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Walker et al.(10) **Pub. No.: US 2010/0004051 A1**(43) **Pub. Date: Jan. 7, 2010**(54) **SYSTEM AND METHOD FOR
PERSONALIZING PLAYING CARDS AT A
TABLE GAME****Publication Classification**(51) **Int. Cl.**
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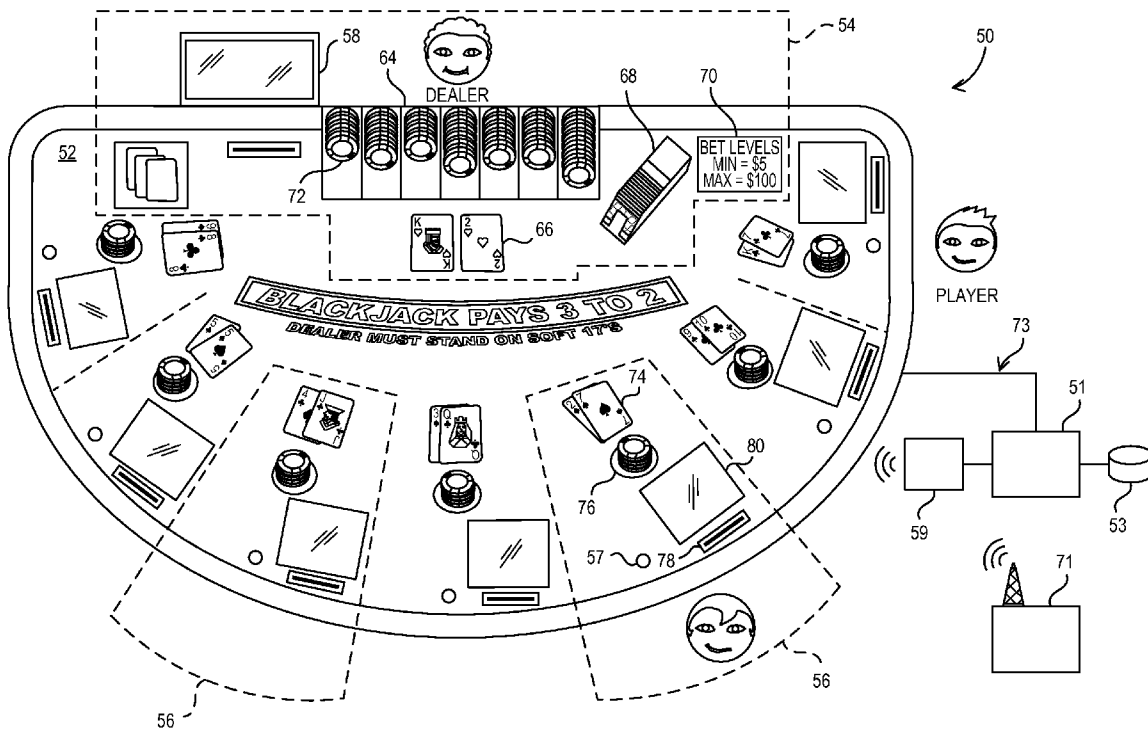
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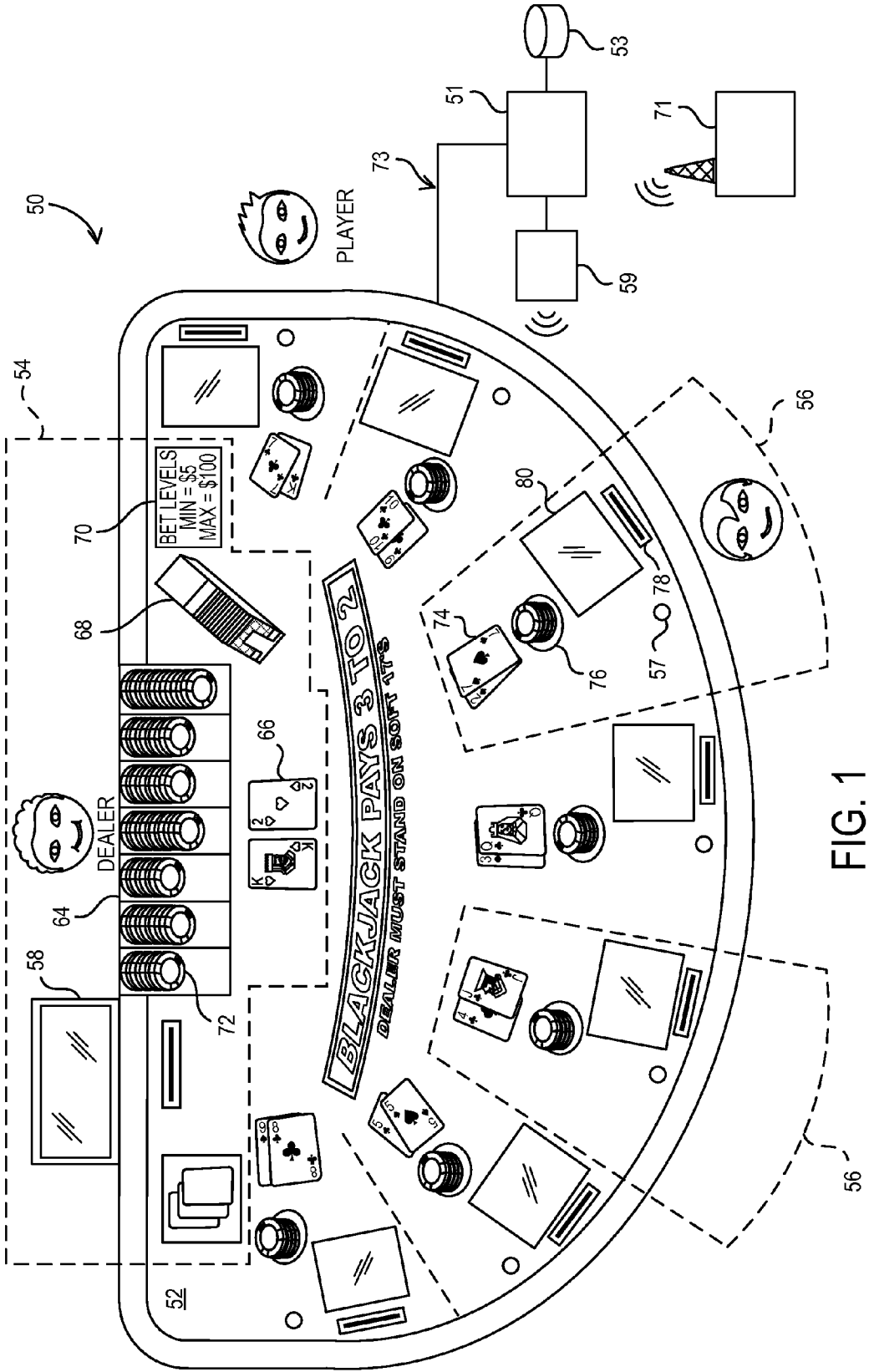
(52) **U.S. Cl.** **463/22**(57) **ABSTRACT**

