes the step of creating a back-up file of the downloaded identification data and routing codes in the off-site storage system. The back-up file acts as an emergency information source in case the mainframe computer 12 at the financial institution has a catastrophic failure.

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In addition, the outsourced third party entity is in direct connection with the mainframe computer 12 of the bank wherein the outsourced third party entity may produce a backup directory of each database file. This database backup is an additional safe guard for the financial institution.

The downloaded identification data and routing codes are then categorized for processing in the off-site storage system. The research automation system categorizes this information in a like fashion as discussed above. In fact, the outsourced third party entity uses the same computer software package as the financial institution such that the flow of information is optimum and not interrupted. As discussed above, the subject example request is for a paid check. Hence, the request will be categorized into the image control system and a sequence number will be determined by the sequencing terminal 20. Also, a status to update the progress of the requested financial document is provided to the financial institution.

After the request is categorized, the request, specifically the inputted identification data, is verified for completeness anti accuracy. If the request is not complete or accurate, then additional data is retrieved. In a similar fashion as above, the additional data is retrieved by using the sequence number retrieval system and/or the all items research system. As appreciated, the outsourced third party entity may retrieve this information from the mainframe computer 12, via its direct line, or from its own backup database files. Once the request is complete and accurate, the image reference number can be determined. Again, as above, the reference number is determined by the image control system.

The requested image is then retrieved. More specifically, the requested financial document is electronically located in the off-site storage system. Additionally, the requested financial document is also reproduced after the document is electronically located in the off-site storage system by the outsourced document terminal 22. In other words, a copy of the digitized document (the check) is created. A status file is then created for the completed transaction. Also, a status of the request is sent to the financial institution wherein the institution may update their records. The status updates, as well as the information connections, create a two way information exchange between the outsourced third party entity and the bank.

The photocopy of the check is then distributed or digitally transferred to the requesting client, the financial institution, or other end users of the financial institution. In the preferred embodiment of the subject invention, the photocopy of the request is distributed to the requesting client, etc. based on the routing codes. That is, in addition to directing the request to be separately routed to the outsourced third party entity, the routing codes also indicate an appropriate distribution for the request client or other end user. The request is now completed.

A special circumstance occurs when the record date of one portion of the client's request is earlier than or equal to one year before the current date, and when the record date of another portion of the client's request is later than one year before the current date. These types of requests are known in the industry as spanned requests. One solution is to incorporate an additional interface utilized when the employee of the bank is utilizing the computer terminal 11 and comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the request is a spanned request, then the request will be split into two separate requests which can be handled simultaneously. A special notation would be put onto the requests such that they may be

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put back together before distributing the documents to the client or other end user. Another solution simply notifies the inputting employee that two requests should be entered separately. A third solution sends the request to the back office production at the bank wherein the back office employees notify the outsourced third party entity by a separate request to retrieve the requested financial documents.

The invention has been described in an illustrative manner, and it is to be understood that the terminology which has been used is intended to be in the nature of words of description rather than of limitation. Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims, wherein reference numerals are merely for convenience and are not to be in any way limiting, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A method of obtaining an electronically-stored financial document from a first storage system remotely-located from a second storage system wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter;

storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;

utilizing a computer terminal connected to the first and second storage systems through a processing unit;

submitting a request for at least one of the stored financial documents into the computer terminal;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been inputted;

automatically accessing the first storage system through the processing unit when the specific document parameter is greater than the predetermined parameter and automatically accessing the second storage system through the processing unit when the specific document parameter is less than or equal to the predetermined parameter; and

retrieving the requested financial document, as defined by the inputted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter.

2. A method as set forth in claim 1 wherein the first and second fixed mediums are different from each other.

3. A method as set forth in claim 2 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

4. A method as set forth in claim 2 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

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5. A method as set forth in claim 3 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on one of microfilm and microfiche.

6. A method as set forth in claim 3 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

7. A method as set forth in claim 6 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents on an electronic disc media.

8. A method as set forth in claim 6 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in an electronically retrievable memory.

9. A method as set forth in claim 4 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as storing a plurality of financial documents on one of microfilm or microfiche.

10. A method as set forth in claim 1 wherein the first and second fixed mediums are the same.

11. A method as set forth in claim 10 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a first fixed electronic medium, and wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a second fixed electronic medium.

12. A method as set forth in claim 1 wherein the specific document parameter of the financial document is a particular numerical sequence.

13. A method as set forth in claim 12 wherein the specific document parameter of the financial document is a specific document age.

14. A method as set forth in claim 13 wherein the specific document age of the financial document is a record date of the financial document and the predetermined parameter is a pre-selected date.

15. A method as set forth in claim 12 wherein the specific document parameter of the financial document is a specific account number.

16. A method as set forth in claim 12 wherein the specific document parameter of the financial document is a specific check number.

17. A method as set forth in claim 12 wherein the specific document parameter of the financial document is a specific payment date.

18. A method as set forth in claim 12 wherein the specific document parameter of the financial document is a specific monetary amount.

19. A method as set forth in claim 1 further including the step of reproducing the requested financial document after the requested financial document has been retrieved from the associated storage system.

20. A method as set forth in claim 19 further including the step of distributing the reproduced financial document to a financial institution based on routing codes.

21. A method as set forth in claim 1 wherein the step of automatically accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

22. A method as set forth in claim 1 further including an outsourcing institution associated with the second storage system.

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23. A method for a financial institution to obtain a stored financial document from an off site storage system remotely-located from an on-site storage system wherein the financial document is associated with at least one specific document parameter with the specific document parameter being defined as a specific document age, said method comprising the steps of:

maintaining the financial document in the off-site storage system when the specific document age of the financial document is greater than a predetermined age;

maintaining the financial document in the on-site storage system when the specific document age of the financial document is less than or equal to the predetermined age;

utilizing a computer terminal associated with the financial institution and connected to the off-site and on-site storage systems through a processing unit;

submitting a request for the financial document into the computer terminal;

comparing the specific document age of the requested financial document to the predetermined age to determine if the specific document age is greater than, less than, or equal to the predetermined age after the request has been inputted;

automatically accessing the off-site storage system through the processing unit when the specific document age is greater than the predetermined age and automatically accessing the on-site storage system through the processing unit when the specific document age is less than or equal to the predetermined age; and

automatically retrieving the requested financial document from the accessed storage system as defined by the inputted request.

24. A method as set forth in claim 23 further including the step of processing the request to locate the requested financial document.

25. A method as set forth in claim 24 further including the step of reproducing the requested financial document after the request has been processed and retrieved.

26. A method as set forth in claim 25 wherein the steps of processing the request, retrieving the requested financial document, and reproducing the requested financial document are controlled by an interlinked computer program.

27. A method as set forth in claim 23 further including the step of feeding the request from the computer terminal into the processing unit.

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28. A method as set forth in claim 27 further including the step of downloading the request from the processing unit into a downloading terminal.

29. A method as set forth in claim 28 further including the step of transmitting the request from the downloading terminal to a document terminal.

30. A method as set forth in claim 29 further including the step of reproducing the requested financial document through the document terminal.

31. A method as set forth in claim 30 further including the step of distributing the reproduced financial document to the financial institution based on routing codes.

32. A method as set forth in claim 27 further including the step of categorizing the request.

33. A method as set forth in claim 27 further including the step of determining a sequence number of the requested financial document after the request has been inputted.

34. A method as set forth in claim 33 further including the step of determining an image reference number of the requested financial document.

35. A method as set forth in claim 23 wherein the step of retrieving the requested financial document is further defined by electronically locating the requested financial document in the off-site storage system.

36. A method as set forth in claim 23 wherein the step of automatically accessing the off-site and on-site storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

37. A method as set forth in claim 23 further including the step of storing the financial document in a fixed medium at one of the off-site and on-site storage systems based on the specific document age of the financial document.

38. A method as set forth in claim 37 wherein the step of storing the financial document in a fixed medium is further defined as electronically storing the financial document in a fixed electronic medium.

39. A method as set forth in claim 37 wherein the step of storing the financial document in a fixed medium is further defined as storing the financial document on microfilm.

40. A method as set forth in claim 37 wherein the step of storing the financial document in a fixed medium is further defined as storing the financial document on microfiche.

* * * * *

Exhibit C

US007836067B2

(12) **United States Patent**
Schulze et al.(10) **Patent No.:** **US 7,836,067 B2**(45) **Date of Patent:** ***Nov. 16, 2010**(54) **METHOD OF OBTAINING
ELECTRONICALLY-STORED FINANCIAL
DOCUMENTS**(75) Inventors: **Michael D. Schulze**, Troy, MI (US);
Richard J. Gagnon, Grosse Pointe
Farms, MI (US)(73) Assignee: **Mirror Imaging, LLC**, Southfield, MI
(US)(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 36 days.This patent is subject to a terminal dis-
claimer.(21) Appl. No.: **12/489,087**(22) Filed: **Jun. 22, 2009**(65) **Prior Publication Data**

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continuation of application No. 09/548,490, filed on
Apr. 13, 2000, now Pat. No. 6,446,072.(60) Provisional application No. 60/129,021, filed on Apr.
13, 1999.(51) **Int. Cl.**
G06F 17/30 (2006.01)(52) **U.S. Cl.** **707/765; 707/754; 707/766;**
707/769; 707/821; 707/E17.062; 707/E17.069;
707/999.001; 707/999.005; 707/999.01; 707/999.205(58) **Field of Classification Search** None
See application file for complete search history.(56) **References Cited**

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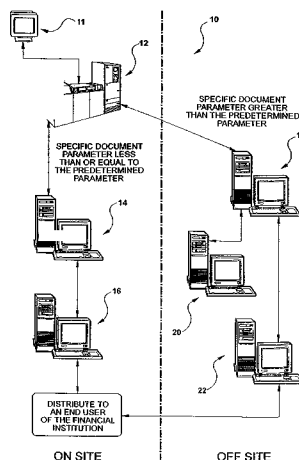
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PLLC(57) **ABSTRACT**

A bank maintains a financial document in a first storage system when a record date is later than a pre-selected date and in a second storage system when the record date is earlier than or equal to the pre-selected date. The bank receives and inputs a request for the financial document from a client and compares the record date to the pre-selected date to determine if the record date is later than, earlier than, or equal to the pre-selected date. In processing the request, the bank can utilize a computer terminal, connected to the storage systems through a processing unit, to access one of the storage systems in response to the comparison of the record date to the pre-selected date. After accessing the appropriate storage system, the bank retrieves the requested financial document and can then reproduce and distribute the requested financial document.

68 Claims, 4 Drawing Sheets

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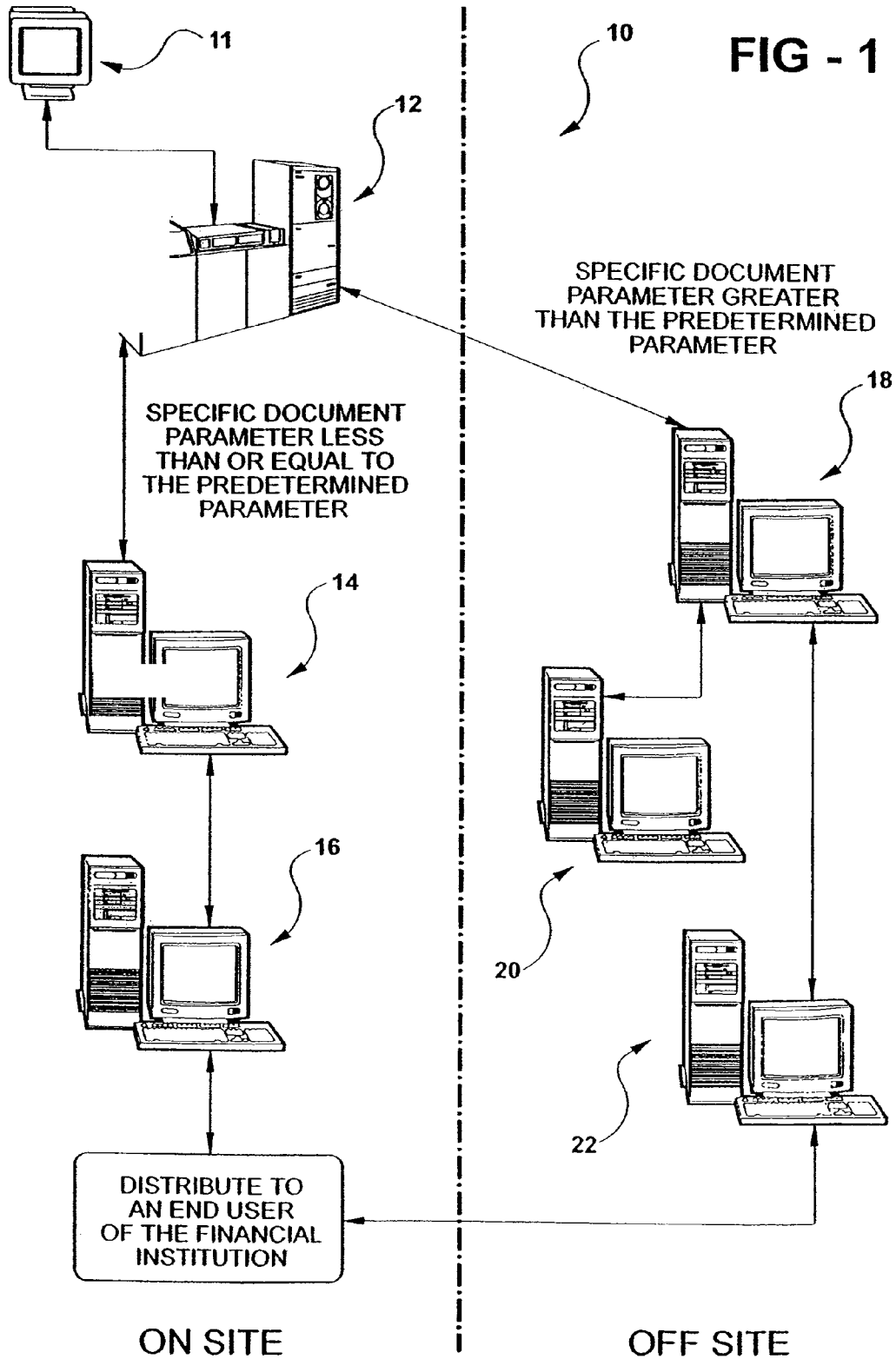
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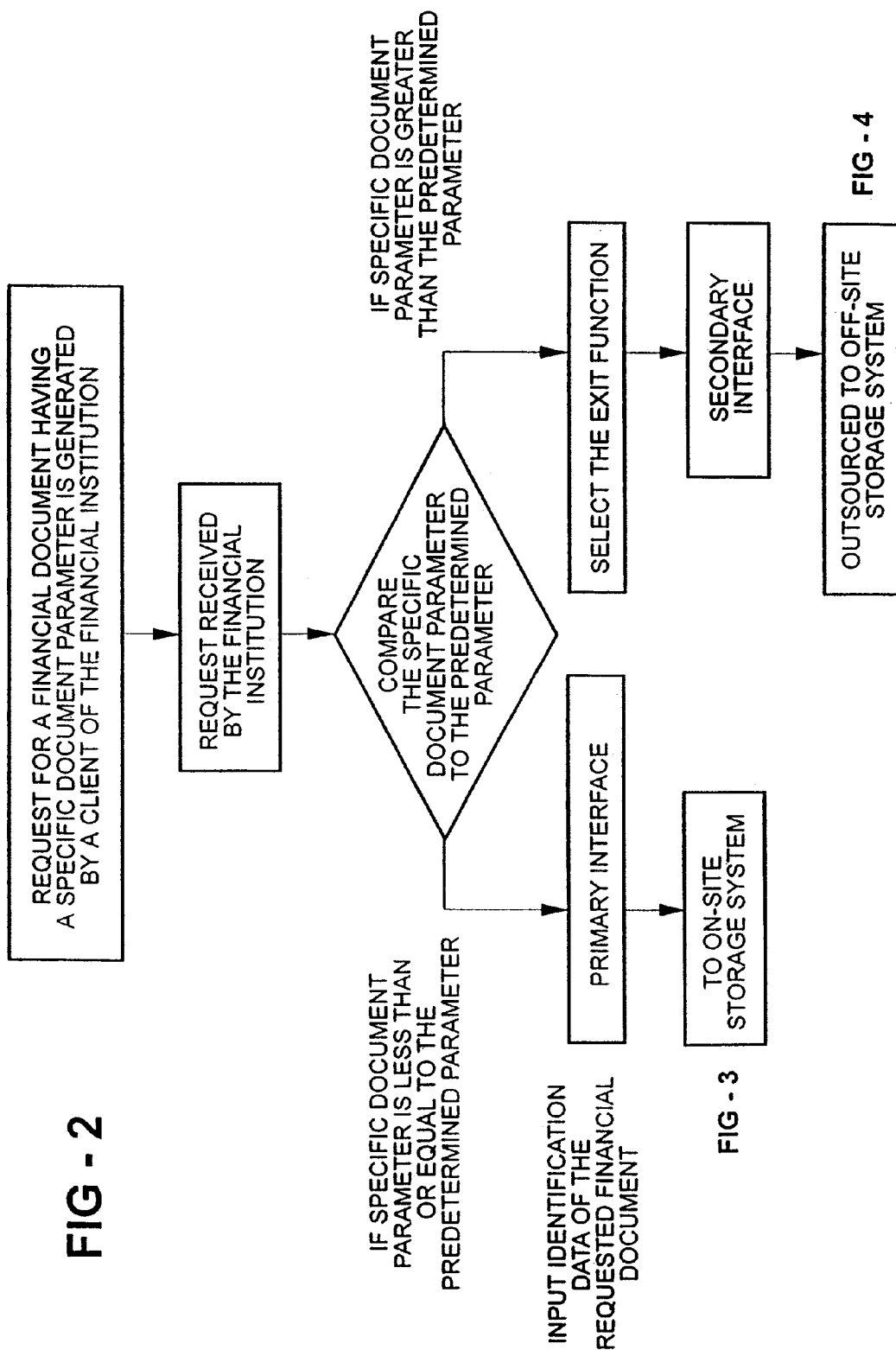


