

EXHIBIT “E”



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IN THE UNITED STATES DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

231
#20

In re application of

Inventors: Barnhard, et al.
Serial No.: 390,623
U.S. Filing Date: August 7, 1989
Examiner: Laura Brutman
Art Unit: 2311
For: Central Check Clearing System

MAY 19 1993
GROUP 2300

PATENT

Paper 20 - Ext

41 South High Street
Columbus, Ohio 43215
May 6, 1993

The Honorable Commissioner
of Patents and Trademarks
Box AF
Washington, D.C. 20231

PETITION FOR EXTENSION OF TIME
AND PAYMENT OF FEE UNDER 37 C.F.R. §1.136
BY AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT

Sir:

1. Request for Extension of Time.

Should it be necessary to permit adequate consideration of the annexed Amendment After Final Action and Statement Pursuant to 37 C.F.R. §1.116(b) it is requested that an extension of time to file the response to the Official Communication mailed in this application on February 25, 1993 be granted to June 25, 1993. This is an extension of time of one month.

CS14152 05/18/93 07390623 16-2326 140 115 110.00CH


By Express Mail, Receipt No. 980625371, May 6, 1993

2. It is requested that the extension be granted. The extension has not been for delay but is requested so that full consideration may be given to applicant's rights.

3. Authorization Regarding Deposit Account.

The Commissioner is authorized to charge the \$110.00 fee due for a one month extension of time and/or any other fee incurred in the filing of the accompanying Amendment, to our Deposit Account No. 16-2326. A duplicate copy of this paper is provided.

Respectfully submitted,



Edwin M. Baranowski
Reg. No. 27,482



ZSM

**PORTER, WRIGHT,
MORRIS & ARTHUR**
ATTORNEYS AT LAW

EDWIN M. BARANOWSKI
PATENTS AND TRADEMARKS
COLUMBUS, OHIO
(614) 227-2188

41 SOUTH HIGH STREET, COLUMBUS, OHIO 43215-3406
TELECOPIER: (614) 227-2100
TELEX: 6503213584

May 6, 1993

OTHER FIRM LOCATIONS:
CINCINNATI, OHIO
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WASHINGTON, D.C.

The Honorable Commissioner
of Patents and Trademarks
Box AF
Washington, D.C. 20231

RECEIVED
MAY 19 1993
GROUP 2300

Re: Inventors: Barnhard, et al.
Serial No.: 390,623
U.S. Filing Date: August 7, 1989
Examiner: Laura Brutman
Art Unit: 2311
For: CENTRAL CHECK CLEARING SYSTEM

Sir:

Transmitted herein for filing in the above-referenced patent application is an Amendment After Final Action and Statement Pursuant to 37 C.F.R. §1.116(b) and accompanying Petition for Extension of Time and Payment of Fee Under 37 C.F.R. §1.136.

Our postcard receipt, which we ask that you acknowledge and return to us for our file, is also enclosed.

By: Edwin M. Baranowski
Edwin M. Baranowski
Reg. No. 27,482
PORTER, WRIGHT, MORRIS & ARTHUR
41 South High Street
Columbus, Ohio 43215
PH: (614) 227-2188

Enclosures
cc: (w/encl.) John Liebersbach, Esq.

EMB/kac/1546/58

By Express Mail, Receipt No. 980625371, May 6, 1993

SENT BY:PWMA

; 5- 6-93 ; 5:45PM :PWMA*Central Service-

709 308 3718;# 3/22

IN THE UNITED STATES DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE
GROUP 230

#20

1993 MAY 10 AM 8:30

Duplicate

In re application of

Inventors: Barnhard, et al.
Serial No.: 390,623
U.S.Filing Date: August 7, 1989
Examiner: Laura Brutman
Art Unit: 2311
For: Central Check Clearing System

PATENT

Paper 20 - Ext

41 South High Street
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May 6, 1993

The Honorable Commissioner
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Respectfully submitted,