A method comprises receiving a request for at least one personalized card from a player, identifying at least one of a rank, a color, and a suit for the at least one personalized card, identifying at least one of a value change and a rule change associated with the at least one personalized card, providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.

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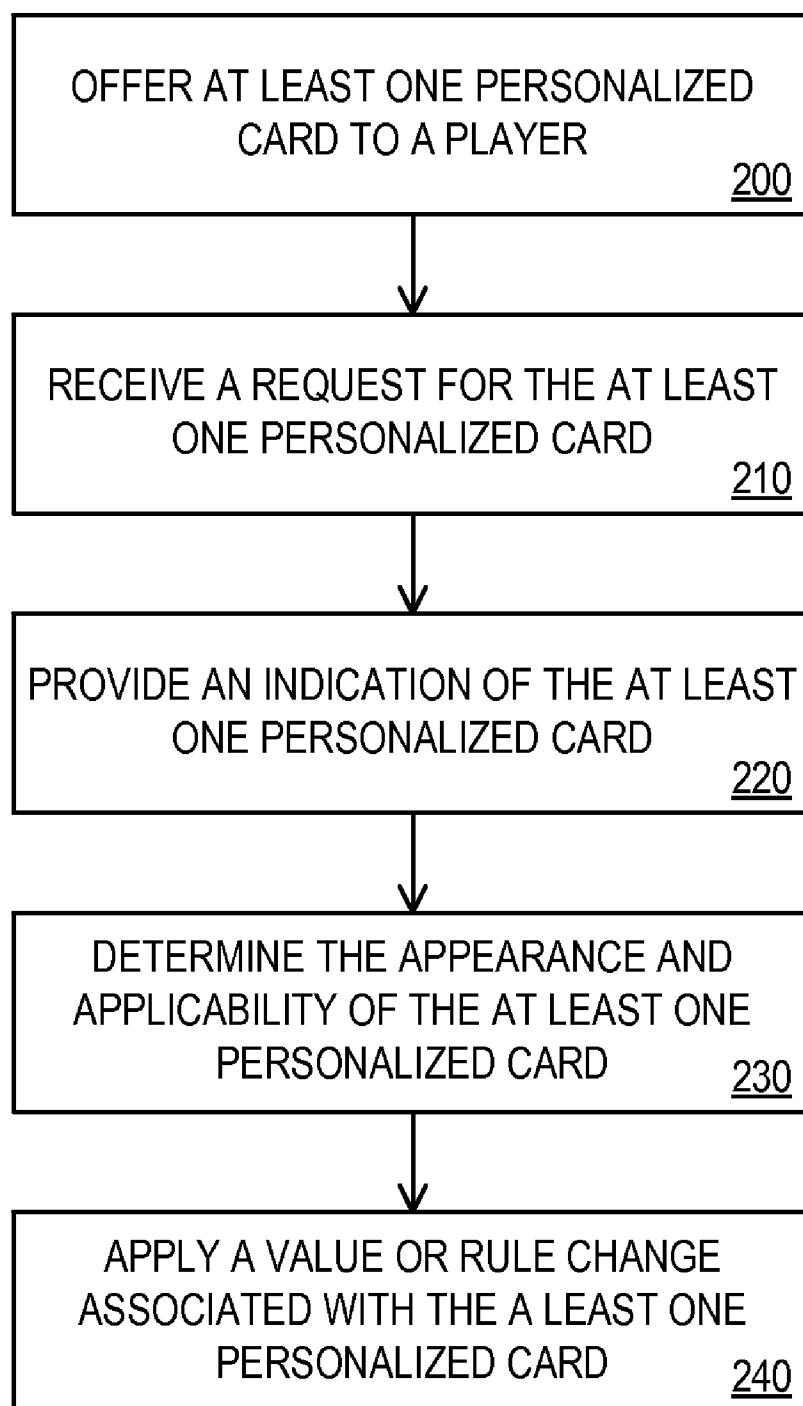
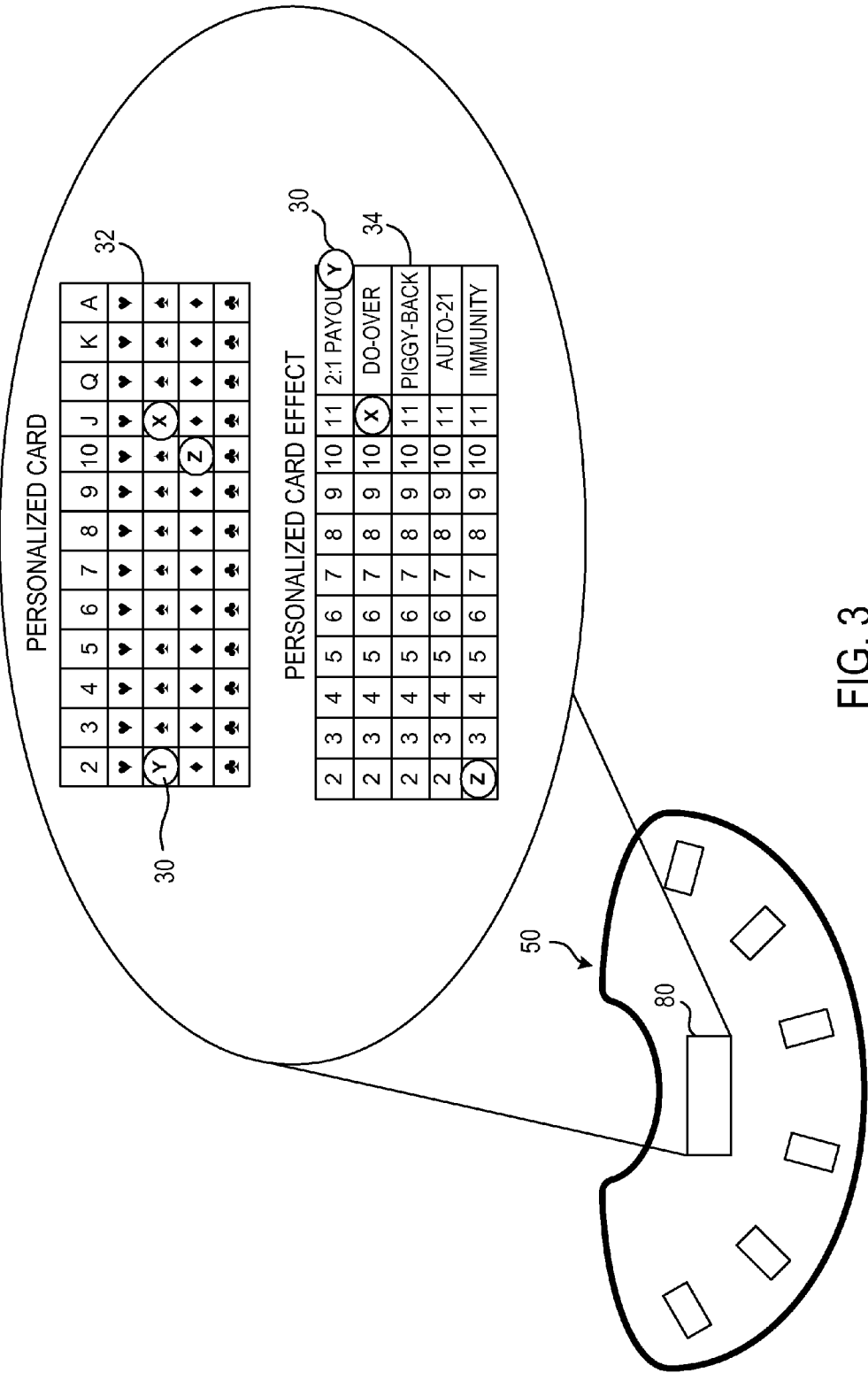


