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EXHIBIT C



IN THE UNITED STATES DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

#5/A W. Lauren 7/15/97

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Examiner: James Trammel

Inventor: David L. James

Title: ELECTRONIC PAYMENT INTERCHANGE

CONCENTRATOR

BY EXPRESS MAIL RECEIPT NO. TB873092605US

To: The Honorable Assistant Commissioner for Patents Washington, D. C. 20231

June 13, 1997

PATENT

APPLICANT'S AMENDMENT AND REMARKS IN RESPONSE TO FIRST OFFICE ACTION

I. INTRODUCTION

This submission responds to the Official Communication mailed on December 18, 1996 resetting the time for response of an earlier communication dated November 20, 1996. Reexamination and reconsideration are respectfully requested.

II. AMENDMENT

In the claims:

- Please cancel claims 8-10, 28-30, 32, 33, 49-51, 66-68 and 87-90 without prejudice. A.
- Please amend the following claims: B.

1. (Amended) An electronic payment interchange concentrator for effecting one or more of the reception, transmission, translation and storage of electronic transaction data files, said files containing information relating to financial instruments exchanged among multiple institutions, said financial instruments being exchanged between and among the institutions, comprising:

a means for receiving a data file from an originating institution, said data file containing comingled records of a plurality of separate financial instruments, said data file being in a first file format established by the originating institution and containing a designation by the originating institution that [the] information in the data file is to be received by [a] one or more than one predetermined institution;

a processor for separating said co-mingled records of financial instrument information into separate bundles corresponding to each of the one or more predetermined institution designated by the originating institution to receive said records and for translating the records in each bundle of said financial instrument information records [in] from said first data file format into a [second] data file format selected by the predetermined institution [that is] designated to receive the information,

said processor including program means for separating and bundling and for translating said records [data file];

a means for storing said <u>bundled</u> financial instrument information in [said second data file format that is] an addressable media where the <u>bundled</u> financial instrument information is uniquely accessible to the institution [that is] <u>designated</u> to receive the information;

means for the institution designed to receive the information to transmit to and to receive from the means for storing; and

a means for transmitting a bundle of said stored financial instrument information from the addressable storage media [in said second data file format] to the institution designated to receive the information upon the receipt of an instruction [from the institution that is to receive the information].

- 2. (Amended) The apparatus of claim 1 wherein said data file further contains identifying information with respect to the originating institution and the [receiving] predetermined institution designated to receive one or more of the records in the data file, said apparatus further including means for:
- (a) validating the identifying information of the originating institution and [the] said designated receiving institution;

- (b) authenticating the financial instrument information contained in said first data file format with respect to predetermined data format parameters; and
 - (c) determining a data file format acceptable to the <u>designated</u> [receiving] institution.
- 3. (Amended) The apparatus of claim 1, further including a security mechanism [procedures] for preventing the unauthorized [originating and receiving institutions from effecting] one or more of the reception, transmission, translation and storage of [said] financial instrument information.
- 4. (Amended) The apparatus of claim 1 including a means for transmitting at least one portion of said bundled financial instrument information [in said second data file format] to one or more settlement mechanisms in a format acceptable to each of said one or more settlement mechanisms.
- 11. (Amended) The apparatus of claim [9] 4 wherein said processor translates said at least one portion of said [separated] financial instrument information into one or more data file formats corresponding to a [data] file format acceptable to each of said one or more [of a plurality of] settlement mechanisms.

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- 12. (Amended) The apparatus of claim 1 including an archive for storing [said] one or more of the co-mingled financial instrument information and the bundled financial instrument information.
- The apparatus of claim 1 [including a means for transmitting said financial 13. (Amended) instrument information in said second data file format] wherein one or more separate portions of the bundled financial instrument information are transmitted to the designated receiving institution upon one of (a) demand from the receiving institution, (b) instructions by the originating institution and (c) within a prearranged time period.
- 14. (Amended) The apparatus of claim 1 wherein [said data file further contains] the bundled financial instrument information includes identifying information with respect to an account at an institution of first deposit in which [said] a financial instrument is deposited.
- 17. (Amended) The apparatus of claim 1 wherein [said data file further contains] at least one portion of the bundled financial instrument information comprises information with respect to settlement instructions from said originating institution.



- 18. (Amended) The apparatus of claim 1 wherein [said data file further contains] at least one portion of the bundled financial instrument information comprises information with respect to settlement instructions from [said] the receiving institution corresponding to said at least one portion.
- 19. (Amended) The apparatus of claim 1 wherein [the financial instrument is a] detailed information concerning one or more cash item is associated with at least one portion of the bundled financial instruments.
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- 20. (Amended) The apparatus of claim I wherein [the] at least one portion of the bundled financial instrument information corresponds to [is] one of an electronic funds transfer and a paper instrument.
- 21. (Amended) The apparatus of claim 20 wherein [said paper instrument is] at least one portion of the bundled financial instrument information comprises information concerning one of a check, a money order, a share order, and a draft.
- 22. (Amended) The apparatus of claim 1 wherein said financial instrument information includes detailed information derived from an MICR line [from which information relating to the instrument is derived].