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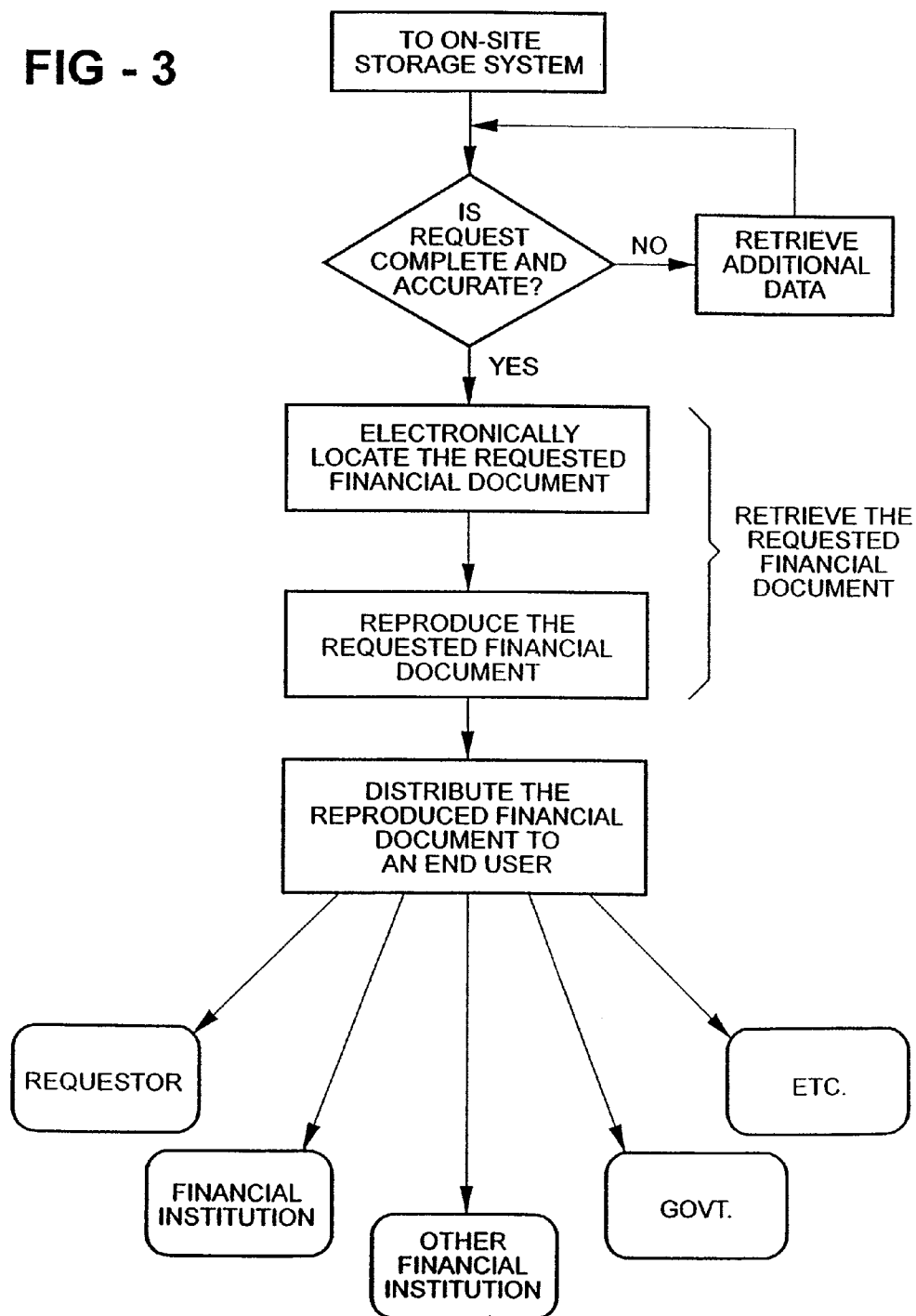
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(ON-SITE STORAGE SYSTEM)

FIG - 3



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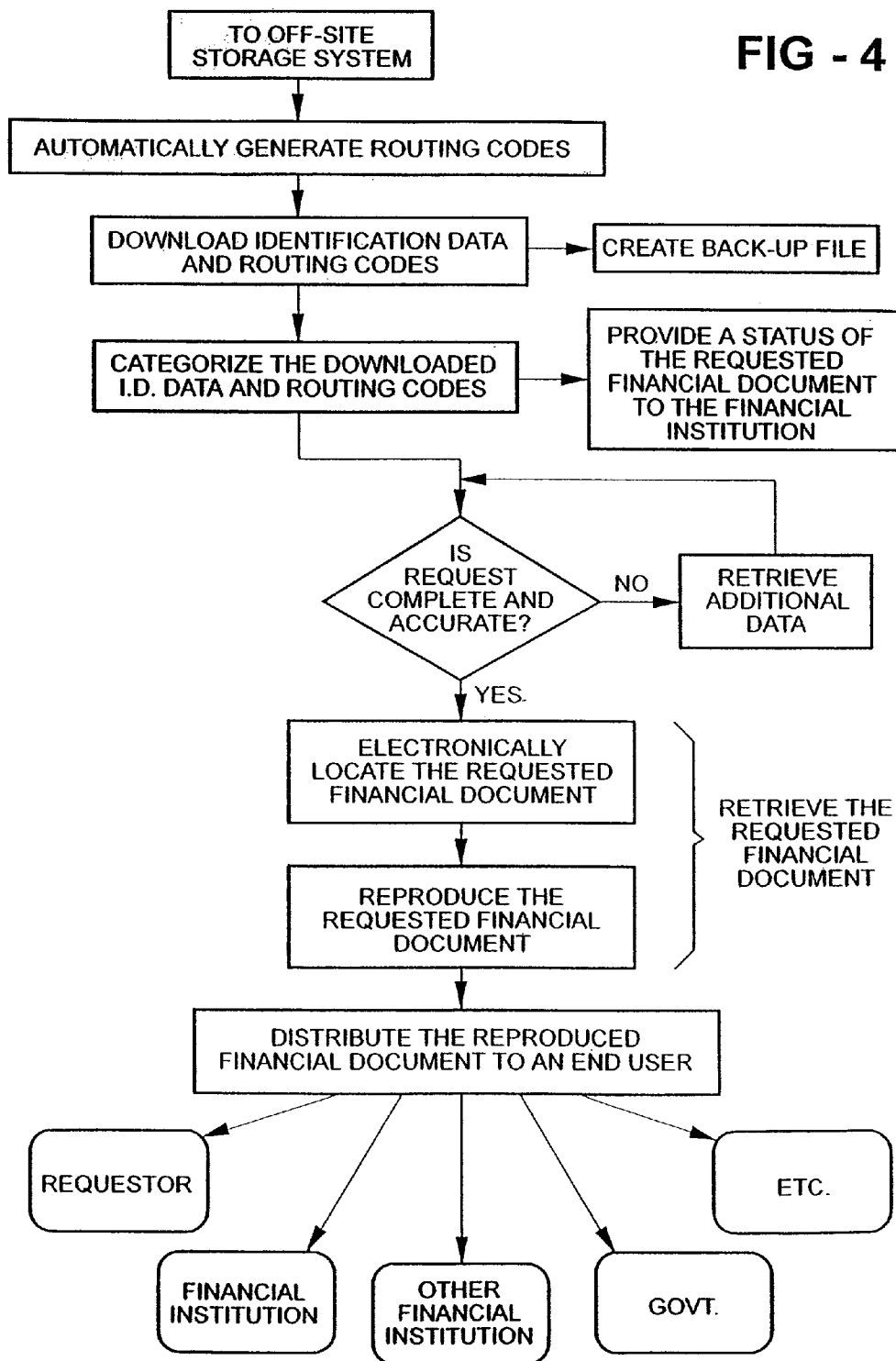
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(OFF-SITE STORAGE SYSTEM)

FIG - 4



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METHOD OF OBTAINING ELECTRONICALLY-STORED FINANCIAL DOCUMENTS

RELATED APPLICATIONS

This patent application is a continuation of U.S. patent application Ser. No. 11/202,790 filed on Aug. 12, 2005, now U.S. Pat. No. 7,552,118, which is a continuation of U.S. patent application Ser. No. 10/104,541 filed on Mar. 22, 2002, now U.S. Pat. No. 6,963,866, which is a continuation of U.S. patent application Ser. No. 09/548,490 filed on Apr. 13, 2000, now U.S. Pat. No. 6,446,072, which in turn claims priority to and all the advantages of U.S. Provisional Patent Application Ser. No. 60/129,021, which was filed on Apr. 13, 1999.

BACKGROUND OF THE INVENTION

1) Technical Field

The subject invention relates to a method for a financial institution to obtain electronically-stored financial documents from an off-site storage system remotely-located from an on-site storage system.

2) Description of the Prior Art

Methods for obtaining electronically-stored financial documents are generally known in the art. Financial institutions, such as banks and credit unions, utilize such methods to rapidly and efficiently obtain financial documents for distribution to clients upon request. Such financial documents include paid checks, account statements, and other related documents. These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. Further, these financial documents are typically electronically-stored in an on-site storage system located at the financial institution or in an off-site storage system. Electronic storage of these financial documents permits financial institutions to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides a means of retrieving the information from the on-site and off-site storage systems.

Once the document is stored, the client may request an image of a particular stored document. Client requests are made to replace lost or stolen documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. The client's request is inputted into a computer terminal at the financial institution. More specifically, conventional methods for obtaining an electronically-stored financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal. The interface is inter-linked with the on-site storage system. Typically, all requests for a particular period are grouped together and subsequently downloaded for retrieval of the requested image by the financial institution. The financial institution retrieves the image, e.g. a photocopy of the check, and then distributes the photocopy to the client via facsimile, mail or hand delivery. The storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry as back office production. Back office production for financial institutions is particularly resource intensive, time consuming, and expensive. Also, back office production becomes increasingly expensive if the client requests a particularly old financial document because older financial documents frequently require more resources and time to locate and retrieve.

The majority of financial institutions electronically store financial documents only in an on-site storage system and

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in an off-site storage system. Consequently, these financial institutions are unable to outsource the responsibilities for the back office production to third party entities to alleviate the expenses and resources associated with the back office production. These financial institutions realize a significant financial burden since the back office production is concentrated strictly at the financial institution.

Other financial institutions do electronically store financial documents in on-site and off-site storage systems. However, the methods utilized by these financial institutions to access the financial documents stored in the off-site storage system are deficient in that the interface utilized in such methods is only inter-linked with the on-site storage system. That is, there is no interface independently inter-linked with the off-site storage system. As a result, the financial documents stored in the off-site storage system can not be efficiently accessed. These financial institutions are still responsible for retrieving the requested financial documents through their back office production and their expenses remain high. One such method of retrieving documents from on-site and off-site storage systems is disclosed in U.S. Pat. No. 5,784,610 to Copeland, III et al.

