

METHOD FOR CLEARING BANK NOTES IN ELECTRONIC GAME MACHINES

FIELD OF THE INVENTION

The present invention relates to a method for clearing
5 bank notes in electronic game machines and particularly to a
method to clear bank notes in bank note boxes of a plurality of
machines.

BACKGROUND OF THE INVENTION

Advance of technology on automatic equipment has made
10 automatic fee collection machines, money exchange machines
and game machines widely installed on amusement sites to
reduce manpower. For accounting purpose and understanding
of business conditions, those automatic machines are
instructed to perform bank note clearing process during shift
15 to provide the status of business condition.

To facilitate fast process of business conditions of all
machines, a technique has been developed to link all the
machines to a main controller. During shift or a pre-set due
time for bank note clearing, the main controller performs
20 instant statistic process and registers total bank note amount
held in all machines. Then operators perform manual bank
note clearing operation on individual bank note box of each
machine to check and match the actual bank note amount with
the value registered in the main controller, and also to check
25 whether malfunction occurred to the machines.

During the aforesaid conventional bank note clearing process, if the machines are continuously being used by people, there will be discrepancy between data registered on the main controller and the actual bank note clearing amount.

5 Because during the interval of the main controller doing statistic calculation and registration of the total bank note stocking amount and the actual bank note clearing operation, bank note transactions continuously take place. This creates troubles on bank note clearing process. Hence the

10 conventional bank note clearing process has to be performed during the rest time, or the machines have to be stopped from external use during the bank note clearing process. Such an approach is not applicable to amusement sites where business is conducted 24/7 non-stop day and night. Utilization of the

15 machines also suffers.

SUMMARY OF THE INVENTION

The primary object of the present invention is to provide a method for clearing bank notes in electronic game machines adaptable to amusement sites that open to business non-stop

20 day and night. The machines are usable during bank note clearing process without creating discrepancy of bank note amount.

To achieve the foregoing object, the method for clearing bank notes according to the present invention is adopted for

25 use on a plurality of machines each equipped with a bank note

box to perform statistical calculation of total bank note amount of the bank note boxes in the machines. The method according to the present invention includes the steps of: first, providing a control system linking to the machines; next, 5 executing the control system to make the machines in a waiting state for bank note clearing operation while the machines are still usable; then performing bank note clearing operation individually on the machines and detecting whether the bank note box being opened and bank notes being taken 10 out; requesting by the control system feedback of the machine which has the bank note box opened about the bank note amount; storing the bank note amount provided in the feedback of the machine through the control system; inspecting by the control system whether all the machines 15 have sent the bank note amount, and presenting a bank note clearing finished message when all of bank note amounts have been received; performing manual entering of actual bank note clearing value; and finally generating a bank note clearing report according to the bank note amount stored in 20 the control system and actual bank note clearing value.

Thus, the bank note amount is sent and stored when the present invention is in use to clear bank notes. In the interval between bank note clearing start and bank note clearing finish the machines can still be used without generating discrepancy 25 of the bank note amount. Thus the present invention can

provide a correct bank note clearing result and also enhance the service time and utilization of the machines.

The foregoing, as well as additional objects, features and advantages of the invention will be more readily apparent from the following detailed description, which proceeds with reference to an embodiment and accompanying drawings. The embodiment serves merely for illustrative purpose and is not the limitation of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic view of system architecture of the present invention.

FIG. 2 is a process flowchart of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Please refer to FIGS. 1 and 2, the present invention provides a method for clearing bank notes in electronic game machines adopted for use on a plurality of machines 10 each equipped with a bank note box 11 to perform bank note clearing process and statistical calculation of total bank note amount in the bank note box 11. The method includes steps S1 through S10 as follow:

First step S1, provide a control system 20 linking to the machines 10. The control system 20 may be linked to the machines 10 through a plurality of signal connection wires as shown in the drawings, or via a wireless network (not shown

in the drawings).

Next step S2, execute bank note clearing operation under the control of the control system 20.

Step S3, the control system 20 makes the machines 10 in a
5 waiting state for bank note clearing operation, and the
machines 10 are still operable and can be used. It aims to
notify users of the machines 10 that bank note clearing
operation is pending to start so that users are informed to
pause or switch to other machines to allow operators to
10 perform bank note clearing operation. The control system 20
can make the machines 10 in the waiting state regularly or
receive commands in a passive manner to make the machines
10 in the waiting state.

Steps S4 and S5, operators perform the bank note clearing
15 operation on the individual machines 10. Detection is
performed whether the bank note box 11 in each machine 10 is
opened and the bank notes held inside has been taken out.
Once the bank note box 11 is opened and the bank notes been
taken out, the control system 20 requests the machine 10 to
20 send the registered bank note amount.

Step S6, the control system 20 stores the bank note
amount sent by the machine 10 to be used for statistical
calculation to compare with actual bank note clearing value.

Steps S7 and S8, the control system 20 detects whether all
25 of the machines 10 have sent the bank note amount. When the

outcome is positive, present a message of bank note clearing operation finished.

Step S9, the operators enter the actual bank note clearing value manually.

- 5 Step S10, generate a bank note clearing report according to the bank note amount stored in the control system 20 and the actual bank note clearing value.

As a conclusion, the present invention sends and stores the bank note amount when actual bank note clearing process
10 is executed, hence the machines 10 are still operable and can be used during start and finish of the bank note clearing operation. Therefore, a correct bank note clearing result can be obtained without creating the problem of discrepancy that might otherwise occur in the computerized statistic of the
15 bank note clearing result and actual bank note clearing value during daily shift.

What is Claimed is:

1. A method for clearing bank notes in electronic game machines that include a plurality of machines each having a bank note box to perform bank note clearing operation and
5 statistical calculation of bank note amount in the bank note box, comprising the steps of:
 - providing a control system linking to the machines;
 - executing the control system to make the machines in a waiting state for the bank note clearing operation;
 - 10 performing the bank note clearing operation in the individual machines and detecting whether the bank note box being opened and bank notes held in the bank note box being taken out, and the control system requesting the machine which has the bank note box opened to send registered bank
15 note amount;
 - storing the bank note amount sent by the machine via the control system;
 - detecting by the control system whether the machines have sent the bank note amount and presenting a bank note
20 clearing operation finished message after all the machines have sent the bank note amount;
 - entering actual bank note clearing value manually; and
 - generating a bank note clearing report according to the bank note amount stored in the control system and the actual
25 bank note clearing value.

2. The method of claim 1, wherein the control system makes regularly the machines in the waiting state for the bank note clearing operation.
3. The method of claim 1, wherein the control system receives
5 commands passively to make the machines in the waiting state for the bank note clearing operation.
4. The method of claim 1, wherein the control system is linked to the machines through a plurality of signal connection wires.
- 10 5. The method of claim 1, wherein the control system is linked to the machines via a wireless network.