24. (Amended) An electronic payment interchange concentrator for effecting one or more of the reception, transmission, translation and storage of data files containing information relating to financial instruments among multiple institutions, each of said data files containing identifying information with respect to an originating institution and [a] multiple predetermined receiving institutions, said financial instrument information being exchanged between and among the institutions, comprising:

a means for receiving a data file from the originating institution, said data file being in a first file format established by the originating institution and comprising co-mingled financial instrument information intended for multiple receiving institutions, the data file further including [containing] a designation that [the] specified information in the data file is to be received by [said] a predetermined receiving institution;

a processor for: (a) validating the identifying information of the originating institution and [the] each receiving institution; (b) authenticating the financial instrument information contained in said first data file with respect to predetermined data format parameters; (c) determining a data file format acceptable to [the] each receiving institution; [and] (d) separating said co-mingled financial instrument information into different portions associated with one or more of the multiple receiving institutions and (e) translating each portion of said separated financial instrument information in said first data file format into a [second] data file format preselected by the receiving institution associated therewith;



a means for storing said <u>separated</u> financial instrument information <u>according to the</u>
<u>separate portions thereof</u> [in said second data file format, said storing means being] in a memory
<u>storage device in a manner such that each separate portion is</u> uniquely accessible to the receiving
institution <u>associated therewith</u>;

a means for transmitting [said financial instrument information in said second data file format] each portion of said separated financial instrument information stored in the memory storage device to, and in the format selected by, the receiving institution associated therewith; and an archive for storing [said] one or more than one of the co-mingled financial instrument information and the separated financial instrument information [in said second data file format].

25. (Amended) The apparatus of claim 24 further including a means for transmitting at least one portion of said separated financial instrument information [in said second data file format] to a settlement mechanism predetermined by one of (a) the originating institution, (b) the receiving institution and [by] (c) agreement of the originating and receiving institutions, the portion being transmitted to the settlement mechanism being translated into a data file format acceptable to said settlement mechanism.

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26. (Amended) The apparatus of claim 24 including a means for transmitting information, derived from at least one portion of said separated financial instrument information, [in said second data file format] to a settlement mechanism in a data file format predetermined by the receiving institution to be acceptable to the settlement mechanism.

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27. (Amended) The apparatus of claim 24, further including security procedures for preventing unauthorized [originating and receiving institutions from effecting one or more of the] reception, transmission, translation and storage of [said] any financial instrument information.

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31. (Amended) The apparatus of claim [29] 25 wherein said processor translates said at least one portion of said separated financial instrument information into one or more data file formats [corresponding to a data file format] acceptable to each of one or more settlement mechanisms to which the information is to be sent.



34. (Amended) The apparatus of claim 24 wherein [said] at least one portion of the separated financial instrument [is a] information comprises information concerning each of one or more cash items.

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35. (Amended) The apparatus of claim 24 wherein [the] at least one portion of the separated financial instrument [is one of an] information comprises a record of an electronic funds transfer or [and] a paper instrument.

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- 36. (Amended) The apparatus of claim 35 wherein said paper instrument [is] comprises one of a check, a money order, a share order, and a draft.
- 37. (Amended) The apparatus of claim [24] <u>34</u> wherein [said financial instrument includes] the information relating to the financial instrument is derived from an MICR line [from which information relating to the instrument is derived].

Al Ale 39. (Amended) The apparatus of claim 24 wherein said [data file further contains] financial instrument information is a record of an instrument and further comprises identifying information with respect to an account at an institution of first deposit in which [said] the financial instrument is deposited.



42. (Amended) The apparatus of claim 24 wherein [said data file further contains] at least one portion of the separated financial instrument information is associated with information with respect to settlement instructions from said originating institution.



- 43. (Amended) The apparatus of claim 24 wherein [said data file further contains] at least one portion of the separated financial instrument information comprises information with respect to settlement instructions for the said at least one portion from [said] the receiving institution.
- 44. (Amended) The apparatus of claim 24 further including means for enabling the receiving institution to retrieve the <u>separated</u> financial instrument information <u>associated</u> with the receiving institution [in said second data file format] upon one of (a) demand from the receiving institution, (b) instructions by the originating institution and (c) within a prearranged time period.
- 45. (Amended) A system for effecting one or more of the reception, transmission, translation and storage of data files between or among institutions, said data files containing comingled information about financial instruments, comprising:
- a communication link between an originating institution and a master processor through which an electronic data file is sent from an originating institution, said data file being in a first file format established by the originating institution and containing identifying information with respect to both the originating institution and [an] multiple institutions that [is] are designated to receive different portions of the co-mingled financial instrument information;

said processor:





- (a) validating the identifying information of the originating institution and the receiving institutions:
- (b) authenticating the co-mingled financial instrument information contained in said data file in said first data format with respect to predetermined data format parameters;
- (c) determining a preselected data file format acceptable to [the] each receiving institution; [and]
- (d) separating said co-mingled financial instrument information into different bundles to be associated with a designated receiving institution; and
- (e) translating each bundle of said separated financial instrument information [in said first data file format] into a [second] data file format preselected by the receiving institution corresponding thereto;
- a means for temporarily storing each bundle of said separated financial instrument information [in said second data file format] in memory unique to the receiving institution associated therewith:
- a communication link for transmitting [said financial instrument information in said second data file format] each bundle of said separated financial instrument information stored in the memory storage device to the receiving institution associated therewith; and

an archive for storing one of said co-mingled financial instrument information and said bundles of financial instrument information.

46. (Amended) The system of claim 45 wherein one or more bundles are addressed on behalf of the receiving institution for delivery into a settlement mechanism further including a communication link for transmitting information derived from at least one bundle of said separated financial instrument information [in said second data file format] to [a] the settlement mechanism, said information being transmitted in a data file format acceptable to the settlement mechanism.

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- 47. (Amended) The system of claim 45 or claim 46 in which the bundles are associated with an address for the receiving institution and further including means for enabling the receiving institution to which the bundle is addressed to retrieve [the financial instrument information in said second data file format] said bundle in the format selected by said receiving institution upon one of (a) demand from the receiving institution, (b) instructions by the originating institution and (c) within a prearranged time period.
- 48. (Amended) The system of claim 45 further including security procedures for preventing unauthorized [originating and receiving institutions from effecting one or more of the]



reception, transmission, translation and storage of [said] any financial instrument information within the system.

52. (Amended) The system of claim [50] 46 wherein said processor separately translates more than one bundle of said separated financial instrument information into one or more data file formats [corresponding to a data file format] acceptable to one or more separate settlement mechanisms to which the information in the bundles [differing data file formats are] is separately directed.



- 53. (Amended) The apparatus of claim 45 wherein [said] at least one portion of the separated financial instrument [is a] information comprises detailed information concerning each of one or more cash items.
- 54. (Amended) The apparatus of claim 45 wherein [the] at least one portion of the separated financial instrument [is one of an] information in a bundle comprises one or more than one of an electronic funds transfer and a paper instrument.

55. (Amended) The apparatus of claim [54] 45 wherein [the paper instrument is] at least one portion of the bundled financial instrument information comprises detailed information concerning one of a check, a money order, a share order, and a draft.

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56. (Amended) The apparatus of claim [45] 53 wherein the [financial instrument includes] detailed information is derived from an MICR line [from which information relating to the instrument is derived].

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- 58. (Amended) The system of claim 45 wherein said [data file further contains] financial instrument information further comprises identifying information with respect to an account at an institution of first deposit in which said financial instrument is deposited.
- 61. (Amended) A process for effecting one or more of the electronic reception, transmission, translation and storage of data files containing information relating to co-mingled financial instruments among multiple institutions, said financial instruments being exchanged between and among the institutions, comprising:

receiving a data file from an originating institution, said data file comprising comingled financial instrument information addressed to multiple receiving institutions being in a first

file format established by the originating institution and containing a designation that [the] specified information in the data file is to be received by a predetermined institution;

separating said co-mingled financial instrument information into one or more discrete bundles of information, each of which is associated with predetermined institution specified as the recipient of the information:

translating each bundle of said separated financial instrument information in said first data file format into a [second] data file format selected by [the institution that is to receive the information] the receiving institution associated therewith:

storing said bundled financial instrument information [in said second data file format] in a memory that is uniquely accessible to the institution specified as the recipient of [that is to receive] the information; and

transmitting said bundled financial instrument information in said [second] translated data file format to the institution that is to receive the information upon one of (a) demand from the institution that is to receive the information, (b) instructions by the originating institution and (c) within a prearranged time period.

The process of claim 61 wherein [said data file further] each separated bundle of financial instrument information [containing] contains identifying information with respect

to both the originating institution and the institution that is <u>designated</u> to receive [the information] said bundle.

- 63. (Amended) The process of claim 61 wherein said [data file further contains] financial instrument information further comprises identifying information with respect to an account at an institution of first deposit in which [said] at least one financial instrument is deposited.
- 64. (Amended) The process of claim 61 further including the step of performing a security authorization procedure[s] for limiting only authorized originating and receiving institutions to effect one or more of the reception, transmission, translation and storage of [said] any financial instrument information.
- 65. (Amended) The process of claim 61 including the step of transmitting information derived from at least one portion of said bundled financial instrument information to a settlement mechanism in a data file format acceptable to said settlement mechanism, the step of transmitting including the step of designating by a receiving institution the settlement mechanism to which the information should be sent.