Due to the inefficiencies identified in the conventional methods used by financial institutions to obtain financial documents, it is desirable to implement a method for a financial institution to obtain electronically-stored financial documents from both on-site and off-site storage systems that reduces, if not eliminates, the back office production of the financial institution by providing a direct interface inter-linked with the off-site storage system. With such an interface, the responsibility for retrieving financial documents from the off-site storage can be outsourced to third party entities while still providing the financial institution with efficient access to any financial documents electronically-stored in the off-site storage system.

SUMMARY OF THE INVENTION AND ADVANTAGES

A method for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed. The specific document parameter is typically a particular numerical sequence, such as a record date of the financial document. The method of the subject invention enables the financial institution to obtain the financial documents from a first or an off-site storage system. The first or off-site storage system is different from a second or an on-site storage system and is preferably remotely-located from the second or on-site storage system. In one embodiment, the financial documents of the financial institution are maintained in the first or off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. The financial documents that are less than or equal to the predetermined parameter are maintained in the second or on-site storage system. In another embodiment, the specific document parameter of the financial document that is less than or equal to the predetermined parameter is maintained in the first or off-site storage system and the financial document that is greater than the predetermined parameter is maintained in the second or on-site storage system.

When the financial institution receives a request for a financial document, the financial institution compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. A computer terminal located at the

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financial institution is connected to both the off-site and on-site storage systems through a processing unit. The processing unit is utilized to, at least partially, automatically access one of the storage systems in response to the comparison of the specific document parameter to the predetermined parameter. For instance, if it is determined that the specific document parameter is less than or equal to the predetermined document parameter, then the processing unit accesses the second or on-site storage system. On the other hand, if it is determined that the specific document parameter of the financial document is greater than the predetermined parameter, then the processing unit accesses the first or off-site storage system. As stated below, the computer terminal may be used to feed a request into the processing unit.

After the requested financial document is accessed, the requested document is then retrieved in order to reproduce the financial document, and distribute the financial document to an end user of the financial institution.

The subject invention therefore provides a method that enables financial institutions to obtain electronically-stored financial documents from on-site and off-site storage systems. As such, the financial institution can selectively store financial documents in either an on-site storage system or the off-site storage system, and the responsibility for the financial documents in the on-site or off-site storage systems can be outsourced to a third party entity. Further, the documents can be stored in different fixed mediums, such as microfiche, microfilm, digitally, electronically, etc., and can be stored in different geographical locations. Therefore, the back office production of the financial institution associated with the retrieval and distribution of financial documents stored in the on-site or off-site storage systems is strategically reduced or even completely eliminated.

BRIEF DESCRIPTION OF THE DRAWINGS

Other advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIG. 1 is a flow diagram schematically detailing an on-site storage system, and an off-site storage system in accordance with the subject invention;

FIG. 2 is a block diagram generally representing a method for a financial institution to obtain electronically-stored financial documents from the on-site and off-site storage systems;

FIG. 3 is a block diagram completing the method of obtaining electronically-stored financial documents from the on-site storage system; and

FIG. 4 is a block diagram completing the method of obtaining electronically-stored financial documents from the off-site storage system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views, a method for a financial institution to obtain an electronically-stored financial document is schematically shown at 10 in FIG. 1. The method introduced in the subject invention enables the financial institution to obtain the financial document from one of a first or an off-site storage system and a second or an on-site storage system with the storage systems being different from each other. Preferably, the on-site storage system is located at the financial institution and the off-

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site storage system is located at a remote location distant from the financial institution. This allows the financial institution to 'outsource' the responsibilities associated with obtaining the financial document.

Methods for financial institutions to obtain electronically-stored documents are frequently used by such entities as banks, credit unions, and other financially-oriented institutions. For illustrative purposes only, the description of the subject invention is discussed with reference to banks. However, as appreciated by those skilled in the art, other businesses, such as insurance companies, may also utilize similar methods and incorporate the aspects of the subject invention.

Methods for banks to obtain electronically-stored financial documents are generally used by banks to rapidly and efficiently obtain financial documents for distribution to clients upon request. As described above, the financial documents for banks are usually paid checks, checking statements, and other related financial documents, and these documents include at least one specific document parameter. As appreciated by those skilled in the art, it is not the financial document (e.g. the paid check) itself that is electronically-stored. Rather, it is data included on the document such as a sequence number that is electronically stored to make up the financial document. The specific document parameter is preferably a particular numerical sequence. As appreciated, the specific document parameter of the financial document can include, but is not limited to, a record date or age of the document, a series number, or some other document identifying number of the financial document. More specifically, in the preferred embodiment of the subject invention, the particular numerical sequence of the financial document is the record date of the financial document. That is, the date that the particular financial document was created or posted.

The financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. As appreciated, the electronic storage of the financial documents is frequently created by taking an electronic photo image of the document and storing the photo image in a computer system. One such digital electronic storage device is sold by Kodak under the name of IMAGELINK™ Digital Workstation (IDW). Electronic storage of these financial documents permits banks to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides an efficient means of retrieving the information from the on-site and off-site storage systems. This will be discussed further herein below.

As described above, the financial documents are electronically-stored in either the on-site storage system located at the bank or in the off-site storage system remotely located from the on-site storage system. More specifically, the subject invention includes the step of maintaining the financial documents in the off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. Financial documents are maintained in the on-site storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter. As appreciated, the document parameter of the financial documents stored in the off-site storage system may be greater than or equal to the predetermined parameter with the on-site storage system having documents only less than the predetermined parameter.

Similar to the specific document parameter of the financial document, the predetermined parameter is also a numerical value. The predetermined parameter is specifically a numerical value predetermined by the bank. For instance, if the specific document parameter is a series number of a paid check and the series number is greater than the predetermined

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parameter which, in this case, would be an arbitrarily selected base series number, then the paid check would be stored in the off-site storage system.

In the preferred embodiment of the subject invention, the predetermined numerical value is a date pre-selected by the bank. For instance, the bank may pre-select a date that is one year before a current date—the current date being the actual date that the client requests the financial document. Of course, the bank may pre-select a date that is some other time period before a current date (e.g. two or three years) without varying from the scope of the subject invention. As such, if the record date of the particular financial document is older than one year, then the particular financial document is maintained in the off-site storage system. If the record date of the particular financial document is earlier than or equal to one year, then the particular financial document is maintained in the on-site storage system. As discussed above, the document having record dates equal to the one year may be stored in the off-site or on-site storage systems.

Once the financial document is maintained in the appropriate storage system, the bank is capable of receiving a request for the financial document from the client. In reality, the client is requesting an image of the stored financial document. As appreciated, clients request the image for various reasons. As discussed above, requests are typically made for replacing lost or stolen financial documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. Ultimately, the bank retrieves the image, reproduces the image, and distributes the reproduced image to the requesting client of the bank.

Referring now to FIG. 1, the method for banks to obtain electronically-stored financial documents is discussed in detail in accordance with a general scope of the subject invention. Initially, the requesting client requests a particular financial document, such as a paid check. The client is typically a customer of the bank or other financial institution. The client's request is inputted into a computer terminal 11 at the financial institution. The computer terminal 11 will be discussed in more detail hereinbelow.

From the computer terminal 11, the request is fed into a processing unit 12, which is illustrated as a mainframe computer 12 at the bank. In the preferred embodiment of the subject invention, if the client requests a financial document having a record date earlier than or equal to one year before the current date, then the request, and other requests like it, are processed at the bank in the on-site storage system. That is, the requests are grouped together and downloaded to a downloading terminal 14 at the bank. The downloading may occur at particular intervals such as at the end of each day, every three hours, etc. The sequence number of each check requested is then determined. A document terminal 16 subsequently creates or reproduces the document, i.e., a photocopy of the check. The photocopy is then distributed to the client via facsimile, mail, or hand delivery.

It is known in the art that the majority of requests for financial documents are requests for documents which were created in the most recent year. That is, if the pre-selected date is one year before the current date, as in the preferred embodiment, then the majority of requests are seeking financial documents having a record date earlier than or equal to the pre-selected date. The remaining document requests relate to financial documents that are older than one year. Since, as described in the Background of the Invention, retrieval of financial documents that are older than one year is particularly expensive, the preferred embodiment of the subject invention outsources all of the document requests which relate to documents having a record date later than one year

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before the current date. As appreciated, the particular time frame which is outsourced is not a critical feature of the subject invention and may be adjusted to meet the needs of any particular financial institution. In fact, all of the document requests, including the most recent, may be outsourced using the outsourcing procedure of the subject invention.

In the preferred embodiment, if the client requests a financial document having a record date later than one year before the current date, then the request, and others like it, are grouped together and downloaded from the mainframe computer 12 to an outsourced downloading terminal 18. As above, the downloading may be at particular intervals as needed. The sequence number is determined by a sequencing terminal 20. The sequence number is then sent back to the outsourced downloading terminal 18. An outsourced document terminal 22 then creates or reproduces the desired document which is then distributed to either the client or the bank. As appreciated, two document retrieval operations, one for the bank to retrieve financial documents having record dates earlier than or equal to one year before the current date, and another to retrieve outsourced financial documents having record dates later than one year before the current date, preferably operate simultaneously. It is to be understood that the computer terminals and the accompanying PC bases are illustrated highly schematically in FIG. 1 and are not intended to be limiting in any manner. For instance, the schematic illustration of the outsourced document terminal 22 need not include a computer terminal and an accompanying PC base. Instead, the outsourced document terminal 22 is preferably some sort of printing device.

Referring to FIGS. 2 through 4, the method for banks to obtain electronically-stored financial documents is described in even greater detail. The request is first generated by the client. The request is then processed by the bank. The processing, retrieval and reproduction of the requested financial document is typically controlled by one interlinked computer software program. One such computer software program is a software program called Antinori Software Incorporated or ASI which is sold under the name of INNOVATION™ by Carreker-Antinori of Dallas, Tex. However, other frequently used software programs include PEGA™ and Sterling™. Any of these computer software systems can provide the necessary means for implementing the discussed procedures.

The processing of the request is completed by a customer service tracking system and the computer terminal 11. The customer service tracking system assists the financial institution in receiving the request. More specifically, the customer service tracking system gives branches, customer service, and other bank departments the capability to enter, log, track, route and monitor the status of all requests for financial documents. The customer service tracking system also provides the capability to enter, log, track, route and monitor the status of customer complaints and other customer service related items.

In accordance with one contemplated embodiment of the invention, a bank employee, such as a bank teller first determines a status of the requested document. More specifically, the employee compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the specific document parameter is a particular numerical sequence and the predetermined parameter is a predetermined numerical value, then the employee compares the particular numerical sequence of the financial document to the predetermined numerical value to determine if the particular numerical sequence is greater than, less than, or

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equal to the predetermined numerical value. Further, if as in the preferred embodiment, the particular numerical sequence is a record date of the financial document, and the predetermined numerical value is a pre-selected date, then the employee compares the record date of the financial document to the pre-selected date to determine if the record date is later than, earlier than, or equal to the pre-selected date.

The customer service tracking system enables a bank employee, such as a bank teller, to submit the request. More specifically, the employee utilizes the computer terminal 11 located at the bank and connected to both the off-site and on-site storage systems to access one of the storage systems in response to the comparison of the specific document parameter of the requested financial document to the predetermined parameter. For instance, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee preferably utilizes the computer terminal 11 to access the off-site storage system, and when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee preferably utilizes the computer terminal 11 to access the on-site storage system. As discussed above, the documents have a numerical sequence equal to the predetermined numerical value may be stored in either the off-site or on-site storage systems.

After the computer terminal 11 is utilized to access the desired storage system, the employee manually inputs identification data of the requested financial document into the computer terminal 11. More specifically, when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee inputs identification data into a primary interface and selects the requested document. Also, the primary interface preferably provides an option for the employee to select among several different output formats. The primary interface is inter-linked with the on-site storage system. In the preferred embodiment of the subject invention, the primary interface appears as follows and includes the identification data detailed below:

Account Number:	Prod Type:
Account Name:	Customer Code:
Address:	
City:	State:
Home Phone: ()	Zip Code:
Fax: ()	Work Phone: ()
Service Code:	
For Items Posted Within A Year	
Copy of Statement Only	Savings Items
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)
Check(s)/Deposit(s)<30 Items	Cash Letter Reconstruction
Statements and<30 Items	Lockbox
Statements and>30 Items	Legal Statement Only
Deposit Reconstruction	Legal Statement and Items
Regardless of Posting Date	
Missing Transactions	Returned Items
Online (Backdated/Unposted)	Encoding Error/Wrong Account
EXIT FUNCTION	

Alternatively, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee selects an exit function at the primary interface. The exit function distinguishes that the request is to be sent to an outsourced third party entity. Upon selection of the exit function at the primary interface, a secondary interface, inter-linked with the exit function, is initiated. The secondary interface is inter-linked with the off-site storage system. The employee inputs identification data into

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the secondary interface and selects the requested document. Also, the secondary interface preferably provides an option for the employee to select among several different output formats. Preferably, routing, or service codes will be generated automatically upon the initiation of the secondary interface and the inputting of the identification data into the secondary interface. The routing codes enable the bank to recognize that the request is being sent to the outsourced third party entity. Furthermore, the routing codes are configured to automatically forward the inputted identification data to the off-site storage system. The inputted identification data and the routing codes are forwarded into the mainframe computer 12 introduced above for temporary storage before transfer to the off-site storage system. This temporary storage also serves to defend against unexpected power outages, computer malfunctions, and the like. In the preferred embodiment of the subject invention, the secondary interface appears as follows and includes the identification data detailed below:

Account Number:	Prod Type:
Account Name:	Customer Code:
Address:	
City:	State:
Home Phone: ()	Zip Code:
Fax: ()	Work Phone: ()
Service Code:	
For Items Posted Prior to a Year	
Copy of Statement Only	Savings Items
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)
Check(s)/Deposit(s)<30 Items	Cash Letter Reconstruction
Statements and<30 Items	Lockbox
Statements and>30 Items	Legal Statement Only
Deposit Reconstruction	Legal Statement and Items

Once the bank employee has inputted the necessary identification data into either the primary or secondary interface, then retrieval of the financial document can continue. Specifically, the requested financial document is retrieved as defined by the inputted identification data. Two separate document retrieval procedures are discussed hereinbelow. One document retrieval procedure is for the financial documents having a record date earlier than or equal to the pre-selected date—one year before the current date in this example. The other document retrieval procedure is for the financial documents having a record date later than the pre-selected date. As discussed above, the one year timing selected for the pre-selected date is simply shown as an example and any suitable time frame may be utilized. In fact, even all financial document retrievals may be outsourced to the third party entity. As also discussed above, the two separate document retrieval procedures will typically operate simultaneously.