Edwin M. Baranowski
Reg. No. 27,482

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703 308 3718:# 5/22

RECEIVED
IN THE UNITED STATES DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

1993 MAY 10 AM 8:30

In re application of:

Inventors: Barnhard, et al.
Serial No.: 390,623
U.S.Filing Date: August 7, 1989
Examiner: Laura Brutman
Art Unit: 2311
For: Central Check Clearing System

PATENT

Paper 20 - Ext

41 South High Street
Columbus, Ohio 43215
May 6, 1993

The Honorable Commissioner
of Patents and Trademarks
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Washington, D.C. 20231

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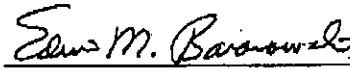
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Respectfully submitted,



Edwin M. Baranowski
Reg. No. 27,482

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703 308 3718:# 7/22

IN THE UNITED STATES DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

1993 MAY 10 AM 8 30

211C
N.E.
5/12/93

In re application of:

PATENT

Inventors: Barnhard, et al.
Serial No.: 390,623
U.S. Filing Date: August 7, 1989
Examiner: Laura Brutman
Art Unit: 2311
For: Central Check Clearing System

Paper No. 20

41 South High Street

Attorney Docket No.: 1260900-50349 Columbus, Ohio 43215

May 5, 1993

The Honorable Assistant Secretary
and Commissioner of Patents
and Trademarks
Box AF
Washington, D.C. 20231

AMENDMENT AFTER FINAL ACTION
AND STATEMENT PURSUANT TO 37 C.F.R. §1.116(b)

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This is a response to the final action mailed in this application on February 25, 1993. Entry of this amendment, reexamination and reconsideration are requested. A Statement Pursuant to 37 C.F.R. §1.116(b) setting forth the reasons for entry of this Amendment is included at pages 13-14, infra.

I. AMEND THE CLAIMS AS FOLLOWS:

A. Amend Claims 7-12 as follows:

7. A mechanism for [controlling the] physically [exchange of] exchanging financial instruments among a number of

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By Express Mail, Receipt No. 980625371, May 6, 1993

pre-selected financial institutions, each located at a preselected site, and for effecting the regular periodic settlement of the exchanged instruments among the institutions including:

(A) means within each of the pre-selected institutions:

(1) for sending and receiving the instruments, said means for sending including means for physically transporting the instruments from an institution at one site to each other of the institutions at the other sites, said means for receiving including means for physically accepting the instruments transported from the other institutions;

(2) for sending to and receiving from a central processing unit connected to each institution information reporting (a) the value of the instruments transported; and (b) the transport status of the instruments with respect to their having been (i) sent and (ii) received; and

(3) for receiving from the central processing unit a calculated value (a) on a real time basis and (b) on a regular periodic settlement basis, information regarding the debits and credits owing to or payable by an institution with

respect to each other of the institutions with regard to instruments sent and received;

(B) a central processing unit connected to each of the pre-selected institutions including

(1) means for monitoring on a real time basis, as reported by each institution by the means for sending information within each institution:

(a) (i) the sending and receipt status of the instruments and (ii) the value of the instruments sent and received, as reported by each of the institutions, and

C1

(b) the status in transit of the instruments with respect to their having been (i) sent and (ii) received, as reported by each of the institutions, according to an institution's sending and receiving of instruments.

(2) means for calculating debits and credits, based on the value of the instruments sent and received by the institutions, as monitored on a real time basis from information reported by the institutions, of (a) the amount owing from or payable to each one of the pre-selected institutions with respect to each of the other

institutions and (b) an aggregate amount owing from or payable to each one of the pre-selected institutions with respect to all of the other institutions; and

(3) means for sending to each institution the information monitored with respect to instruments sent to an institution and the value of such instruments; and

C/ P
C/ (C) a cycling means interrelated with the central processing unit (a) for controlling the physical transport of the financial instruments among the institutions and (b) for controlling the means for calculating such that a final calculation of the debits and credits owing from or payable to, with respect to each of the institutions with regard to each other of the institutions, comprising the occurrence of the regular periodic settlement among the institutions, does not occur until [after a time that] pre-determined local settlements by the institutions in the pre-selected sites with institutions that are not among the number of pre-selected financial institutions, are completed.