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69. (Amended) The process of claim [67] 65 further including the step of translating said at least one portion of the separated financial instrument information into one or more data file formats corresponding to a data file format acceptable to each of one or more [of a plurality of] settlement mechanisms to which the portions are sent.

72. (Amended) The process of claim [61] <u>62</u> further including validating [the] identifying information of the originating institution and [the] <u>each of the multiple</u> receiving institutions; authenticating the <u>co-mingled</u> financial instrument information contained in said first data file format with respect to predetermined data format parameters; and determining a preselected data file format acceptable to [the] <u>each</u> receiving institution.

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- 73. (Amended) The process of claim 61 further including [the archival storage of said financial instrument information.] storing one of said co-mingled financial instrument information and said bundled financial instrument information for an archival purpose.
- 74. (Amended) The process of claim 61 further including enabling [the] each receiving institution to retrieve the bundle of the separated financial instrument information with which each is associated in [said second] a data file format compatible with said receiving institution upon one

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of (a) demand from the institution that is to receive the information, (b) instructions by the originating institution and (c) within a prearranged time period.

75. (Amended) The process of claim 61 wherein [the] at least one portion of the separated financial instrument [is a] information comprises detailed information concerning each of one or more cash items.

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- 76. (Amended) The process of claim 61 wherein the financial instrument [is one of an] information comprises information of an electronic funds transfer and/or a paper instrument.
- 77. (Amended) The process of claim 76 wherein the paper instrument [is] <u>financial</u> instrument information comprises detailed information concerning one of a check, a money order, a share order, and a draft.
- 78. (Amended) The process of claim [61] 75 wherein the financial instrument information includes detailed information derived from an MICR line [from which information relating to the instrument is derived].

80. (Amended) A process for effecting one or more of the reception, transmission, translation and storage of data files containing information relating to financial instruments among multiple institutions, said financial instruments being exchanged between and among the institutions, comprising:

receiving a data file from an originating institution, said data file being in a first file format established by the originating institution and containing [a designation that the information in the data file is to be received by a predetermined institution] co-mingled financial instrument information intended for multiple receiving institutions and identifying portions of the information with respect to the originating institution [and] as to each of the multiple receiving institutions to which one or more than one portion is to be sent;

validating the identifying information of the originating institution and each of the receiving institutions;

authenticating the co-mingled financial instrument information contained in said first data format with respect to predetermined data format parameters;

determining a preselected data file format acceptable to [the] each receiving institution;

performing security procedures for limiting only authorized originating and receiving institutions to effect one or more of the reception, transmission, translation and storage of said financial instrument information;



separating the co-mingled financial instrument information into different portions corresponding to each receiving institution:

translating each portion of said data file in said first file format into a [second] file format selected by the receiving institution;

storing [said data file being in said second file format] each portion of the separated financial instrument information in a memory storage device unique to the [designated] receiving institution corresponding thereto;

transmitting [said data file being in said second file format] each portion of the separated financial instrument information stored in the memory storage device to, and in the file format selected by, the receiving institution [and to a settlement mechanism] corresponding thereto; and

storing [said data file in said second data format] one of said co-mingled financial instrument information and said separated financial instrument information for an archival purpose[s].

81. (Amended) The process of claim 80 further including enabling [the] each receiving institution to retrieve the portion of the separated financial instrument information [in said second data file format] corresponding to said receiving institution upon one of (a) demand from the

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institution that is to receive the information, (b) instructions by the originating institution and (c) within a prearranged time period.

The process of claim 80 wherein [the] at least one portion of the separated 82. (Amended) financial instrument [is a] information comprises detailed information concerning each of one or more cash items.



- 83. (Amended) The process of claim 80 wherein [the] at least one portion of the separated financial instrument [is one of an] information comprises an electronic funds transfer [and a paper instrument].
- 84. (Amended) The process of claim [83] 80 wherein [the paper instrument is] at least one portion of the separated financial instrument information comprises detailed information concerning one of a check, a money order, a share order, and a draft.
- 85. (Amended) The process of claim [80] 82 wherein the [financial instrument includes] detailed information is derived from an MICR line [from which information relating to the instrument is derived].



91. (Amended) The process of claim [89] 80 further including the step of translating at least one portion of said separated financial instrument information into one or more data file formats corresponding to a data file format acceptable to [differing] each of one or more settlement mechanisms.

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III. REMARKS

A. Drawings

The Draftperson's objections to the drawings are noted. Applicant requests that corrections of the drawings be deferred pending allowance of the subject application.