With reference to the subject example, if the record date of the financial document is earlier than or equal to one year before the current date, the remaining steps occur at the bank. As discussed above, these steps are known as the back office production of the bank. The request is first categorized by a research automation system. The research automation system automates the entire workflow of a bank's research and photocopy departments by sending requests to the appropriate sequence for processing. The downloading terminal 14 serves to perform the research automation system's tasks.

Photocopy requests are routed to an image control system, statement requests are sent to a document retrieval system, and requests for financial adjustments are routed to an adjustment system. The document terminal 16 serves to perform these tasks. In the illustrated embodiment of the subject

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invention, the sample document request is for a paid check. Hence, the categorized sequence will be the image control system which handles photocopy requests.

Referring now to FIG. 3, after the request is categorized, the request is verified for completeness and accuracy. If the request is not complete then additional data is retrieved. The additional data is retrieved by using a sequence number retrieval system and/or an all items research system. Once the request is complete and accurate, then the image reference number can be determined. That is, once the request is complete and accurate, then the requested financial document can be electronically located in the on-site storage system. The reference number may be a routing, sequence, or any other type of indicator. The reference number is determined by the image control system. The image control system is an image retrieval and routing management system which works in conjunction with Kodak's IMAGELINK™ Digital Workstations (IDW). Specifically, the image control system first connects to a network node. The network node is any type of storage device as is known in the art. Preferably a Kodak network node is used. The network node drives the IDW to find the location of the image by using the reference number. Specifically, the employee is prompted to verify that the correct media is loaded in the IDW such that the IDW can locate the image. The reference number for the document is known and the document image is now verified and located.

The requested image can now be retrieved and reproduced. In other words a copy of the digitized document (the check) is created. The copy may be created by manually pulling the microfilm, microfiche, or the like and photocopying the document. The copy may also be made by printing the document from a digitized record. The photocopy of the check is then distributed to the requesting client or other end user of the financial institution. Other end users of the financial institution include, but are not limited to, other financial institutions and federal and state governments. Additional information such as a photocopy report, a statement of charges, a research report and/or a daily status report may also be produced for the requesting client, the other end user, and/or the financial institution. The document retrieval system incorporated at the bank and the method for obtaining electronically-stored financial documents from the on-site storage system is now completed.

Continuing with the subject example, if the record date of the financial document is later than one year before the current date, the automated retrieval of the financial document is outsourced to the third party entity. To begin, a separate file is automatically generated at the bank by the input of the identification data into the secondary interface. Referring specifically to FIG. 4, the routing codes direct the request created on the separate file to be routed separately to the outsourced third party entity. In the preferred embodiment of the subject invention, additional user ID's are created to allow only selected users into the secondary interface. The identification data stored in the separate file and the routing codes are downloaded to the off-site storage system for retrieval of the requested financial documents by the outsourced downloading terminal 18. Preferably, the identification data and routing codes are grouped into batches of common requests for optimum retrieval of the requested financial document by the outsourced third party entity at the off-site storage system. The downloading step may occur at any suitable predetermined interval. Preferably, the downloading will occur three times a day. The downloaded documents are known in the industry as a basket of requests.

The subject method further includes the step of creating a back-up file of the downloaded identification data and routing

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codes in the off-site storage system. The back-up file acts as an emergency information source in case the mainframe computer 12 at the financial institution has a catastrophic failure. In addition, the outsourced third party entity is in direct connection with the mainframe computer 12 of the bank wherein the outsourced third party entity may produce a backup directory of each database file. This database backup is an additional safe guard for the financial institution.

The downloaded identification data and routing codes are then categorized for processing in the off-site storage system. The research automation system categorizes this information in a like fashion as discussed above. In fact, the outsourced third party entity uses the same computer software package as the financial institution such that the flow of information is optimum and not interrupted. As discussed above, the subject example request is for a paid check. Hence, the request will be categorized into the image control system and a sequence number will be determined by the sequencing terminal 20. Also, a status to update the progress of the requested financial document is provided to the financial institution.

After the request is categorized, the request, specifically the inputted identification data, is verified for completeness and accuracy. If the request is not complete or accurate, then additional data is retrieved. In a similar fashion as above, the additional data is retrieved by using the sequence number retrieval system and/or the all items research system. As appreciated, the outsourced third party entity may retrieve this information from the mainframe computer 12, via its direct line, or from its own backup database files. Once the request is complete and accurate, the image reference number can be determined. Again, as above, the reference number is determined by the image control system.

The requested image is then retrieved. More specifically, the requested financial document is electronically located in the off-site storage system. Additionally, the requested financial document is also reproduced after the document is electronically located in the off-site storage system by the outsourced document terminal 22. In other words, a copy of the digitized document (the check) is created. A status file is then created for the completed transaction. Also, a status of the request is sent to the financial institution wherein the institution may update their records. The status updates, as well as the information connections, create a two way information exchange between the outsourced third party entity and the bank.

The photocopy of the check is then distributed or digitally transferred to the requesting client, the financial institution, or other end users of the financial institution. In the preferred embodiment of the subject invention, the photocopy of the request is distributed to the requesting client, etc. based on the routing codes. That is, in addition to directing the request to be separately routed to the outsourced third party entity, the routing codes also indicate an appropriate distribution for the request client or other end user. The request is now completed.

A special circumstance occurs when the record date of one portion of the client's request is earlier than or equal to one year before the current date, and when the record date of another portion of the client's request is later than one year before the current date. These types of requests are known in the industry as spanned requests. One solution is to incorporate an additional interface utilized when the employee of the bank is utilizing the computer terminal 11 and comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the request is a spanned

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request, then the request will be split into two separate requests which can be handled simultaneously. A special notation would be put onto the requests such that they may be put back together before distributing the documents to the client or other end user. Another solution simply notifies the inputting employee that two requests should be entered separately. A third solution sends the request to the back office production at the bank wherein the back office employees notify the outsourced third party entity by a separate request to retrieve the requested financial documents.

The invention has been described in an illustrative manner, and it is to be understood that the terminology which has been used is intended to be in the nature of words of description rather than of limitation. Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims, wherein reference numerals are merely for convenience and are not to be in any way limiting, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A method of obtaining an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter;

storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;

utilizing, through a user, a computer terminal connected to the first and second storage systems through a processing unit;

submitting a request for at least one of the stored financial documents into the computer terminal;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been submitted;

accessing the first storage system through the processing unit when the specific document parameter is greater than the predetermined parameter and accessing the second storage system through the processing unit when the specific document parameter is less than or equal to the predetermined parameter; and

retrieving the requested financial document, as defined by the submitted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter.

2. A method as set forth in claim 1 wherein the first and second fixed mediums are different from each other.

3. A method as set forth in claim 2 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

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4. A method as set forth in claim 3 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on one of microfilm and microfiche.

5. A method as set forth in claim 3 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

6. A method as set forth in claim 5 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents on an electronic disc media.

7. A method as set forth in claim 5 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in an electronically retrievable memory.

8. A method as set forth in claim 2 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

9. A method as set forth in claim 8 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as storing a plurality of financial documents on one of microfilm or microfiche.

10. A method as set forth in claim 1 wherein the first and second fixed mediums are the same.

11. A method as set forth in claim 10 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a first fixed electronic medium, and wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a second fixed electronic medium.

12. A method as set forth in claim 1 wherein the specific document parameter of the financial document is a particular numerical sequence.

13. A method as set forth in claim 12 wherein the specific document parameter of the financial document is a specific document age.

14. A method as set forth in claim 13 wherein the specific document age of the financial document is a record date of the financial document and the predetermined parameter is a pre-selected date.

15. A method as set forth in claim 12 wherein the specific document parameter of the financial document is selected from the group of a specific account number, a specific check number, a specific payment date and a specific monetary amount.

16. A method as set forth in claim 1 further including the step of reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system.

17. A method as set forth in claim 1 wherein the step of accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

18. A method for a financial institution to obtain a stored financial document from one of an off-site storage system and an on-site storage system with the off-site and on-site storage systems being different from each other wherein the financial document is associated with at least one specific document parameter with the specific document parameter being defined as a specific document age, said method comprising the steps of:

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maintaining the financial document in the off-site storage system when the specific document age of the financial document is less than a predetermined age;
 maintaining the financial document in the on-site storage system when the specific document age of the financial document is greater than or equal to the predetermined age;
 utilizing a computer terminal associated with the financial institution and connected to the off-site and on-site storage systems through a processing unit;
 submitting a request for the financial document into the computer terminal;
 comparing the specific document age of the requested financial document to the predetermined age to determine if the specific document age is greater than, less than, or equal to the predetermined age after the request has been submitted;
 automatically accessing the off-site storage system through the processing unit when the specific document age is less than the predetermined age and automatically accessing the on-site storage system through the processing unit when the specific document age is greater than or equal to the predetermined age; and
 automatically retrieving the requested financial document from the accessed storage system as defined by the submitted request.

19. A method as set forth in claim 18 further including the step of processing the request to locate the requested financial document.

20. A method as set forth in claim 19 further including the step of reproducing the requested financial document after the request has been processed and retrieved.

21. A method as set forth in claim 20 wherein the steps of processing the request, retrieving the requested financial document, and reproducing the requested financial document are controlled by an interlinked computer program.

22. A method as set forth in claim 18 further including the step of feeding the request from the computer terminal into the processing unit.

23. A method as set forth in claim 22 further including the step of downloading the request from the processing unit into a downloading terminal.

24. A method as set forth in claim 23 further including the step of transmitting the request from the downloading terminal to a document terminal.

25. A method as set forth in claim 24 further including the step of reproducing the requested financial document through the document terminal.

26. A method as set forth in claim 22 further including the step of categorizing the request.

27. A method as set forth in claim 22 further including the step of determining a sequence number of the requested financial document after the request has been submitted.

28. A method as set forth in claim 27 further including the step of determining an image reference number of the requested financial document.

29. A method as set forth in claim 18 wherein the step of retrieving the requested financial document is further defined by electronically locating the requested financial document in the on-site storage system.

30. A method as set forth in claim 18 wherein the step of automatically accessing the off-site and on-site storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

31. A method as set forth in claim 18 further including the step of storing the financial document in a fixed medium at

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one of the off-site and on-site storage systems based on the specific document age of the financial document.

32. A method as set forth in claim 31 wherein the step of storing the financial document in a fixed medium is further defined as electronically storing the financial document in a fixed electronic medium, on microfilm or on microfiche.

33. A method of obtaining an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter;

storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;

utilizing, without user intervention, a processing unit connected to the first and second storage systems;

submitting a request for at least one of the stored financial documents through the processing unit;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been submitted;

accessing the first storage system when the specific document parameter is greater than the predetermined parameter and accessing the second storage system when the specific document parameter is less than or equal to the predetermined parameter; and

retrieving the requested financial document, as defined by the submitted request, in the first fixed medium when the specific document parameter is greater than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is less than or equal to the predetermined parameter.

34. A method as set forth in claim 33 wherein the first and second fixed mediums are different from each other.

35. A method as set forth in claim 34 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

36. A method as set forth in claim 34 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

37. A method as set forth in claim 34 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

38. A method as set forth in claim 34 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as storing a plurality of financial documents on a physical media.

39. A method as set forth in claim 34 wherein the first and second fixed mediums are the same.

40. A method as set forth in claim 39 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a first fixed electronic

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medium, and wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a second fixed electronic medium.

41. A method as set forth in claim 34 further including the step of reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system.

42. A method as set forth in claim 34 wherein the step of accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

43. A method of obtaining an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is less than a predetermined parameter;

storing a plurality of financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is greater than or equal to the predetermined parameter;

utilizing a processing unit connected to the first and second storage systems;

submitting a request for at least one of the stored financial documents through the processing unit;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been submitted;

accessing the first storage system when the specific document parameter is less than the predetermined parameter and accessing the second storage system when the specific document parameter is greater than or equal to the predetermined parameter; and

retrieving the requested financial document, as defined by the submitted request, in the first fixed medium when the specific document parameter is less than the predetermined parameter and in the second fixed medium when a specific document parameter of the financial document is greater than or equal to the predetermined parameter.

44. A method as set forth in claim 43 wherein the first and second fixed mediums are different from each other.

45. A method as set forth in claim 44 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

46. A method as set forth in claim 44 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

47. A method as set forth in claim 44 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

48. A method as set forth in claim 44 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as storing a plurality of financial documents on a physical media.

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49. A method as set forth in claim 43 wherein the first and second fixed mediums are the same.

50. A method as set forth in claim 49 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a first fixed electronic medium, and wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a second fixed electronic medium.

51. A method as set forth in claim 43 further including the step of reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system.

52. A method as set forth in claim 43 wherein the step of accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

53. A method of accessing an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents has an electronic image and is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of images of the financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is greater than a predetermined parameter;

storing a plurality of images of the financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;

utilizing a processing unit connected to the first and second storage systems;

receiving a request for an image of one of the stored financial documents into the processing unit;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been received;

accessing the first storage system when the specific document parameter is greater than the predetermined parameter and accessing the second storage system when the specific document parameter is less than or equal to the predetermined parameter; and

retrieving the image of the requested financial document from the accessed storage system as defined by the received request.

54. A method as set forth in claim 53 wherein the first and second fixed mediums are different from each other.

55. A method as set forth in claim 54 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

56. A method as set forth in claim 54 wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

57. A method as set forth in claim 54 wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

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58. A method as set forth in claim **53** wherein the first and second fixed mediums are the same.

59. A method as set forth in claim **53** further including the step of distributing the retrieved financial document to a financial institution based on routing codes.

60. A method as set forth in claim **53** wherein the step of automatically accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the image of the requested financial document.

61. A method of accessing an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents has an electronic image and is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of images of the financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document is less than a predetermined parameter;

storing a plurality of images of the financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is greater than or equal to the predetermined parameter;

utilizing a processing unit connected to the first and second storage systems;

receiving a request for an image of one of the stored financial documents into the processing unit;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document param-

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eter is greater than, less than, or equal to the predetermined parameter after the request has been received; accessing the first storage system when the specific document parameter is less than the predetermined parameter and accessing the second storage system when the specific document parameter is greater than or equal to the predetermined parameter; and

retrieving the image of the requested financial document from the accessed storage system as defined by the received request.

62. A method as set forth in claim **61** wherein the first and second fixed mediums are different from each other.

63. A method as set forth in claim **62** wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as storing a plurality of financial documents on a physical media.

64. A method as set forth in claim **62** wherein the step of storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

65. A method as set forth in claim **62** wherein the step of storing a plurality of financial documents in a first fixed medium is further defined as electronically storing the plurality of financial documents in a fixed electronic medium.

