dealing, thereby increasing actual playing time. Such devices also add to the excitement of a game by reducing the amount of time the dealer or house has to spend in preparing to play the game.

However, the card output area or shoe used in conjunction with shufflers often places strain on dealers' hands and wrists by using card distribution interfaces to output cards that are oriented at a substantial acute angle relative to the table surface. To draw cards from these shoes, dealers often have to twist their wrists repeatedly at awkward and uncomfortable angles. Moreover, shoes often are not easily adjustable to meet a dealer's card drawing preference (*e.g.*, direction in which dealers prefer to draw a card relative to the table).

Card counting is also a significant problem, for example, when using automatic card shufflers or hand shuffling. Casinos often lose a house advantage when players are able to predict what cards remain to be dealt and the proximity of those cards to being dealt. It is desirable for casinos to reduce or eliminate the ability for players to count cards. Continuous shuffling machines assist in reducing the ability to count cards, but additional ways to eliminate card counting and improve ergonomics of card delivery may be desirable.

SUMMARY

In a first aspect, the present disclosure provides a card-handling device, comprising: a playing card-shuffling apparatus; and a card rotation device configured to rotate one or more playing cards about a minor axis of the one or more playing cards to alter an orientation of lateral edges of the one or more playing cards, the minor axis of the one or more playing cards extending through a thickness of the one or more playing cards in a direction transverse to a longitudinal axis and a lateral axis of the one or more playing cards as at least one of the one or more playing cards enters the shuffling apparatus.

In a second aspect, the present disclosure provides a card-handling device, comprising: a card input configured to rotate at least one playing card from a group of playing cards about a minor axis of the at least one playing card to alter an orientation of lateral edges of the at least one playing card relative to at least one adjacent playing card of the group of playing cards, the minor axis of the at least one playing card extending through a thickness of the at least one playing card in a direction transverse to a longitudinal axis and lateral axis of the at least one playing card, wherein the card input is

configured to enable the at least one playing card to be provided to a card-shuffling apparatus for shuffling playing cards after the orientation of the lateral edges of the at least one playing card has been altered.

In a third aspect, the present disclosure provides a card-handling device configured to be mounted at or proximate a gaming surface, the card-handling device comprising: a card-shuffling apparatus for shuffling playing cards; and a card rotation device configured to receive the playing cards in a substantially flat orientation and to alter an orientation of a leading edge of at least some of the playing cards while maintaining the at least some of the playing cards in the substantially flat orientation.

In a fourth aspect, the present disclosure provides a card-handling device configured to be positioned at a gaming structure having a playing surface, comprising: a card-shuffling apparatus for shuffling playing cards; and a card output portion for receiving the playing cards from the card-shuffling apparatus, wherein the playing cards are positioned by the card-shuffling apparatus to be received into the card output portion where major faces of the playing cards are oriented in a plane substantially transverse to the playing surface when the card output portion is in a first position at least partially within the card-handling device, and where the card output portion is further configured to transport the playing cards to a second position where at least a portion of the card output portion is accessible from the playing surface.

In a fifth aspect, the present disclosure provides a method of shuffling cards, comprising: inputting cards into a card rotation device of a card-handling device; rotating the card rotation device from a first orientation to a second orientation about a minor axis of the cards to alter an orientation of lateral edges of the cards, the minor axis of the cards extending through a thickness of the cards in a direction transverse to a longitudinal axis and a lateral axis of the cards to randomize an orientation of the lateral edges of the cards; transporting the cards from the card rotation device into a card-shuffling apparatus; outputting at least one card from the card-shuffling apparatus into a card output area.

In a sixth aspect, the present disclosure provides a method of shuffling cards: comprising inputting cards into a card-handling device in an orientation substantially parallel a horizontal plane; transporting the cards to a card-shuffling apparatus;

outputting the cards into a card output area in an orientation substantially perpendicular to the horizontal plane.

In a seventh aspect, the present disclosure provides a card-handling device comprising: a card-shuffling apparatus comprising: a carousel; and at least one-hundred compartments each configured to hold between one and ten cards arranged radially about the carousel.

Some embodiments of the present disclosure may include a card-handling device including a card-shuffling apparatus. The card-shuffling apparatus may include a carousel having a number of compartments, for example, at least one-hundred compartments. The compartments may be arranged radially about the carousel and configured to hold between one and ten cards in each compartment.

In an eighth aspect, the present disclosure provides a card-shuffling carousel comprising: compartments configured to hold at least one card arranged radially about the carousel, wherein the compartments comprise: an aperture defined by at least two arms; and a resilient material extending between a bottom retention and a top retention in at least one of the at least two arms, wherein the resilient material has a length greater than a distance between the bottom retention and the top retention and at least one of the bottom retention or the top retention comprises a movable connection.

In a nineth aspect, the present disclosure provides a card-handling device for use with a gaming surface comprising: a retractable card input portion configured to receive playing cards in an orientation substantially parallel to the gaming surface; a transportation device may be configured to transfer the playing cards from the retractable card input portion to a card-shuffling apparatus within the card-handling device; and a card outlet configured to receive the playing cards from the card-shuffling apparatus and to deliver the playing cards to a location proximate the gaming surface in an orientation substantially transverse to the gaming surface.

In a tenth aspect, the present disclosure provides a card-handling device configured to be positioned at least partially below a gaming table upper surface and comprising: a card intake area; a card-shuffling apparatus, the card intake area configured to feed cards into the card-shuffling apparatus in an orientation substantially parallel to a surface of the gaming table; and an output area configured to receive the cards from the card-shuffling apparatus in an orientation substantially transverse to the surface of the gaming table in an area beneath the

surface of the gaming table and to transport the cards to an area at least partially above the surface of the gaming table.

BRIEF DESCRIPTION OF THE DRAWINGS

While the specification concludes with claims particularly pointing out and distinctly claiming embodiments of the present disclosure, the advantages of embodiments of the disclosure may be more readily ascertained from the following description of embodiments of the disclosure when read in conjunction with the accompanying drawings in which:

FIG. 1 shows an isometric view of an embodiment of the present disclosure with covers removed to show the internal mechanism;

FIG. 2 shows an isometric view of an embodiment of the present disclosure with covers removed to show the internal mechanism;

FIG. 3 shows an isometric view of a card intake area according to an embodiment of the present disclosure;

FIG. 4 shows an elevational side view of an embodiment of the present disclosure with covers removed to show the internal mechanism;

FIG. 5 show a section view of an elevational side view of an embodiment of the present disclosure;

FIG. 6 shows an enlarged view of a section view of a card input portion according to an embodiment of the present disclosure;

FIG. 7 shows an enlarged view of a section view of a card-shuffling apparatus according to an embodiment of the present disclosure;

FIG. 8 shows an enlarged view of a compartment module according to an embodiment of the present disclosure;

FIG. 9 shows an enlarged view of a card output portion according to an embodiment of the present disclosure with additional covers removed to show the internal mechanism;

FIG. 10 shows an enlarged view of a section view of a card outlet storage container according to an embodiment of the present disclosure;

FIG. 11 is a process diagram for the shuffling of playing cards according to an embodiment of the present disclosure; and