B. Claims

The acronym for the present invention is EPIC, "Electronic Payment Interchange Concentrator." EPIC has the ability to receive co-mingled data files relating to individual transactions (whether the transactions are effected electronically or by a paper instrument) in a preferred data format of an originating sender and to bundle and translate the individual transaction data files and send them to pre-designated recipients, such as a payor bank or a clearinghouse, in a file format compatible with the recipient. EPIC works with multiple originators and multiple recipients, efficiently sorts and translates files and achieves efficiencies in speed and in the reduction of file handling in transaction processing by financial institutions. EPIC is a product of Huntington Bancshares, assignee of the present application, and the owner of United States Patent No. 5,265,007, Barnhard et al., cited as a reference herein.

As related in the Specification at pages 1 through 8, EPIC solves a bottleneck in electronic commerce among financial institutions by processing discrete records of financial transactions (paper or electronic) and bundles and translates the records (which may be the transaction itself) for

transmission to designated recipients in a format acceptable to the recipient. Bilateral incompatibility which has presented a barrier to clearing commerce is eliminated; record handling is reduced; and clearing time is shortened, all resulting in consequent benefits to the industry, its customers and the consumer. While the Barnhard et al. system advanced the art of clearinghouse transactions, EPIC goes beyond clearing and facilitates bilateral transactions that have previously been impractical, if not impossible to effect.

Claims 1-7, 11-27, 31, 34-48, 52-65, 69-86, and 91 are now in the application. Favorable reconsideration and allowance of these claims is respectfully requested. The numbered paragraphs of the Office Action are separately addressed below

Office Action, ¶2: Claims 1, 4-21, 61-63, 65-69, 70-71 and 73-77 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard (5,265,007) in view of Sansone (5,050,078).

Independent claims 1 and 61 have been amended to clarify the description of, and to particularly point out, the invention and also to include elements of cancelled claims 8-10 and 66-68, respectively. The amended independent claims 1 and 61 relate to apparatus, a means and processes for receiving a data file that comprises several portions, or bundles, of financial instrument information, one or more of which portions or bundles are intended for one recipient and others of which are intended for other recipients; a processor for or the steps of sorting and translating those

¹ Claims 8-10 and 66-68 have been cancelled.

portions according to recipient designations made by the originating institution; storing the various portions so that only the portion associated with a particular receiving institution is accessible to that institution; and the transmission of the portion corresponding to a particular receiving institution to that institution upon specific instruction. In this manner, the present invention permits the originating institution to co-mingle financial instrument information intended for multiple recipients in a single data file. Further, the present system is adapted to process, store and transmit the data file in such a manner that only the portion or portions intended for a particular recipient reaches that recipient.

While Barnhard and Sansone disclose systems that presumably perform some allocating or routing function, they do so on aggregate data files received from the various originating institutions or entities. They do not disclose a capability of receiving a data file containing co-mingled information, some portion of which is intended for one recipient and other portions of which are intended for other recipients that require differing data formats for the file information. The cited references do not separate the individual transaction records in one data file into different portions according to recipient, nor do they disclose the transmission of less than all of a sent data file to a recipient in a system where the data is translated according to the requirements of the recipient.

Barnhard discloses a clearinghouse which receives and processes data files from member financial institutions. Banks A and B, for example, may separately transmit information to the clearinghouse concerning the checks each of them is separately sending to Bank C. To credit the

accounts of A and B properly and debit the account of C, Barnhard's clearinghouse allocates the financial instrument information among its internal member accounts. However, this allocating or routing function, if considered as such, is among already sorted data files.

Sansone's gateway receives data files from several mailers, postal agents, post offices and banks and is, presumably, able to properly route these separate data files. Like Barnhard however, this allocation function appears to be performed on each data file as a whole, rather than on separate parts or bundles contained in a single file. Upon occasion, one of the entities will send the same information to more than one of the other entities (Col 5, lines 1-3 and 41-42), but this operation does not require the separation of a data file into different portions. The information which Sansone's entities are sending and receiving relates to operations which are substantially sequential in time (obtaining and printing addresses, sorting the mail, determining its quantity and deliverability, assessing postage, debiting and crediting accounts). Since the originating entity is unlikely to have more than one bundle of information ready for transmission at any given point in time, there is no apparent need for the originating entity to include different bundles of information intended for different recipients in the same data file. Thus, one would not be motivated by Sansone's teachings to provide a means for receiving a single data file containing co-mingled different portions of information for different recipients or a processor for sorting and translating these portions according to a recipient's data format.

Accordingly, it may be appreciated that the present invention, as defined in amended independent claims 1 and 61, provides an apparatus and process enabling an institution which desires to transmit different bundles of financial instrument information to other institutions in translated data formats with the means and method of doing so in a manner neither disclosed nor suggested by the two references. Neither cited reference includes any suggestion or motivation for a modification that would lead, as obvious, to the present claimed invention.