66. A method as set forth in claim **61** wherein the first and second fixed mediums are the same.

67. A method as set forth in claim **61** further including the step of distributing the retrieved financial document to a financial institution based on routing codes.

68. A method as set forth in claim **61** wherein the step of automatically accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the image of the requested financial document.

* * * * *

Exhibit D

(12) **United States Patent**
Schulze et al.

(10) **Patent No.:** **US 9,141,612 B2**
(45) **Date of Patent:** ***Sep. 22, 2015**

(54) **METHOD OF OBTAINING AN ELECTRONICALLY-STORED FINANCIAL DOCUMENT**

(58) **Field of Classification Search**
CPC G06F 17/30011; G06F 17/30604
USPC 707/703, 731, 769, 821
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 249 days.

This patent is subject to a terminal disclaimer.

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(21) Appl. No.: **13/840,892**

Primary Examiner — Pierre Vital

Assistant Examiner — Andalib Lodhi

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(57) **ABSTRACT**

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(63) Continuation of application No. 13/272,936, filed on Oct. 13, 2011, now abandoned, which is a continuation of application No. 12/902,973, filed on Oct. 12, 2010, now abandoned, which is a continuation of application

(Continued)

(51) **Int. Cl.**

G06F 17/00 (2006.01)

G06F 17/30 (2006.01)

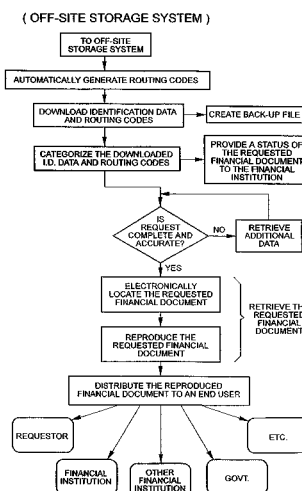
G06Q 40/00 (2012.01)

(52) **U.S. Cl.**

CPC **G06F 17/30008** (2013.01); **G06F 17/30011** (2013.01); **G06Q 40/00** (2013.01); **G06F 17/30064** (2013.01); **G06F 17/30067** (2013.01)

An electronically stored financial document is either maintained in a first storage system when a parameter associated with the document is greater than a pre-selected parameter or in a second storage system when the parameter associated with the document is less than or equal to the pre-selected parameter. A request for a stored financial document is received and the requested financial document parameter is compared to the pre-selected financial document parameter to determine if the electronically stored financial document's parameter is more than, less than, or equal to the pre-selected parameter. In processing the request, a processing unit electronically accesses one of the storage systems in response to the comparison of the pre-selected parameter to the electronically stored financial document's parameters. After accessing the appropriate storage system, the requested electronically stored financial document can be reproduced, and/or distributed.

18 Claims, 4 Drawing Sheets



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Related U.S. Application Data

No. 12/489,087, filed on Jun. 22, 2009, now Pat. No. 7,836,067, which is a continuation of application No. 11/202,790, filed on Aug. 12, 2005, now Pat. No. 7,552,118, which is a continuation of application No. 10/104,541, filed on Mar. 22, 2002, now Pat. No. 6,963,866, which is a continuation of application No. 09/548,490, filed on Apr. 13, 2000, now Pat. No. 6,446,072.

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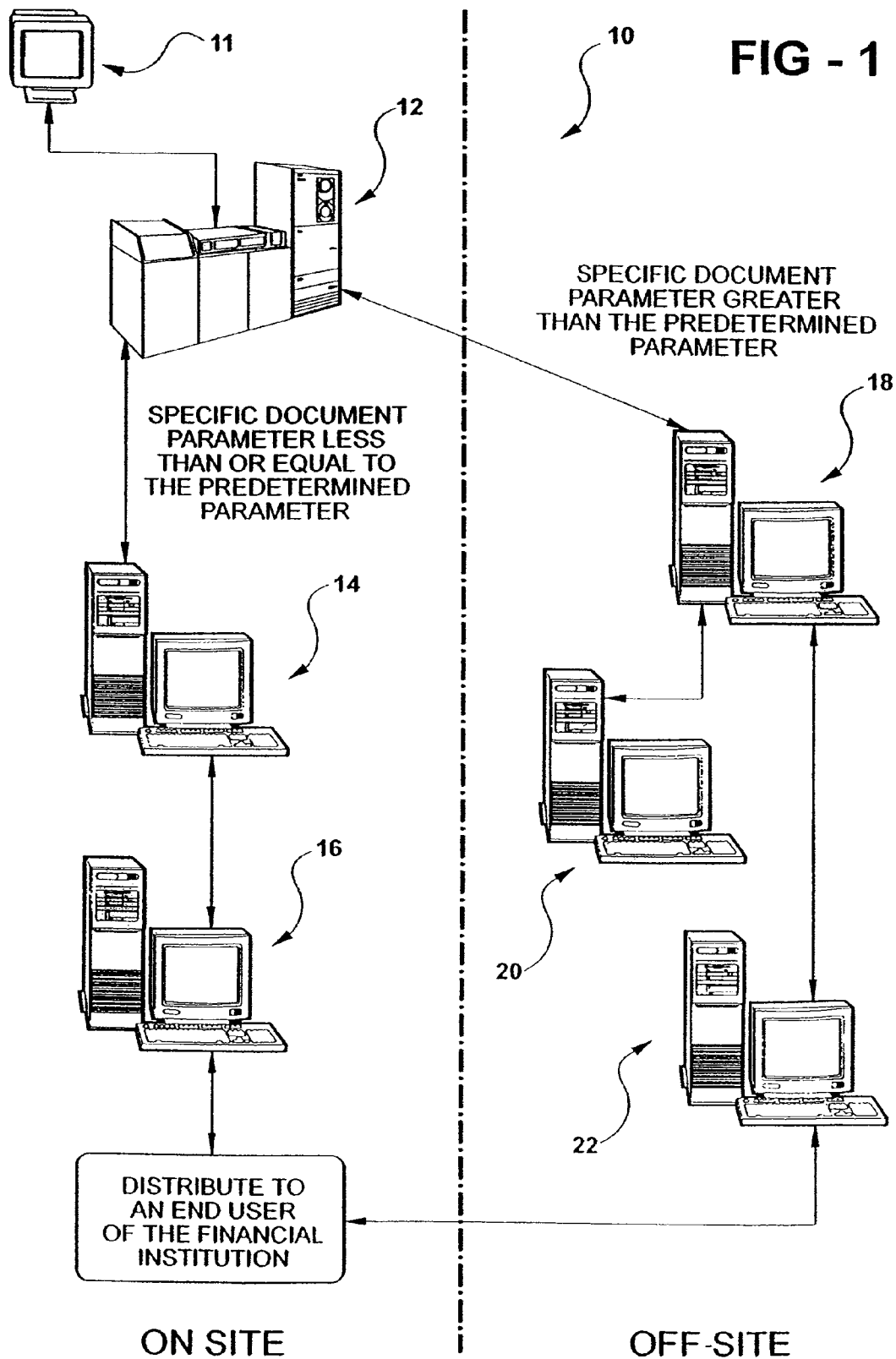
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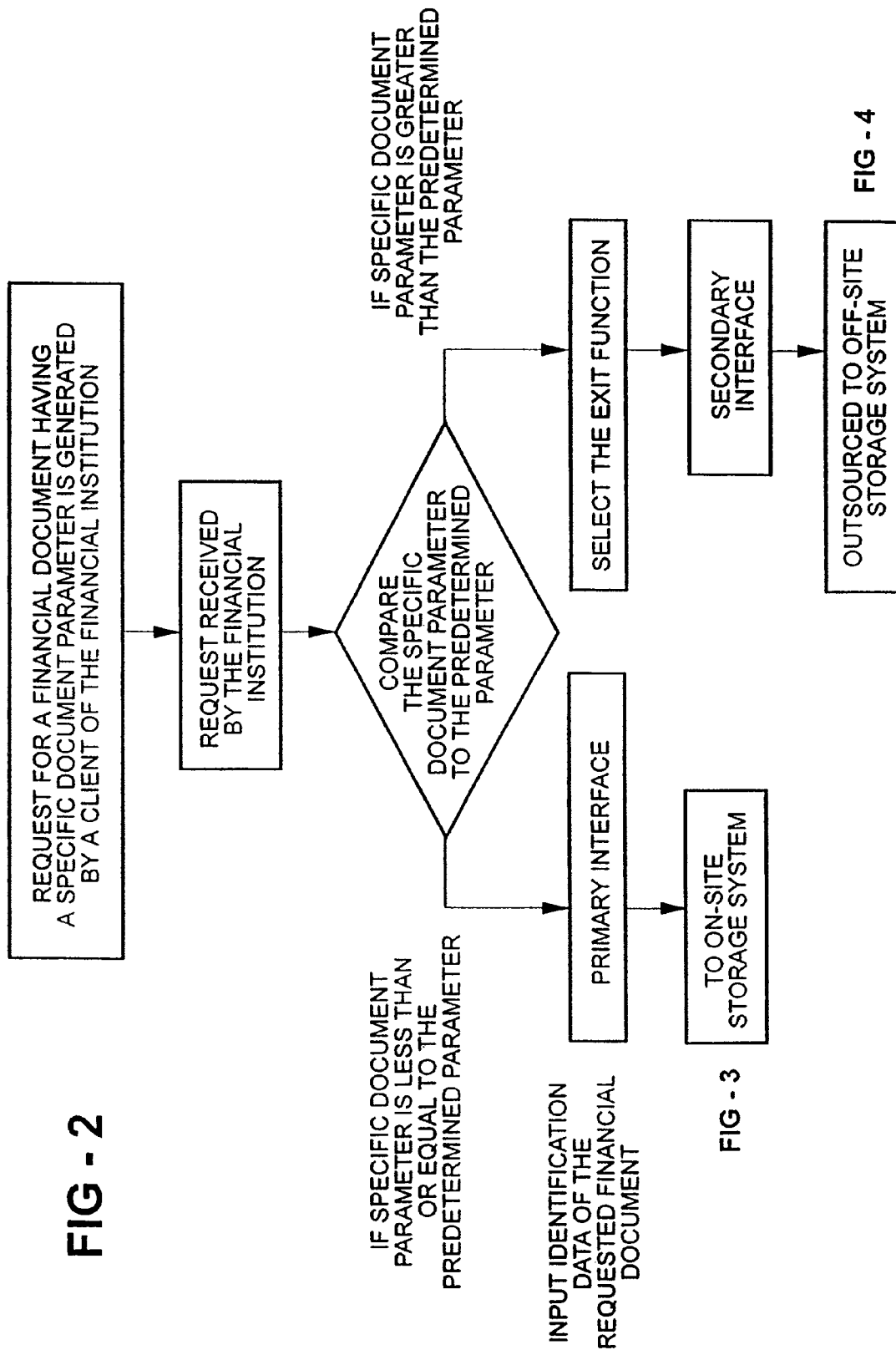
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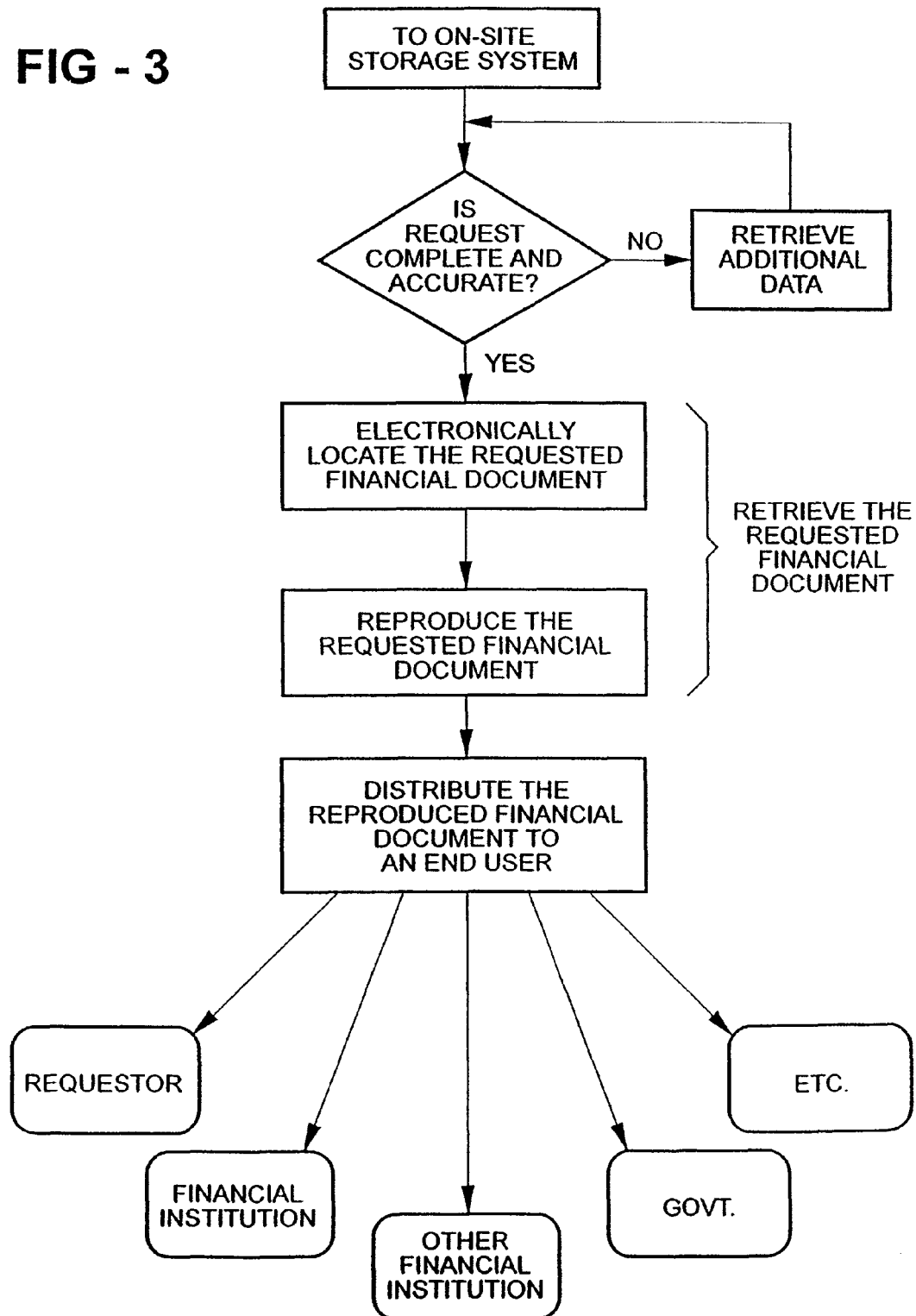
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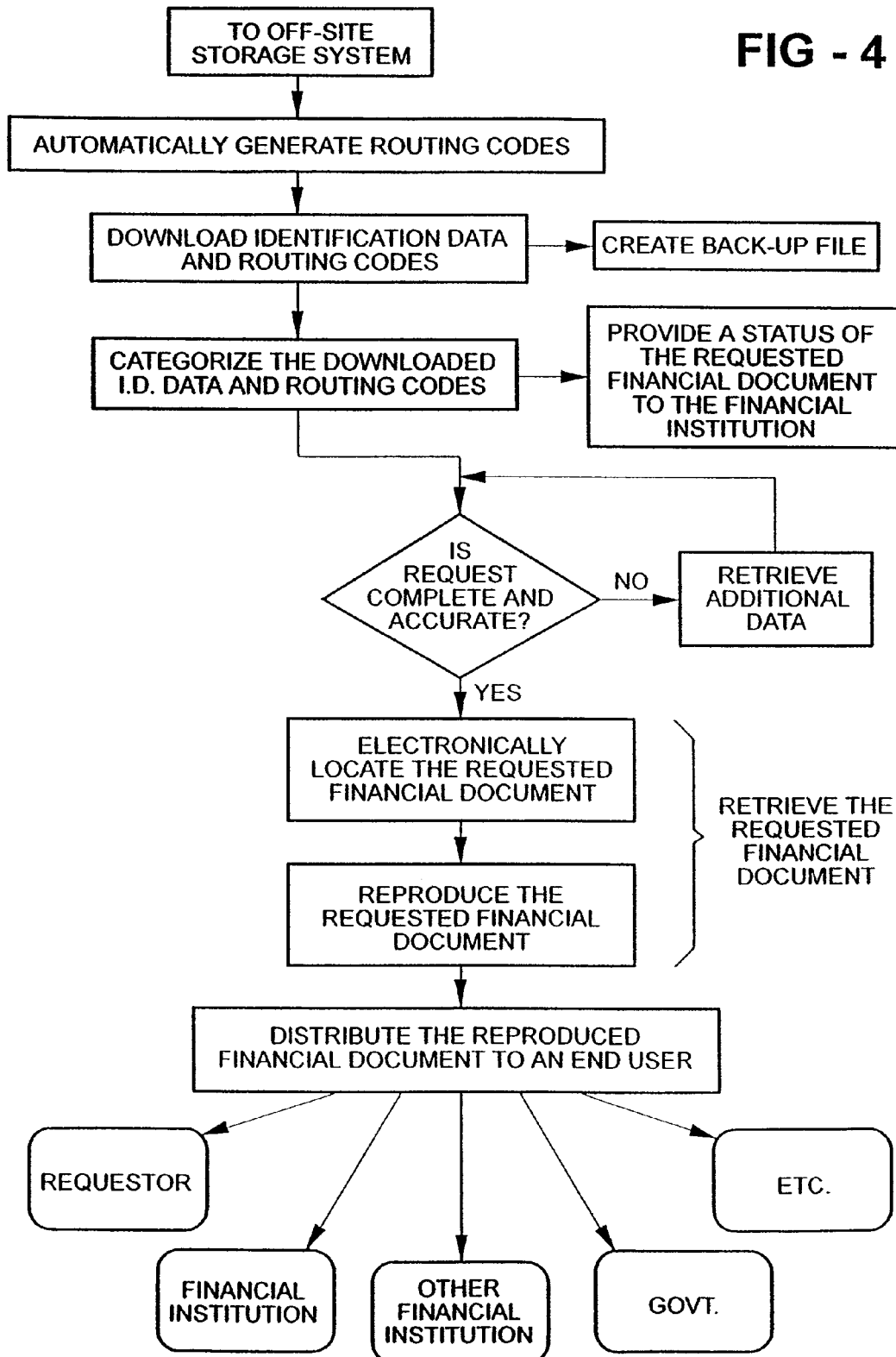
(ON-SITE STORAGE SYSTEM)

