of the shuffled playing cards being illegally acquired, and therefore there is a problem of possible cheating.

[0006]

Embodiments of the present invention seek to provide a system in which multiple shuffling devices are connected in series to one another, and shuffle cards using sets of random numerical values output from respective random generators based on commands from multiple CPUs (processors) which are independent from one another, and wiredly or wirelessly connected with the respective multiple shuffling devices, and then the subsequent shuffling devices connected in series shuffle the cards in the same manner, this shuffling process is performed across the multiple shuffling devices, so that the cards are arranged randomly. Furthermore, even if the information about the sets of random numerical values output from the multiple random generators is stolen due to an unauthorized access to the multiple CPUs (processors), or the like, it becomes difficult to identify shuffled cards to which the stolen information is allocated in all the shuffling devices, and therefore the possibility that the arrangement of the shuffled cards is recognized is reduced.

[0007]

Embodiments of the present invention further seek to provide a system in which in each of the multiple

shuffling devices, the cards are shuffled using the set of random numerical values selected from the sets of random numerical values output for each multiple sets from the random generator based on a command from the CPU (processor), and therefore even if the information about the multiple sets of random numerical values in the random generator is stolen due to an unauthorized access to the CPU (processor), or the like, it becomes difficult to identify the selected and used set of random numerical values by which the cards have been shuffled, and therefore the possibility that the arrangement of the shuffled cards is recognized is further reduced.

SUMMARY OF THE INVENTION

[0008]

According to an aspect, there is provided a shuffling system, comprising: one or more random generators configured to generate a plurality of random numerical values including a first random numerical value and a second random numerical value; a first shuffling device configured to shuffle, based on the first random numerical value of the plurality of random numerical values, a card set made up of a plurality of cards; and a second shuffling device configured to shuffle, based on the second random numerical value of the plurality of random numerical values, the card set shuffled by the first shuffling device; wherein the first random numerical value and the second

random numerical value are managed independently from each other, and wherein each of the first and second shuffling devices is configured to: respectively selects one random numerical value from the plurality of random numerical values generated by the one or more random generators, and conduct shuffling of the card set based on the selected random numerical value.

[0008a]

According to another aspect, there is provided a shuffling system comprising a card set that is shuffled by the shuffling system as described; and an automatic packager configured to pack the shuffled card set into a package.

[0008b]

According to another aspect, there is provided a shuffled card set comprising a card set that is shuffled by the shuffling system as described.

[0008c]

According to another aspect, there is provided a shuffling system comprising a plurality of shuffling devices; a plurality of sequencers or controllers, wherein each of the plurality of sequencers or controllers is configured to control operations of a respective one of the plurality of shuffling devices; and a plurality of processors, each processor of the plurality of processors configured to control a respective sequencer or controller of the plurality of sequencers or controllers; and wherein:

each processor of the plurality of processors includes a respective random generator configured to generate a plurality of random numerical values; and each sequencer or controller of the plurality of sequencers or controllers is configured to select and use one random numerical value from the plurality of random numerical values to control the respective shuffling device of the plurality of shuffling devices to shuffle a single set of cards made up of one or more decks.

[0008d]

According to another aspect, there is provided a shuffling system comprising a plurality of shuffling devices; a plurality of sequencers or controllers configured to control operations of respective ones of the plurality of shuffling devices independently of one another; and a processor configured to control the plurality of sequencers or controllers, wherein: the processor includes a random generator configured to generate a plurality of random numerical values; the processor is configured to output the plurality of random numerical values generated by the random generator; and each of the sequencers or controllers is configured to select and use one random numerical value from the plurality of random numerical values to control the shuffling device corresponding to the sequencer or controller to shuffle a single set of cards made up of one or more decks.

[0008e]

According to another aspect, there is provided a set of shuffled playing cards manufactured using the shuffling system as described.

[0008f]

A shuffling system according to the present disclosure comprises:

a playing card set made up of a predetermined number of decks;

multiple shuffling devices which shuffle the playing card set;

multiple sequencers or controllers which are independent from one another and control operations of the multiple shuffling devices, respectively; and

select and use one out of the multiple sets of random numerical values to control the corresponding shuffling device.

[0011]

A final shuffling device which finally shuffles the cards of the card set among the multiple shuffling devices further includes gathering means which mechanically gathers the cards sorted by the final shuffling device, and

the shuffled playing cards may be completely manufactured by gathering the sorted cards by the gathering means as a single stack and packing the shuffled card set into a package by an automatic packaging machine.

[0012]

A unique ID may be generated for each of the individual shuffled card sets, and may be associated with the shuffled card set.

[0013]

The present disclosure includes shuffled playing cards manufactured using the above-described shuffling system.

[0014]

The shuffled playing cards may be double packed into the package by the automatic packaging machine.

[0015]

A shuffling system according to the present disclosure is a system for shuffling cards made up of one or more decks, which comprises:

multiple shuffling devices which shuffle the cards;

multiple sequencers or controllers which control operations of the multiple shuffling devices, respectively; and

multiple processors which control the multiple sequencers or controllers,

wherein the multiple processors have random generators, respectively, and

the multiple shuffling devices are configured to shuffle one set of cards made up of one or more decks using sets of numerical values commanded by random generators of at least different processors.

[0016]

A shuffling system according to the present disclosure is a system for shuffling cards made up of one or more decks comprises:

multiple shuffling devices which shuffle the cards;

multiple sequencers or controllers which independently control operations of the multiple shuffling devices, respectively; and

a processor which controls the multiple sequencers or controllers,

[0019]

A final shuffling device which finally shuffles the cards of the card set among the multiple shuffling devices further includes gathering means which mechanically gathers the cards sorted by the final shuffling device, and

the shuffled playing cards may be completely manufactured by gathering the sorted cards by the gathering means as a single stack and packing the shuffled card set into a package by an automatic packaging machine.

[0020]

A unique ID may be generated for each of the individual shuffled card sets, and may be associated with the shuffled card set.

[0021]

The present disclosure includes shuffled playing cards manufactured using the above-described shuffling system.

[0022]

The shuffled playing cards may be double packed into the package by an automatic packaging machine.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023]

FIG. 1(A) is a diagram illustrating a mechanism in which cards are arranged randomly by shuffling (when the