Dependent claims 4, 11, 65, 69 have been amended to indicate that the present invention provides a means for, or the step of, transmitting or translating at least one portion of the separated financial instrument information to one or more settlement mechanisms in format(s) acceptable to the settlement mechanisms. In other words, the present invention allows the user to designate one or more portions of the data file to be sent to a settlement mechanism. In Barnhard an entire settlement data file is sent to the clearinghouse mechanism. Sansone is silent on settlement mechanisms. In this context, the claimed invention is not a suggestion from Barnhard; the claimed invention is a mechanism that is different in character as it begins with the individual records intended for a recipient, and it can also transmit the bundled and translated records into a settlement mechanism such as Barnhard, on behalf of the recipient.

Claims 5, 6 and 7 recite, respectively, that the settlement mechanism is predetermined by the originating institution, the receiving institution and by agreement of the originating and receiving institutions. In other words, the present invention allows the originating and receiving institutions,

or both of them, to determine the settlement mechanism to which the translated and bundled data is sent. Barnhard teaches that all members of the clearinghouse association must use the settlement mechanism disclosed therein. There is no choice in Barnhard; neither the originating nor receiving institutions can determine the settlement mechanism, either separately or by agreement between them. And again, Sansone is silent on settlement mechanisms.

Claims 12 and 73 are amended to define the present invention as providing an archive for, or the step of storing, either the co-mingled financial instrument information or the separated financial instrument information. The present invention stores all of the financial instrument information from the data file created by the originating institution, either in its co-mingled state or in its separated state, in an archive. Neither Barnhard nor Sansone teaches a system which can receive and separate a data file containing co-mingled information. Thus, neither of these systems store that which they do not receive or create.

Amended claims 13 and 74 point out that the transmission of each translated portion of the separated financial instrument information to the receiving institution corresponding thereto occurs when the receiving institution asks for it, at a time selected by the originating institution or within a prearranged time period. In Barnhard and Sansone, transmission of information from the originating institution to the receiving institution via the clearinghouse or gateway is not selectable.

Claims 14, 15, 16, 63, 70 and 71 are directed to the inclusion in the financial instrument information of identifying information concerning an account in which a financial instrument is first

deposited. Barnhard's clearinghouse does transmit files to a bank of first deposit, but the clearing is a clearing of physical instruments such as checks which are physically transported to the clearinghouse. The present invention can be used as a "front end" to Barnhard — to receive transaction records and then to translate and send the records to the clearinghouse as a cash letter with substantially less detailed financial instrument information. Sansone does not relate to the bank of first deposit for financial instruments.

Claims 17 and 18 are directed to the inclusion of settlement instructions in the data file. In Barnhard all participants follow the same procedures to effect settlement in a mutual clearinghouse; there would be no reason for the participants to communicate settlement instructions to one another as settlement, accomplished by the physical exchange of checks, is already a given. Sansone teaches nothing about settling financial instruments.

Claims 19, 21, 75 and 77 define the ability of the present invention to receive, separate, translate, store and transmit detailed information concerning each of one or more cash items, money orders, share orders and drafts. "Detailed information" means a plurality of particulars associated with a financial instrument including, without limitation, any of the details mentioned on pages 10 and 20 of the present application, namely, MICR line data, bank of first deposit trace number, account number associated with the bank of first deposit, sender bank trace number, dollar amount, AKA trace number, image location and instrument location. Barnhard and Sansone do not disclose the handling such information in an addressable translation system as in the claimed invention.

Barnhard discloses a centralized clearinghouse system; the member banks transmit the following information to their central clearinghouse: the facts of shipment or receipt of checks and cash letters (Col. 2, lines 1-7) and the aggregate value of checks shipped or received (Col. 2, lines 31-46; Col. 4, lines 19-23; Col. 5, lines 63-66; Col. 6, lines 25-27; Col. 7, lines 14-22). There is one statement in Barnhard that member banks can transmit information concerning adjustments and return items through their clearinghouse (Col. 2, lines 51-54), but Barnhard is foremost a settlement system for determining aggregate amounts and balances; Barnhard is not directed to the processing of information about individual financial instrument records. Barnhard provides no motivation for receiving detailed or particularized information. Barnhard monitors debiting and crediting functions based on a total dollar amount of checks, the identity of the institution sending the checks and the identity of the institution receiving the checks. For any more information about a particular check, the checks themselves which are physically transported and exchanged contain all of the detailed information. Because the checks are exchanged, the member banks will have all of the detailed information concerning each check upon receipt of the check. Sansone's disclosure has nothing to do with cash items.

Claims 20 and 76 define the present invention's ability to receive, separate, translate, store and transmit electronic funds transfers. Barnhard's clearinghouse relates to physical checks, not electronic funds transfers. Barnhard requires the physical transfer of checks between financial institutions (Col 3, lines 15-16) and strict adherence to procedures and timing requirements (Col.