FIG - 3



(OFF-SITE STORAGE SYSTEM)

FIG - 4



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METHOD OF OBTAINING AN ELECTRONICALLY-STORED FINANCIAL DOCUMENT

RELATED APPLICATIONS

This patent application is a continuation of U.S. patent application Ser. No. 13/272,936 filed on Oct. 13, 2011, now abandoned, which is a continuation of U.S. patent application Ser. No. 12/902,973 filed on Oct. 12, 2010, now abandoned, which is a continuation of U.S. patent application Ser. No. 12/489,087 filed on Jun. 22, 2009, now U.S. Pat. No. 7,836,067, which is a continuation of U.S. patent application Ser. No. 11/202,790 filed on Aug. 12, 2005, now U.S. Pat. No. 7,552,118, which is a continuation of U.S. patent application Ser. No. 10/104,541 filed on Mar. 22, 2002, now U.S. Pat. No. 6,963,866, which is a continuation of U.S. patent application Ser. No. 09/548,490 filed on Apr. 13, 2000, now U.S. Pat. No. 6,446,072, which in turn claims priority to and all the advantages of U.S. Provisional Patent Application Ser. No. 60/129,021, which was filed on Apr. 13, 1999.

BACKGROUND OF THE INVENTION

1) Technical Field

The subject invention relates to a method for a financial institution to obtain electronically-stored financial documents from an off-site storage system remotely-located from an on-site storage system.

2) Description of the Prior Art

Methods for obtaining electronically-stored financial documents are generally known in the art. Financial institutions, such as banks and credit unions, utilize such methods to rapidly and efficiently obtain financial documents for distribution to clients upon request. Such financial documents include paid checks, account statements, and other related documents. These financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. Further, these financial documents are typically electronically-stored in an on-site storage system located at the financial institution or in an off-site storage system. Electronic storage of these financial documents permits financial institutions to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides a means of retrieving the information from the on-site and off-site storage systems.

Once the document is stored, the client may request an image of a particular stored document. Client requests are made to replace lost or stolen documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. The client's request is inputted into a computer terminal at the financial institution. More specifically, conventional methods for obtaining an electronically-stored financial document enable an employee of the financial institution, such as a bank teller, to input the request into an interface incorporated into the computer terminal. The interface is inter-linked with the on-site storage system. Typically, all requests for a particular period are grouped together and subsequently downloaded for retrieval of the requested image by the financial institution. The financial institution retrieves the image, e.g. a photocopy of the check, and then distributes the photocopy to the client via facsimile, mail or hand delivery. The storing, downloading, and retrieving of the financial document, including the reproduction and the distribution of the document, are known in the industry as back office production. Back office production for financial institutions is particularly resource intensive, time consuming, and expen-

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sive. Also, back office production becomes increasingly expensive if the client requests a particularly old financial document because older financial documents frequently require more resources and time to locate and retrieve.

The majority of financial institutions electronically store financial documents only in an on-site storage system and not in an off-site storage system. Consequently, these financial institutions are unable to outsource the responsibilities for the back office production to third party entities to alleviate the expenses and resources associated with the back office production. These financial institutions realize a significant financial burden since the back office production is concentrated strictly at the financial institution.

Other financial institutions do electronically store financial documents in on-site and off-site storage systems. However, the methods utilized by these financial institutions to access the financial documents stored in the off-site storage system are deficient in that the interface utilized in such methods is only inter-linked with the on-site storage system. That is, there is no interface independently inter-linked with the off-site storage system. As a result, the financial documents stored in the off-site storage system can not be efficiently accessed. These financial institutions are still responsible for retrieving the requested financial documents through their back office production and their expenses remain high. One such method of retrieving documents from on-site and off-sited storage systems is disclosed in U.S. Pat. No. 5,784,610 to Copeland, III et al.

Due to the inefficiencies identified in the conventional methods used by financial institutions to obtain financial documents, it is desirable to implement a method for a financial institution to obtain electronically-stored financial documents from both on-site and off-site storage systems that reduces, if not eliminates, the back office production of the financial institution by providing a direct interface inter-linked with the off-site storage system. With such an interface, the responsibility for retrieving financial documents from the off-site storage can be outsourced to third party entities while still providing the financial institution with efficient access to any financial documents electronically-stored in the off-site storage system.

SUMMARY OF THE INVENTION AND ADVANTAGES

A method for a financial institution to obtain electronically-stored financial documents having a specific document parameter is disclosed. The specific document parameter is typically a particular numerical sequence, such as a record date of the financial document. The method of the subject invention enables the financial institution to obtain the financial documents from a first or an off-site storage system. The first or off-site storage system is different from a second or an on-site storage system and is preferably remotely-located from the second or on-site storage system. In one embodiment, the financial documents of the financial institution are maintained in the first or off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. The financial documents that are less than or equal to the predetermined parameter are maintained in the second or on-site storage system. In another embodiment, the specific document parameter of the financial document that is less than or equal to the predetermined parameter is maintained in the first or off-site storage system and the financial document that is greater than the predetermined parameter is maintained in the second or on-site storage system.

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When the financial institution receives a request for a financial document, the financial institution compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. A computer terminal located at the financial institution is connected to both the off-site and on-site storage systems through a processing unit. The processing unit is utilized to, at least partially, automatically access one of the storage systems in response to the comparison of the specific document parameter to the predetermined parameter. For instance, if it is determined that the specific document parameter is less than or equal to the predetermined document parameter, then the processing unit accesses the second or on-site storage system. On the other hand, if it is determined that the specific document parameter of the financial document is greater than the predetermined parameter, then the processing unit accesses the first or off-site storage system. As stated below, the computer terminal may be used to feed a request into the processing unit.

After the requested financial document is accessed the requested document is then retrieved in order to reproduce the financial document, and distribute the financial document to an end user of the financial institution.

The subject invention therefore provides a method that enables financial institutions to obtain electronically-stored financial documents from on-site and off-site storage systems. As such, the financial institution can selectively store financial documents in either an on-site storage system or the off-site storage system, and the responsibility for the financial documents in the on-site or off-site storage systems can be outsourced to a third party entity. Further, the documents can be stored in different fixed mediums, such as microfiche, microfilm, digitally, electronically, etc., and can be stored in different geographical locations. Therefore, the back office production of the financial institution associated with the retrieval and distribution of financial documents stored in the on-site or off-site storage systems is strategically reduced or even completely eliminated.

BRIEF DESCRIPTION OF THE DRAWINGS

Other advantages of the present invention will be readily appreciated as the same becomes better understood by reference to the following detailed description when considered in connection with the accompanying drawings wherein:

FIG. 1 is a flow diagram schematically detailing an on-site storage system, and an off-site storage system in accordance with the subject invention;

FIG. 2 is a block diagram generally representing a method for a financial institution to obtain electronically-stored financial documents from the on-site and off-site storage systems;

FIG. 3 is a block diagram completing the method of obtaining electronically-stored financial documents from the on-site storage system; and

FIG. 4 is a block diagram completing the method of obtaining electronically-stored financial documents from the off-site storage system.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the Figures, wherein like numerals indicate like or corresponding parts throughout the several views, a method for a financial institution to obtain an electronically-stored financial document is schematically shown at 10 in

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FIG. 1. The method introduced in the subject invention enables the financial institution to obtain the financial document from one of a first or an off-site storage system and a second or an on-site storage system with the storage systems being different from each other. Preferably, the on-site storage system is located at the financial institution and the off-site storage system is located at a remote location distant from the financial institution. This allows the financial institution to 'outsource' the responsibilities associated with obtaining the financial document.

Methods for financial institutions to obtain electronically-stored documents are frequently used by such entities as banks, credit unions, and other financially-oriented institutions. For illustrative purposes only, the description of the subject invention is discussed with reference to banks. However, as appreciated by those skilled in the art, other businesses, such as insurance companies, may also utilize similar methods and incorporate the aspects of the subject invention.

Methods for banks to obtain electronically-stored financial documents are generally used by banks to rapidly and efficiently obtain financial documents for distribution to clients upon request. As described above, the financial documents for banks are usually paid checks, checking statements, and other related financial documents, and these documents include at least one specific document parameter. As appreciated by those skilled in the art, it is not the financial document (e.g. the paid check) itself that is electronically-stored. Rather, it is data included on the document such as a sequence number that is electronically stored to make up the financial document. The specific document parameter is preferably a particular numerical sequence. As appreciated, the specific document parameter of the financial document can include, but is not limited to, a record date or age of the document, a series number, or some other document identifying number of the financial document. More specifically, in the preferred embodiment of the subject invention, the particular numerical sequence of the financial document is the record date of the financial document. That is, the date that the particular financial document was created or posted.

The financial documents are typically stored on microfiche, microfilm, digitally, or by some other electronic storage means. As appreciated, the electronic storage of the financial documents is frequently created by taking an electronic photo image of the document and storing the photo image in a computer system. One such digital electronic storage device is sold by Kodak under the name of IMAGELINK™ Digital Workstation (IDW). Electronic storage of these financial documents permits banks to eliminate storage of paper or "hard" copies of these documents. The electronic storage of these documents also provides an efficient means of retrieving the information from the on-site and off-site storage systems. This will be discussed further herein below.

As described above, the financial documents are electronically-stored in either the on-site storage system located at the bank or in the off-site storage system remotely located from the on-site storage system. More specifically, the subject invention includes the step of maintaining the financial documents in the off-site storage system when the specific document parameter of the financial document is greater than a predetermined parameter. Financial documents are maintained in the on-site storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter. As appreciated, the document parameter of the financial documents stored in the off-site storage system may be greater than or equal to the predetermined parameter with the on-site storage system having documents only less than the predetermined parameter.

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Similar to the specific document parameter of the financial document, the predetermined parameter is also a numerical value. The predetermined parameter is specifically a numerical value predetermined by the bank. For instance, if the specific document parameter is a series number of a paid check and the series number is greater than the predetermined parameter which, in this case, would be an arbitrarily selected base series number, then the paid check would be stored in the off-site storage system.

In the preferred embodiment of the subject invention, the predetermined numerical value is a date pre-selected by the bank. For instance, the bank may pre-select a date that is one year before a current date—the current date being the actual date that the client requests the financial document. Of course, the bank may pre-select a date that is some other time period before a current date (e.g. two or three years) without varying from the scope of the subject invention. As such, if the record date of the particular financial document is older than one year, then the particular financial document is maintained in the off-site storage system. If the record date of the particular financial document is earlier than or equal to one year, then the particular financial document is maintained in the on-site storage system. As discussed above, the document having record dates equal to the one year may be stored in the off-site or on-site storage systems.