2
8. The mechanism of claim X further including a means at an institution [which sends instruments] by which instruments

are sorted by the site locality of each other of the pre-selected institutions and in which the instruments sorted by site are sent by site sort category to institutions at sites within the site sort categories.

3 2
9. The mechanism of claim & further including a sorter at an institution which receives the instruments, which sorter sorts the instruments received according to categories of:

PIB (1) instruments drawn on the receiving institution; and

PIB (2) instruments drawn on institutions within the site that are not among the number of pre-selected financial institutions.

C1

Sub 10

10. A system for a financial clearinghouse comprised of an association of selected member financial institution participants situated in different localities including:

A: means at each of the participants (1) for sending and receiving financial instruments to be cleared and (2) for sending and receiving information reporting the value and transit status of the financial instruments to be cleared, to a programmed central processing unit, and [said means including further means] (3) for addressing a central processing unit by which a participant may determine the

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information received by the processing unit with respect to that participant's relative credit and debit obligations with respect to other institutions arising from the instruments that are sent and received [to be cleared];

B. a programmed central processing unit including:

means for calculating debits and credits [(1)] owing from or payable (1) to one member to another member and (2) from or to one member to all other members, based upon the value of instruments reported by a participant as having been sent and received;

C
means for receiving and recording a participant's reports of the value and transit status of the instruments to be cleared, as having been sent and received with respect to all participants in the system; and

means for monitoring on a real time as reported basis (1) the actual sending from and receipt by a participant of the value of instruments being cleared as reported by the participants, and (2) the sending from and receipt by a participant of the actual instruments being cleared, said means for monitoring being operatively interconnected to the means for calculating whereby debits and credits owing from one

member to another may be determined and monitored in real time as reports of the value and transit status of the instruments to be cleared are reported by the participants and received by the processing unit; and

C/P/W
C/P/W

C. a time control for determining the time of physical transport of financial instruments between and among the participants according to a predetermined time cycle, and for determining the occurrence of a final settlement by the clearinghouse participants at a pre-determined time until after a time that certain pre-determined local settlements in the localities, by the participants in the localities, are completed.

⁵
11. The system of claim ⁴ 10 further including a sorter machine which separates the instruments in pre-determined sort categories [on behalf of a participant] according to localities to which the instruments are sent.

⁶
12. The system of claim ⁵ 11 further including [in which the sorter is] a sorter machine operated by a receiving participant [and includes means] for sorting [such] the instruments received by the participant according to categories of:

PLB (1) instruments drawn on that participant; and

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C1
P1B (2) instruments [received by the participant which are] drawn on different financial institutions in the locality which are not participants in the clearinghouse.

II. REMARKS

Claims 7-12 have been amended to particularly point out the invention in view of the Examiner's rejection under 35 U.S.C. §112. Thus, in Claim 7 the means (A) is included in each of the pre-selected institutions, clarifying that instruments are sent between institutions and that each institution has a means for sending and receiving instruments. **The CPU is a master CPU connected to each institution. Each institution may use a CPU in a terminal mode connected to the master CPU, but it is the single master CPU that controls the mechanism.**

Claim 7, in (B)(2), more specifically provides that instruments are sent and received "from one institution to another." The "cycling means" is a mechanism interrelated to the master CPU as provided in 7(C).

The ambiguity of Claim 8 is eliminated by striking the redundant "which sends instruments" from the definition of the institution. Likewise the sorter in Claim 9 is particularly clarified to eliminate any inference the instruments sort themselves.

Although certain other items are not specifically addressed by the Examiner, Claims 10, 11 and 12 have also been clarified to better define the invention.