2, lines 62-63). An electronic funds transfer is operative without a physical transfer of a paper item. Barnhard also indicates that wire transfers are handled through the Federal Reserve Bank or as private transactions between banks. Barnhard's clearinghouse is intended to reduce or eliminate such wire transfers (Col. 4, lines 54-59). Again, however, these are aggregate amounts, not comingled records of individual transactions.

Sansone teaches electronic funds transfers of a kind which fall outside the scope of "financial instruments" as that term is used in the present application. In Sansone, a postal agent notifies a bank via Sansone's gateway to transfer funds from the account of a mailer to the account of a post office. The funds, however, are never in the hands of the postal agent. The transfer is simply between accounts within one bank (Col. 3, lines 20-23) and, in this respect, is analogous to an electronic bill paying operation.

Claim 62 has been amended to indicate that each portion of the separated financial instrument information contains identifying information with respect to the originating institution and the receiving institution corresponding thereto. Neither Barnhard nor Sansone suggest the apportionment of a single data file among multiple recipients.

In view of the foregoing distinctions, applicant submits that the claims 1, 4-7, 11-21, 61-63, 65-69, 70-71 and 73-77, as amended, are patentably distinguishable over Barnhard and Sansone and should be allowed.

Office Action, $\P 3$: Claims 2 and 72 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone as applied to claims 1 and 61 and further in view of official notice.

Claims 2 and 72 have been amended to indicate that the validation, authentication and format determination functions are performed with respect to each of the multiple receiving institutions addressed in a single data file. As discussed more extensively above with respect to the patentability of claims 1, 61 and 62 (upon which 72 depends), neither Barnhard nor Sansone teaches or contemplates a data file containing different portions intended for multiple receiving institutions. While validation, authentication and format determination functions may be separately known in other computer-related contexts, the combination and adaptation of these functions to the exchange and translation of financial instrument information at a centralized point, and in the manner expressly stated in claims 2 and 72, is an advance over, and was not contemplated by, the cumbersome procedures of bi-lateral exchange and physical transfers that were done, or may not have been possible in the first instance, before. Accordingly, claims 2 and 72 further distinguish the present invention over the cited prior art.

Office Action, \P 4: Claims 3 and 64 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone as applied to claims 1 and 61 and further in view of official notice.

Dependent claims 3 and 64 define that security procedures are performed with respect to each portion of the co-mingled financial instrument information. In this manner, the originating institution may be advised in the event that a portion directed to an unauthorized receiving institution is inadvertently inserted while creating the data file. As discussed more extensively above with respect to the patentability of claims 1 and 61, neither Barnhard nor Sansone teaches or contemplates a data file containing different portions intended for multiple receiving institutions. Barnhard relates to a common clearinghouse where physical items are exchanged and to a monitoring mechanism. While security procedures are noted in Barnhard and may be used in other computer-related contexts, the adaptation of security procedures to EPIC, as defined in independent claims 1 and 62 is not suggested by the cited references or notice of the art.

Office Action, \P 5: Claims 22-23 and 78-79 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone as applied to claims 1 and 61 and further in view of official notice.

Claims 22 and 78 relate to information in an MICR line found in a paper instrument and claims 23 and 79 define the particular details found on an MICR line that are processed by the electronic payment interchange concentrator. As discussed more fully above with respect to the patentability of claims 19 and 62, Barnhard and Sansone do not relate to systems that receive and translate a data file containing individualized detailed financial instrument information. The adaptation of MICR information to EPIC where a co-mingled file has instruments intended for

multiple recipients having different data format requirements, as particularly stated in claims 22, 23, 78 and 79 is not suggested by the cumbersome prior art procedures.

Office Action, \P 6: Claims 24-26, 28-36, 39-44, 45-47, 49-55 and 58-60 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone and official notice.

Independent claims 24 and 45 have been amended in the manner of claims 1 and 61 and therefore differ from the cited prior in all of the aspects discussed above with reference to claims 1 and 61. The validation and authentication functions that have been combined with and adapted to the EPIC system of claims 24 and 45 have been previously distinguished. EPIC accomplishes that which has not previously been done before — the exchange of data files of co-mingled individual transaction records where file format requirements of the sender and multiple recipients are different.

Claims 25 is additionally distinguished in that EPIC allows a settlement mechanism and an associated file format to be predetermined. See remarks above in support of the patentability of claims 5-7.

Claims 26, 31, 46 and 52 have been amended to specify that separated portions of the information and their transfer to settlement mechanisms in a specified data format is accomplished in the EPIC system. See the remarks above in support of the patentability of claims 4, 11, 65 and 69.

Claims 42-43 likewise specify apportioned information and instructions from the originating and receiving institutions with regard to settlement instructions. In EPIC, the subject matter claimed is distinguishable from, and nonobvious in view of, the prior art for at least the reasons expressed above in support of the patentability of claims 17-18.