Once the financial document is maintained in the appropriate storage system, the bank is capable of receiving a request for the financial document from the client. In reality, the client is requesting an image of the stored financial document. As appreciated, clients request the image for various reasons. As discussed above, requests are typically made for replacing lost or stolen financial documents, for tax purposes, for proof of financial transactions, for legal disputes, and other similar matters. Ultimately, the bank retrieves the image, reproduces the image, and distributes the reproduced image to the requesting client of the bank.

Referring now to FIG. 1, the method for banks to obtain electronically-stored financial documents is discussed in detail in accordance with a general scope of the subject invention. Initially, the requesting client requests a particular financial document, such as a paid check. The client is typically a customer of the bank or other financial institution. The client's request is inputted into a computer terminal 11 at the financial institution. The computer terminal 11 will be discussed in more detail hereinbelow.

From the computer terminal 11, the request is fed into a processing unit 12, which is illustrated as a mainframe computer 12 at the bank. In the preferred embodiment of the subject invention, if the client requests a financial document having a record date earlier than or equal to one year before the current date, then the request, and other requests like it, are processed at the bank in the on-site storage system. That is, the requests are grouped together and downloaded to a downloading terminal 14 at the bank. The downloading may occur at particular intervals such as at the end of each day, every three hours, etc. The sequence number of each check requested is then determined. A document terminal 16 subsequently creates or reproduces the document, i.e., a photocopy of the check. The photocopy is then distributed to the client via facsimile, mail, or hand delivery.

It is known in the art that the majority of requests for financial documents are requests for documents which were created in the most recent year. That is, if the pre-selected date is one year before the current date, as in the preferred embodiment, then the majority of requests are seeking financial documents having a record date earlier than or equal to the pre-selected date. The remaining document requests relate to

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financial documents that are older than one year. Since, as described in the Background of the Invention, retrieval of financial documents that are older than one year is particularly expensive, the preferred embodiment of the subject invention outsources all of the document requests which relate to documents having a record date later than one year before the current date. As appreciated, the particular time frame which is outsourced is not a critical feature of the subject invention and may be adjusted to meet the needs of any particular financial institution. In fact, all of the document requests, including the most recent, may be outsourced using the outsourcing procedure of the subject invention.

In the preferred embodiment, if the client requests a financial document having a record date later than one year before the current date, then the request, and others like it, are grouped together and downloaded from the mainframe computer 12 to an outsourced downloading terminal 18. As above, the downloading may be at particular intervals as needed. The sequence number is determined by a sequencing terminal 20. The sequence number is then sent back to the outsourced downloading terminal 18. An outsourced document terminal 22 then creates or reproduces the desired document which is then distributed to either the client or the bank. As appreciated, two document retrieval operations, one for the bank to retrieve financial documents having record dates earlier than or equal to one year before the current date, and another to retrieve outsourced financial documents having record dates later than one year before the current date, preferably operate simultaneously. It is to be understood that the computer terminals and the accompanying PC bases are illustrated highly schematically in FIG. 1 and are not intended to be limiting in any manner. For instance, the schematic illustration of the outsourced document terminal 22 need not include a computer terminal and an accompanying PC base. Instead, the outsourced document terminal 22 is preferably some sort of printing device.

Referring to FIGS. 2 through 4, the method for banks to obtain electronically-stored financial documents is described in even greater detail. The request is first generated by the client. The request is then processed by the bank. The processing, retrieval and reproduction of the requested financial document is typically controlled by one interlinked computer software program. One such computer software program is a software program called Antinori Software Incorporated or ASI which is sold under the name of INNOVASION™ by Carreker-Antinori of Dallas, Tex. However, other frequently used software programs include PEGA™ and Sterling™. Any of these computer software systems can provide the necessary means for implementing the discussed procedures.

The processing of the request is completed by a customer service tracking system and the computer terminal 11. The customer service tracking system assists the financial institution in receiving the request. More specifically, the customer service tracking system gives branches, customer service, and other bank departments the capability to enter, log, track, route and monitor the status of all requests for financial documents. The customer service tracking system also provides the capability to enter, log, track, route and monitor the status of customer complaints and other customer service related items.

In accordance with one contemplated embodiment of the invention, a bank employee, such as a bank teller first determines a status of the requested document. More specifically, the employee compares the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined param-

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eter. If the specific document parameter is a particular numerical sequence and the predetermined parameter is a predetermined numerical value, then the employee compares the particular numerical sequence of the financial document to the predetermined numerical value to determine if the particular numerical sequence is greater than, less than, or equal to the predetermined numerical value. Further, if as in the preferred embodiment, the particular numerical sequence is a record date of the financial document, and the predetermined numerical value is a pre-selected date, then the employee compares the record date of the financial document to the pre-selected date to determine if the record date is later than, earlier than, or equal to the pre-selected date.

The customer service tracking system enables a bank employee, such as a bank teller, to submit the request. More specifically, the employee utilizes the computer terminal **11** located at the bank and connected to both the off-site and on-site storage systems to access one of the storage systems in response to the comparison of the specific document parameter of the requested financial document to the predetermined parameter. For instance, when the particular numerical sequence of the financial document is greater than the prede-

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termined numerical value, the employee preferably utilizes the computer terminal **11** to access the off-site storage system, and when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee preferably utilizes the computer terminal **11** to access the on-site storage system. As discussed above, the documents have a numerical sequence equal to the predetermined numerical value may be stored in either the off-site or on-site storage systems.

After the computer terminal **11** is utilized to access the desired storage system, the employee manually inputs identification data of the requested financial document into the computer terminal **11**. More specifically, when the particular numerical sequence of the financial document is less than or equal to the predetermined numerical value, the employee inputs identification data into a primary interface and selects the requested document. Also, the primary interface preferably provides an option for the employee to select among several different output formats. The primary interface is inter-linked with the on-site storage system. In the preferred embodiment of the subject invention, the primary interface appears as follows and includes the identification data detailed below:

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Account Number:

Prod Type:

Account Name:

Customer Code:

Address:

City:

State:

Zip Code:

Home Phone: ()

Work Phone: ()

Fax: ()

Service Code:

For Items Posted Within A Year

Copy of Statement Only

Savings Items

Copy of Check/Deposit Ticket

Misc (G/L, Loans, Teller, Etc)

Check(s)/Deposit(s)<30 Items

Cash Letter Reconstruction

Statements and<30 Items

Lockbox

Statements and>30 Items

Legal Statement Only

Deposit Reconstruction

Legal Statement and Items

Regardless of Posting Date

Missing Transactions

Returned Items

Online (Backdated/Unposted) Encoding Error/Wrong Account

EXIT FUNCTION

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Alternatively, when the particular numerical sequence of the financial document is greater than the predetermined numerical value, the employee selects an exit function at the primary interface. The exit function distinguishes that the request is to be sent to an outsourcing third party entity. Upon selection of the exit function at the primary interface, a secondary interface, inter-linked with the exit function, is initiated. The secondary interface is inter-linked with the off-site storage system. The employee inputs identification data into the secondary interface and selects the requested document. Also, the secondary interface preferably provides an option for the employee to select among several different output formats. Preferably, routing, or service codes will be generated automatically upon the initiation of the secondary interface and the inputting of the identification data into the secondary interface. The routing codes enable the bank to recognize that the request is being sent to the outsourced third party entity. Furthermore, the routing codes are configured to automatically forward the inputted identification data to the off-site storage system. The inputted identification data and the routing codes are forwarded into the mainframe computer **12** introduced above for temporary storage before transfer to the off-site storage system. This temporary storage also serves to defend against unexpected power outages, computer malfunctions, and the like. In the preferred embodiment of the subject invention, the secondary interface appears as follows and includes the identification data detailed below:

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Account Number:		Prod Type:	
Account Name:		Customer Code:	
Address:			
City:	State:	Zip Code:	
Home Phone: ()		Work Phone: ()	
Fax: ()			
Service Code:			
For Items Posted Prior to a Year			
Copy of Statement Only	Savings Items		
Copy of Check/Deposit Ticket	Misc (G/L, Loans, Teller, Etc)		
Check(s)/Deposit(s)<30 Items	Cash Letter Reconstruction		
Statements and<30 Items	Lockbox		
Statements and>30 Items	Legal Statement Only		
Deposit Reconstruction	Legal Statement and Items		

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Once the bank employee has inputted the necessary identification data into either the primary or secondary interface, then retrieval of the financial document can continue. Specifically, the requested financial document is retrieved as defined by the inputted identification data. Two separate document retrieval procedures are discussed hereinbelow. One document retrieval procedure is for the financial documents having a record date earlier than or equal to the pre-selected date—one year before the current date in this example. The other document retrieval procedure is for the financial documents having a record date later than the pre-selected date. As discussed above, the one year timing selected for the pre-selected date is simply shown as an example and any suitable time frame may be utilized. In fact, even all financial document retrievals may be outsourced to the third party entity. As also discussed above, the two separate document retrieval procedures will typically operate simultaneously.

With reference to the subject example, if the record date of the financial document is earlier than or equal to one year before the current date, the remaining steps occur at the bank. As discussed above, these steps are known as the back office production of the bank. The request is first categorized by a research automation system. The research automation system automates the entire workflow of a bank's research and photocopy departments by sending requests to the appropriate sequence for processing. The downloading terminal **14** serves to perform the research automation system's tasks.

Photocopy requests are routed to an image control system, statement requests are sent to a document retrieval system, and requests for financial adjustments are routed to an adjustment system. The document terminal **16** serves to perform these tasks. In the illustrated embodiment of the subject invention, the sample document request is for a paid check. Hence, the categorized sequence will be the image control system which handles photocopy requests.

Referring now to FIG. 3, after the request is categorized, the request is verified for completeness and accuracy. If the request is not complete then additional data is retrieved. The additional data is retrieved by using a sequence number retrieval system and/or an all items research system. Once the request is complete and accurate, then the image reference number can be determined. That is, once the request is complete and accurate, then the requested financial document can be electronically located in the on-site storage system. The reference number may be a routing, sequence, or any other type of indicator. The reference number is determined by the image control system. The image control system is an image retrieval and routing management system which works in conjunction with Kodak's IMAGELINK™ Digital Workstations (IDW). Specifically, the image control system first connects to a network node. The network node is any type of storage device as is known in the art. Preferably a Kodak network node is used. The network node drives the IDW to find the location of the image by using the reference number. Specifically, the employee is prompted to verify that the correct media is loaded in the IDW such that the IDW can locate the image. The reference number for the document is known and the document image is now verified and located.

The requested image can now be retrieved and reproduced. In other words a copy of the digitized document (the check) is created. The copy may be created by manually pulling the microfilm, microfiche, or the like and photocopying the document. The copy may also be made by printing the document from a digitized record. The photocopy of the check is then distributed to the requesting client or other end user of the financial institution. Other end users of the financial institution

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include, but are not limited to, other financial institutions and federal and state governments. Additional information such as a photocopy report, a statement of charges, a research report and/or a daily status report may also be produced for the requesting client, the other end user, and/or the financial institution. The document retrieval system incorporated at the bank and the method for obtaining electronically-stored financial documents from the on-site storage system is now completed.

Continuing with the subject example, if the record date of the financial document is later than one year before the current date, the automated retrieval of the financial document is outsourced to the third party entity. To begin, a separate file is automatically generated at the bank by the input of the identification data into the secondary interface. Referring specifically to FIG. 4, the routing codes direct the request created on the separate file to be routed separately to the outsourced third party entity. In the preferred embodiment of the subject invention, additional user ID's are created to allow only selected users into the secondary interface. The identification data stored in the separate file and the routing codes are downloaded to the off-site storage system for retrieval of the requested financial documents by the outsourced downloading terminal **18**. Preferably, the identification data and routing codes are grouped into batches of common requests for optimum retrieval of the requested financial document by the outsourced third party entity at the off-site storage system. The downloading step may occur at any suitable predetermined interval. Preferably, the downloading will occur three times a day. The downloaded documents are known in the industry as a basket of requests.

The subject method further includes the step of creating a back-up file of the downloaded identification data and routing codes in the off-site storage system. The back-up file acts as an emergency information source in case the mainframe computer **12** at the financial institution has a catastrophic failure. In addition, the outsourced third party entity is in direct connection with the mainframe computer **12** of the bank wherein the outsourced third party entity may produce a backup directory of each database file. This database backup is an additional safe guard for the financial institution.

The downloaded identification data and routing codes are then categorized for processing in the off-site storage system. The research automation system categorizes this information in a like fashion as discussed above. In fact, the outsourced third party entity uses the same computer software package as the financial institution such that the flow of information is optimum and not interrupted. As discussed above, the subject example request is for a paid check. Hence, the request will be categorized into the image control system and a sequence number will be determined by the sequencing terminal **20**. Also, a status to update the progress of the requested financial document is provided to the financial institution.

After the request is categorized, the request, specifically the inputted identification data, is verified for completeness and accuracy. If the request is not complete or accurate, then additional data is retrieved. In a similar fashion as above, the additional data is retrieved by using the sequence number retrieval system and/or the all items research system. As appreciated, the outsourced third party entity may retrieve this information from the mainframe computer **12**, via its direct line, or from its own backup database files. Once the request is complete and accurate, the image reference number can be determined. Again, as above, the reference number is determined by the image control system.

The requested image is then retrieved. More specifically, the requested financial document is electronically located in

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the off-site storage system. Additionally, the requested financial document is also reproduced after the document is electronically located in the off-site storage system by the outsourced document terminal 22. In other words, a copy of the digitized document (the check) is created. A status file is then created for the completed transaction. Also, a status of the request is sent to the financial institution wherein the institution may update their records. The status updates, as well as the information connections, create a two way information exchange between the outsourced third party entity and the bank.

The photocopy of the check is then distributed or digitally transferred to the requesting client, the financial institution, or other end users of the financial institution. In the preferred embodiment of the subject invention, the photocopy of the request is distributed to the requesting client, etc. based on the routing codes. That is, in addition to directing the request to be separately routed to the outsourced third party entity, the routing codes also indicate an appropriate distribution for the request client or other end user. The request is now completed.

A special circumstance occurs when the record date of one portion of the client's request is earlier than or equal to one year before the current date, and when the record date of another portion of the client's request is later than one year before the current date. These types of requests are known in the industry as spanned requests. One solution is to incorporate an additional interface utilized when the employee of the bank is utilizing the computer terminal 11 and comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter. If the request is a spanned request, then the request will be split into two separate requests which can be handled simultaneously. A special notation would be put onto the requests such that they may be put back together before distributing the documents to the client or other end user. Another solution simply notifies the inputting employee that two requests should be entered separately. A third solution sends the request to the back office production at the bank wherein the back office employees notify the outsourced third party entity by a separate request to retrieve the requested financial documents.