Applicant further submits that the amended claims patentably distinguish the invention over the references of record, which were cited and applied.

In general, the cited references relate to electronic funds transfer (EFT) and/or needs for improvement in payment and clearing systems for financial instruments. EFT is generally a paperless transaction system, such as the conventional "wire transfer" in which funds are exchanged without the exchange and clearing of a corresponding or simultaneous written instrument. Wire transfers have always traveled time zones and geography because wire does not depend on paper instruments which require the physical movement and exchange of a document before funds are transferred.

As to the specific references:

Reference T

The article "Electronic Payments Volume Will Gain at Corporations" relates to electronic funds transfer -- a paperless electronic payment system which is distinct from the conventional paper check clearing system. The reference to timed net settlements at pages 4-5 relates to wire transfer systems for the payment of funds. The location in the Examiner's reference to "sorting by site locality (page 4)" has not been identified in this article.

Even so, the reference relates that "very few" payments were made and that other forms of on-line transfers were too expensive, and lacked an ability to provide invoice information. The transport of physical instruments, as set forth in the claims in a settlement system is not disclosed in a coherent system. At pages 7-8 the article refers to the factor that disbursement float favors paper transfers and again notes that the reconciliation of check postmark dates and ACH transfers is a problem. The Claimed system does not depend on check postmark dates, but rather is a "real time" document exchange and settlement system.

Reference U

The article "Boycott of Automated Clearing System In London Is Said Close to Resolution ..." relates to an international network for the settlement of wire transfers and the organizations CHAPS and SWIFT. These systems relate to paperless electronics funds transfer. The apparent dispute relates to the timing of a closing and the problem involving institutions which may not be able to collect on a transfer, and the option of a limited "window" to clear the transfer for non-member banks.

In contrast to References S and U, the claimed system is an improved settlement mechanism in which checks and instruments, for example, which are otherwise the subject of Federal Reserve Check Clearinghouse settlements, are physically transported to

predetermined locations. At the clearing of the participants checks of members and non-members are cleared in the system of the invention, with respect to members, and at a pre-determined time with respect to Federal Reserve settlements. The master CPU monitors debits and credits so that participants can prepare funds for settlement.

Again, the ACH system addressed by Reference U does not involve a mechanism for the physical transport and transaction clearing of items that are represented by tangible financial instruments.

Reference S

The article "Proposals for Long Term Improvements to the Check Collection System" relates to proposals concerning the expedition of the collection and return system for checks.

Applicant notes that the reference is dated February 4, 1988 and was apparently written December 3, 1987. The present application is a continuation-in-part of application Serial No. 07/203,489 filed on June 7, 1988. Applicants consider themselves able to proffer an affidavit based on personal knowledge, under 37 C.F.R. §1.131, showing reduction to practice of the invention before the date of Reference S. Applicants do not believe, however, that such an affidavit is necessary because as Reference S relates to the physical transportation and sorting of instruments, transportation and sorting (which are known) is as far as the Reference is applicable to the claimed invention.

Reference 5 suggests that improvements are needed to check clearing systems, such as bar codes and imaging systems, but does not suggest the coherent system of the claims (e.g. as illustrated at page 7 of Applicant's prior Amendment). The specified interrelationship of transportation, information entry and reporting, and the sequence of clearing procedures according to a predetermined control and schedule with respect to other settlements, as set forth in claims 7 and 10 is not disclosed or suggested by Reference 5 or the combination of Reference 5 with any other cited reference.

In independent claims 7 and 10, a combination of overall elements in an operating mechanism is set forth in which a mechanism for the physical exchange of instruments between locations is coordinated with the settlement transaction of the funds represented by the instruments. The settlement is co-ordinated in a locality with a local settlement. In the mechanism, the physical transport, and the monitoring of information about transport and value, on a real time basis, is provided and controlled by a master CPU, which is accessible to the participant institutions. Based on information reported to and calculated by the master CPU, the institutions can monitor their needs for funds, and prepare for these fund needs at the settlement, as checks are sent and data transmitted. The settlement is separate and apart from conventional local settlements. In the dependent claims, the checks are sorted and at the receiving bank may be fine sorted by participant and non-participant bank categories in preparation for the

settlement. This allows greater utilization of the receiver's sorter for a fine sort, and permits the expedited sending of instruments because the sender does not need to do the fine sort that is otherwise necessary to sort instruments by bank category. In this manner, greater efficiency in the use of capital intensive sorting equipment is achieved.