Claims 34, 36, 53, and 55 respectively relate to particular cash items and paper instruments in EPIC. As to the processing of cash items, checks, money order, share orders and drafts, the subject matter is distinguishable for at least the reasons as expressed above in support of the patentability of claims 19, 21, 75 and 77.

Likewise, claims 35 and 54 relate to electronic fund transfers (paperless) in EPIC and are distinguishable over the cited prior art for reasons expressed above in support of the patentability of claims 20 and 76. Similarly, claims 39-41 and 58-60 relate to the translation and transmission of data files relating to the bank of first deposit for the instruments sorted and additionally distinguish the invention over the prior art as are claims 14-16, 63 and 70-71 so distinguished.

In claims 44 and 47 the ability of EPIC to provide for the retrieval of specified portions of the separated and translated financial instrument information to the receiving institution is particularly set forth. See the reasons as expressed above in support of the patentability of claims 13 and 74.

Office Action, \P 7: Claims 27 and 48 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone and official notice.

Claims 27 and 48 relate to the additional incorporation of security procedures in EPIC and are distinguishable over the cited prior art for reasons expressed in support of the patentability of claims 3 and 64.

Office Action, ¶ 8: Claims 37-38 and 56-57 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone and further in view of official notice.

Claims 37 and 56 point out the particular, apportioned manner in which the present invention incorporates MICR line information in EPIC. Claims 38 and 57 depend upon claims 37 and 56, respectively, and recite the particular details of the information used by EPIC that is derived from an MICR line. These claims are distinguishable over the cited prior art as are the independent claims and/or for the same reasons expressed in support of the patentability of claims 22-23 and 78-79.

Office Action, \P 9: Claims 80-84 and 87-91 were rejected under 35 U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone and official notice.

Independent claim 80 has been amended in the same manner as claims 1 and 61 and therefore differs from the cited prior in all of the aspects discussed above with reference to claims 1 and 61.

While validation and authentication functions and security procedures may be separately known per

se in other contexts, the combination and adaptation of these functions and procedures in the present invention, and in the manner expressly stated in claim 80 as it relates to EPIC accomplishes that which was not contemplated or suggested by what was done before. Claims dependent on claim 80, namely claims 81-84 and 91, respectively detail the manner in which the present invention enables transmission of each portion of the separated and translated financial instrument information to the receiving institution associated therewith (claim 81); the manner in which EPIC handles detailed financial instrument information concerning cash items, checks, money orders, share orders and drafts. (claims 82 and 85); the handling of electronic funds transfers (claim 83); and the manner in which the present invention transmits financial instrument information to one or more settlement mechanisms (claim 91) in translated format. These claims are distinguishable over the cited prior art for at least the same reasons as expressed above in support of the patentability of claims 13 and 74 (claim 81); 19, 21, 75 and 77 (claims 82 and 84); 20 and 76 (claim 83) and 4, 11, 65 and 69 (claim 91).

Office Action, ¶ 10: Claims 85-86 were rejected under 35 \angle U.S.C. 103(a) as being unpatentable over Barnhard in view of Sansone and further in view of official notice.

These process claims again relate to the use of MICR line information and particular details of information incorporated by the present invention from an MICR line in EPIC. Both of these

claims are distinguishable over the prior art for reasons expressed above in support of the patentability of claims 22-23 and 78-79.

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Accordingly, it is respectfully submitted that claims 1-7, 11-27, 31, 34-48, 52-65, 69-86 and 91 are patentably distinguished over the prior art and are in condition for allowance. It is respectfully requested that these claims be allowed and that this application be passed to issue.

Respectfully submitted,

June 13, 1997

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COLUMBUS/0346696.01

CERTIFICATE OF FILING EXPRESS MAIL

I hereby certify that Applicant's Amendment and Remarks in Response to First Office Action was filed with the United States Patent and Trademark Office by mailing the same via U.S. Express Mail Receipt No. TB873092605US postage prepaid, this 13th day of June, 1997 to:

Honorable Assistant Commissioner for Patents Washington, D.C. 20231

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PATENT

June 13, 1997

The Hon. Assistant Commissioner for Patents Washington, D.C. 20231

08/399,763

In re: Serial Number: 08/39 Group Art Unit: 2414

Filing Date: March 7, 1995

Examiner: James Trammel Inventor: David L. James

Title: ELECTRONIC PAYMENT INTERCHANGE CONCENTRATOR

Dear Sir:

Enclosed for filing are:

- (1) Applicant's Amendment and Remarks in Response to First Office Action.
- (2) Applicant's Request for an Extension of Time for Three Months and Authorization re: Deposit Account (2 copies).
- (3) Our postcard receipt.

Please acknowledge receipt of the foregoing by so indicating on the enclosed postcard which we ask that you return to us for our file.

Very truly yours,

Edwin M. Baranowski.

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Attorney for Applicant.

Enclosures (As stated.)

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