The invention has been described in an illustrative manner, and it is to be understood that the terminology which has been used is intended to be in the nature of words of description rather than of limitation. Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is, therefore, to be understood that within the scope of the appended claims, wherein reference numerals are merely for convenience and are not to be in any way limiting, the invention may be practiced otherwise than as specifically described.

What is claimed is:

1. A method of accessing an electronically-stored financial document from one of a first storage system and a second storage system with the first and second storage systems being different from each other wherein the first and second storage systems each include a plurality of financial documents stored therein and wherein each of the financial documents has an electronic image and is associated with at least one specific document parameter, said method comprising the steps of:

storing a plurality of images of the financial documents in a first fixed medium at the first storage system when the specific document parameter of the financial document

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is greater than a predetermined parameter, wherein the predetermined parameter includes a pre-selected numerical record date;

storing a plurality of images of the financial documents in a second fixed medium at the second storage system when the specific document parameter of the financial document is less than or equal to the predetermined parameter;

utilizing a processor that has access to the first and second storage systems;

receiving a request for an image of one of the stored financial documents into the processor;

comparing the specific document parameter of the requested financial document to the predetermined parameter to determine if the specific document parameter is greater than, less than, or equal to the predetermined parameter after the request has been received, wherein the specific document parameter of the financial document is a particular numerical sequence associated with the specific document parameter, and wherein the particular numerical sequence of the financial document includes a record date of the financial document;

accessing the first storage system when the specific document parameter is greater than the predetermined parameter and accessing the second storage system when the specific document parameter is less than or equal to the predetermined parameter; and

retrieving the image of the requested financial document from the accessed storage system as defined by the received request.

2. A method as set forth in claim 1 wherein the first and second fixed mediums are different from each other.

3. A method as set forth in claim 1 further including the step of reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system.

4. A method as set forth in claim 3 wherein the step of reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system includes reproducing the document onto paper.

5. A method as set forth in claim 3 wherein the step of reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system includes electronically reproducing the document.

6. A method as set forth in claim 1 wherein the first and second storage systems are associated with the same entity.

7. A method as set forth in claim 1 wherein the first and second storage systems are associated with different entities.

8. A method as set forth in claim 1 wherein the first and second fixed mediums are the same.

9. A system for selectively storing and retrieving electronic images of financial documents, each electronic image being associated with a document parameter that includes a numerical sequence that is representative of a record date of the corresponding financial document, the system comprising:

a first storage system including a first fixed medium that stores a plurality of electronic images of corresponding financial documents, wherein the numerical sequence of the document parameter of each electronic image is greater than a numerical sequence of a predetermined parameter, wherein the predetermined parameter includes a pre-selected numerical record date;

a second storage system including a second fixed medium that stores a plurality of electronic images of corresponding financial documents, wherein the numerical

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sequence of the document parameter of each electronic image is less than or equal to the numerical sequence of the predetermined parameter; and
 a processor that has electronic access to the first and second storage systems, wherein the processor is configured to:
 5 receive a request to retrieve the stored electronic image corresponding to a requested financial document that includes the document parameter;
 compare the numerical sequence of the document parameter associated with the electronic image of the
 10 requested financial document to the numerical sequence of the predetermined parameter, wherein the specific document parameter associated with the electronic image of the requested financial document includes a particular numerical sequence that is representative of a
 15 specific record date of the financial document;
 if the numerical sequence of the document parameter of the requested financial document is greater than the numerical sequence of the predetermined parameter, then retrieve the electronic image corresponding to the
 20 requested financial document from the first storage system;
 if the numerical sequence of the document parameter of the requested financial document is less than or equal to the
 25 numerical sequence of the predetermined parameter, then retrieve the electronic image corresponding to the requested financial document from the second storage system.

10. A system as set forth in claim 9 wherein storing a plurality of financial documents in a first fixed medium is
 30 further defined as electronically storing the plurality of financial documents in a first fixed electronic medium, and

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wherein storing a plurality of financial documents in a second fixed medium is further defined as electronically storing the plurality of financial documents in a second fixed electronic medium.

11. A system as set forth in claim 9 wherein accessing the first and second storage systems is further defined as accessing only one of the storage systems at any one time to locate the requested financial document.

12. A system as set forth in claim 9, wherein said record date of a financial document is a date on which the electronic image of the financial document is created.

13. A system as set forth in claim 9 further including reproducing the requested financial document after the requested financial document has been retrieved from the accessed storage system.

14. A system as set forth in claim 13 wherein the reproducing of the requested financial document after the requested financial document has been retrieved from the accessed storage system includes reproducing the document onto paper.

15. A system as set forth in claim 13 wherein the reproducing of the requested financial document after the requested financial document has been retrieved from the accessed storage system includes electronically reproducing the document.

16. A system as set forth in claim 9 wherein the first and second fixed mediums are different from each other.

17. A system as set forth in claim 9 wherein the first and second storage systems are associated with the same entity.

18. A system as set forth in claim 9 wherein the first and second storage systems are associated with a different entity.

* * * * *

JS 44 (Rev. 06/17)

CIVIL COVER SHEET

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

Mirror Imaging LLC

(b) County of Residence of First Listed Plaintiff Macomb County
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)

Rabico Law LLC; 73 W Monroe St, Chicago, IL 60603 (773) 669-4590

DEFENDANTS

Austin Bancorp, Inc.; Austin Bank Texas, National Association

County of Residence of First Listed Defendant Cherokee County
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known)

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

- | | PTF | DEF | | PTF | DEF |
|---|----------------------------|----------------------------|---|----------------------------|----------------------------|
| Citizen of This State | ☐ 1 | ☐ 1 | Incorporated or Principal Place of Business In This State | ☐ 4 | ☐ 4 |
| Citizen of Another State | ☐ 2 | ☐ 2 | Incorporated and Principal Place of Business In Another State | ☐ 5 | ☐ 5 |
| Citizen or Subject of a Foreign Country | ☐ 3 | ☐ 3 | Foreign Nation | ☐ 6 | ☐ 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)Click here for: [Nature of Suit Code Descriptions.](#)

CONTRACT	TORTS	FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES	
☐ 110 Insurance ☐ 120 Marine ☐ 130 Miller Act ☐ 140 Negotiable Instrument ☐ 150 Recovery of Overpayment & Enforcement of Judgment ☐ 151 Medicare Act ☐ 152 Recovery of Defaulted Student Loans (Excludes Veterans) ☐ 153 Recovery of Overpayment of Veteran's Benefits ☐ 160 Stockholders' Suits ☐ 190 Other Contract ☐ 195 Contract Product Liability ☐ 196 Franchise	PERSONAL INJURY ☐ 310 Airplane ☐ 315 Airplane Product Liability ☐ 320 Assault, Libel & Slander ☐ 330 Federal Employers' Liability ☐ 340 Marine ☐ 345 Marine Product Liability ☐ 350 Motor Vehicle ☐ 355 Motor Vehicle Product Liability ☐ 360 Other Personal Injury ☐ 362 Personal Injury - Medical Malpractice	☐ 365 Personal Injury - Product Liability ☐ 367 Health Care/Pharmaceutical Personal Injury Product Liability ☐ 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY ☐ 370 Other Fraud ☐ 371 Truth in Lending ☐ 380 Other Personal Property Damage ☐ 385 Property Damage Product Liability	☐ 625 Drug Related Seizure of Property 21 USC 881 ☐ 690 Other LABOR ☐ 710 Fair Labor Standards Act ☐ 720 Labor/Management Relations ☐ 740 Railway Labor Act ☐ 751 Family and Medical Leave Act ☐ 790 Other Labor Litigation ☐ 791 Employee Retirement Income Security Act IMMIGRATION ☐ 462 Naturalization Application ☐ 465 Other Immigration Actions	☐ 422 Appeal 28 USC 158 ☐ 423 Withdrawal 28 USC 157 PROPERTY RIGHTS ☐ 820 Copyrights ☒ 830 Patent ☐ 835 Patent - Abbreviated New Drug Application ☐ 840 Trademark SOCIAL SECURITY ☐ 861 HIA (1395ff) ☐ 862 Black Lung (923) ☐ 863 DIWC/DIWW (405(g)) ☐ 864 SSID Title XVI ☐ 865 RSI (405(g)) FEDERAL TAX SUITS ☐ 870 Taxes (U.S. Plaintiff or Defendant) ☐ 871 IRS—Third Party 26 USC 7609	☐ 375 False Claims Act ☐ 376 Qui Tam (31 USC 3729(a)) ☐ 400 State Reapportionment ☐ 410 Antitrust ☐ 430 Banks and Banking ☐ 450 Commerce ☐ 460 Deportation ☐ 470 Racketeer Influenced and Corrupt Organizations ☐ 480 Consumer Credit ☐ 490 Cable/Sat TV ☐ 850 Securities/Commodities/Exchange ☐ 890 Other Statutory Actions ☐ 891 Agricultural Acts ☐ 893 Environmental Matters ☐ 895 Freedom of Information Act ☐ 896 Arbitration ☐ 899 Administrative Procedure Act/Review or Appeal of Agency Decision ☐ 950 Constitutionality of State Statutes

V. ORIGIN (Place an "X" in One Box Only)

- ☒ 1 Original Proceeding
- ☐ 2 Removed from State Court
- ☐ 3 Remanded from Appellate Court
- ☐ 4 Reinstated or Reopened
- ☐ 5 Transferred from Another District (specify)
- ☐ 6 Multidistrict Litigation - Transfer
- ☐ 8 Multidistrict Litigation - Direct File

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):

35 U.S.C. 271, et seq; Patent Infringement

Brief description of cause:

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P.

DEMAND \$

CHECK YES only if demanded in complaint:

JURY DEMAND: ☒ Yes ☐ No**VIII. RELATED CASE(S) IF ANY**

(See instructions):

JUDGE

DOCKET NUMBER

DATE

SIGNATURE OF ATTORNEY OF RECORD

07/16/2017

/s/ Isaac Rabico

FOR OFFICE USE ONLY

RECEIPT # _____ AMOUNT _____ APPLYING IFP _____ JUDGE _____ MAG. JUDGE _____

JS 44 Reverse (Rev. 06/17)

INSTRUCTIONS FOR ATTORNEYS COMPLETING CIVIL COVER SHEET FORM JS 44**Authority For Civil Cover Sheet**

The JS 44 civil cover sheet and the information contained herein neither replaces nor supplements the filings and service of pleading or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. Consequently, a civil cover sheet is submitted to the Clerk of Court for each civil complaint filed. The attorney filing a case should complete the form as follows:

- I.(a) Plaintiffs-Defendants.** Enter names (last, first, middle initial) of plaintiff and defendant. If the plaintiff or defendant is a government agency, use only the full name or standard abbreviations. If the plaintiff or defendant is an official within a government agency, identify first the agency and then the official, giving both name and title.
- (b) County of Residence.** For each civil case filed, except U.S. plaintiff cases, enter the name of the county where the first listed plaintiff resides at the time of filing. In U.S. plaintiff cases, enter the name of the county in which the first listed defendant resides at the time of filing. (NOTE: In land condemnation cases, the county of residence of the "defendant" is the location of the tract of land involved.)
- (c) Attorneys.** Enter the firm name, address, telephone number, and attorney of record. If there are several attorneys, list them on an attachment, noting in this section "(see attachment)".
- II. Jurisdiction.** The basis of jurisdiction is set forth under Rule 8(a), F.R.Cv.P., which requires that jurisdictions be shown in pleadings. Place an "X" in one of the boxes. If there is more than one basis of jurisdiction, precedence is given in the order shown below.
 United States plaintiff. (1) Jurisdiction based on 28 U.S.C. 1345 and 1348. Suits by agencies and officers of the United States are included here.
 United States defendant. (2) When the plaintiff is suing the United States, its officers or agencies, place an "X" in this box.
 Federal question. (3) This refers to suits under 28 U.S.C. 1331, where jurisdiction arises under the Constitution of the United States, an amendment to the Constitution, an act of Congress or a treaty of the United States. In cases where the U.S. is a party, the U.S. plaintiff or defendant code takes precedence, and box 1 or 2 should be marked.
 Diversity of citizenship. (4) This refers to suits under 28 U.S.C. 1332, where parties are citizens of different states. When Box 4 is checked, the citizenship of the different parties must be checked. (See Section III below; **NOTE: federal question actions take precedence over diversity cases.**)
- III. Residence (citizenship) of Principal Parties.** This section of the JS 44 is to be completed if diversity of citizenship was indicated above. Mark this section for each principal party.
- IV. Nature of Suit.** Place an "X" in the appropriate box. If there are multiple nature of suit codes associated with the case, pick the nature of suit code that is most applicable. Click here for: [Nature of Suit Code Descriptions](#).
- V. Origin.** Place an "X" in one of the seven boxes.
 Original Proceedings. (1) Cases which originate in the United States district courts.
 Removed from State Court. (2) Proceedings initiated in state courts may be removed to the district courts under Title 28 U.S.C., Section 1441. When the petition for removal is granted, check this box.
 Remanded from Appellate Court. (3) Check this box for cases remanded to the district court for further action. Use the date of remand as the filing date.
 Reinstated or Reopened. (4) Check this box for cases reinstated or reopened in the district court. Use the reopening date as the filing date.
 Transferred from Another District. (5) For cases transferred under Title 28 U.S.C. Section 1404(a). Do not use this for within district transfers or multidistrict litigation transfers.
 Multidistrict Litigation – Transfer. (6) Check this box when a multidistrict case is transferred into the district under authority of Title 28 U.S.C. Section 1407.
 Multidistrict Litigation – Direct File. (8) Check this box when a multidistrict case is filed in the same district as the Master MDL docket.
PLEASE NOTE THAT THERE IS NOT AN ORIGIN CODE 7. Origin Code 7 was used for historical records and is no longer relevant due to changes in statute.
- VI. Cause of Action.** Report the civil statute directly related to the cause of action and give a brief description of the cause. **Do not cite jurisdictional statutes unless diversity.** Example: U.S. Civil Statute: 47 USC 553 Brief Description: Unauthorized reception of cable service
- VII. Requested in Complaint.** Class Action. Place an "X" in this box if you are filing a class action under Rule 23, F.R.Cv.P.
 Demand. In this space enter the actual dollar amount being demanded or indicate other demand, such as a preliminary injunction.
 Jury Demand. Check the appropriate box to indicate whether or not a jury is being demanded.
- VIII. Related Cases.** This section of the JS 44 is used to reference related pending cases, if any. If there are related pending cases, insert the docket numbers and the corresponding judge names for such cases.

Date and Attorney Signature. Date and sign the civil cover sheet.