III. Conclusion.

For these reasons, the amendment to the application is considered to place claims 7-12 in compliance with 35 U.S.C. §112. The withdrawal of the rejection and the allowance of this application is requested. Applicants note, in view of the foregoing distinctions, that no prior art has been cited and/or applied in the prosecution hereof which is considered to disclose or suggest the claimed invention.

Reexamination, reconsideration and allowance are therefore requested.

STATEMENT PURSUANT TO 37 C.F.R. §1.116(b)

Applicant submits that the foregoing amendment should be admitted because of the following good and sufficient reasons why they are necessary and were not earlier permitted:

Although the principal effect of the amendment is to place the claims in better form to more particularly define the invention with the particularity required by 35 U.S.C. §112, it is now evident that as the claims define the invention, the

claims, as now presented, distinguish the invention over the prior art references cited and applied by defining the coherent mechanisms and systems discussed above.

If the prior prosecution of this application is considered, it is apparent that the emphasis on the issues between Examiner and applicants related to the patentability of subject matter under 35 U.S.C. §101. Applicant had consistently maintained that the invention was distinguishable over the cited reference; however, the final action was the first time that a rejection under §103 was made.

As heretofore explained, applicants consider the amendment to remove all grounds of § 112 rejection, and in doing so clarifies the definition of the invention, such that the claims are patentably distinguished over the cited reference. No new search is required, and because the claims, as amended, are now in condition for allowance, it is requested that the amendment be entered and this application allowed.

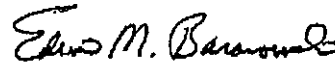
Respectfully submitted,



Edwin M. Baranowski
Reg. No. 27,482
PORTER, WRIGHT, MORRIS & ARTHUR
41 South High Street, Suite 2800
Columbus, Ohio 43215
(614) 227-2188

CERTIFICATE OF FILING BY EXPRESS MAIL

I hereby certify that this Amendment After Final Action and Statement Pursuant to 37 C.F.R. §1.116(b) accompanied by a Petition for Extension of Time of Time and Payment of Fee Under 37 C.F.R. §1.136 by Authorization to Charge Deposit Account (2 copies), in the below captioned application are being deposited with the United States Postal Service (Postage prepaid, Express Mail, Receipt No. 980625371) in an envelope addressed to The Honorable Commissioner of Patents and Trademarks, Attention: Box AF, Washington, D.C. 20231, on May 6, 1993 and pursuant to the provisions of 37 C.F.R. 1.10, it is requested that May 6, 1993 be the filing date accorded to these documents.



Edwin M. Baranowski
Porter, Wright, Morris & Arthur
41 South High Street
Columbus, Ohio 43215
(614) 227-2188

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BAR/1546/41

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703 308 3718:#22/22

CERTIFICATE OF FACSIMILE TRANSMISSION

In addition to having been filed by Express Mail Receipt 280625371 on May 6, 1993, I hereby certify that a copy by facsimile of this Amendment After Final Action and Statement Pursuant to 37 C.F.R. §1.116(b) is being transmitted to FAX #703/308-3718, 3719, 3720 or 3721 to The Honorable Assistant Secretary and Commissioner of Patents and Trademarks, ATTENTION: Examiner Laura Brutman, Group 2300 (Art Unit 2311), Washington, D.C. 20231,



Edwin M. Baranowski
Porter, Wright, Morris & Arthur
41 South High Street
Columbus, Ohio 43215
(614) 227-2188

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