FIG. 2



80

STEP 3 – SELECT A VALUE TO BE ASSOCIATED WITH YOUR PERSONALIZED CARD

1	2	3	4	5	6	7	8	9	10	11	12
-1	-2	-3	-4	-5	-6	-7	-8	-9	-10	-11	-12

BACK

FIG. 4c

80

STEP 3 – SELECT A RULE TO BE ASSOCIATED WITH YOUR PERSONALIZED CARD

IMMUNITY	HOW DOES IT WORK?	WHAMMY	HOW DOES IT WORK?
DOUBLE PAYOUT	HOW DOES IT WORK?	PIGGY-BACK	HOW DOES IT WORK?
ANYTIME SPLIT	HOW DOES IT WORK?	DO-OVER	HOW DOES IT WORK?

BACK

FIG. 4d

80

STEP 1 – SELECT A CARD TO PERSONALIZE

2	3	4	5	6	7	8	9	10	J	Q	K	A
♥	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥	♥
♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♠	♠
♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦	♦
♣	♣	♣	♣	♣	♣	♣	♣	♣	♣	♣	♣	♣

FIG. 4a

80

STEP 2 – SELECT A TYPE OF PERSONALIZED CHANGE

VALUE CHANGE	RULE CHANGE
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BACK

FIG. 4b

56

57

PERSONALIZED CARD RANK/SUIT	PERSONALIZED RULE CHANGE	PERSONALIZED VALUE CHANGE	FEE / RULE CHANGE / ADJUSTED PAYOUT	RESTRICTIONS
2 – HEARTS	AUTOMATIC 21	N/A	.05:1 PAYOUT ODDS	N/A
2 – HEARTS	WHAMMY	N/A	PUSHES PAY 0.5:1	ONLY APPLICABLE FOR FIRST 3 PUSHES
2 – HEARTS	WINS PAY 2:1	N/A	\$10	ONLY APPLICABLE ON BETS < \$30
2 – HEARTS	N/A	"10"	\$1 PER USE	DISCONTINUED AFTER SHOE IS OVER
2 – HEARTS	N/A	"11"	\$5	ONLY APPLICABLE FOR 3 USES

FIG. 5

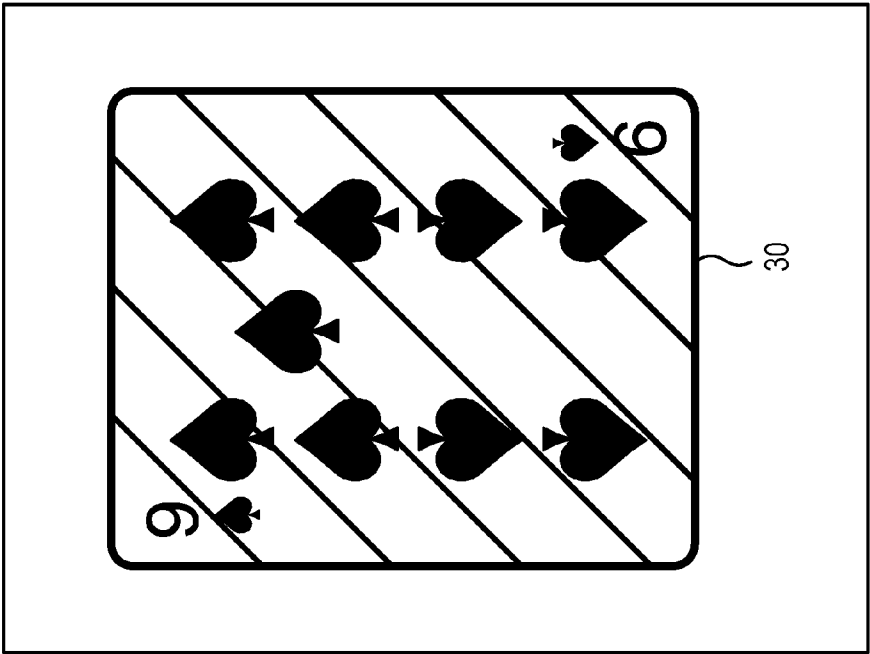


FIG. 6b

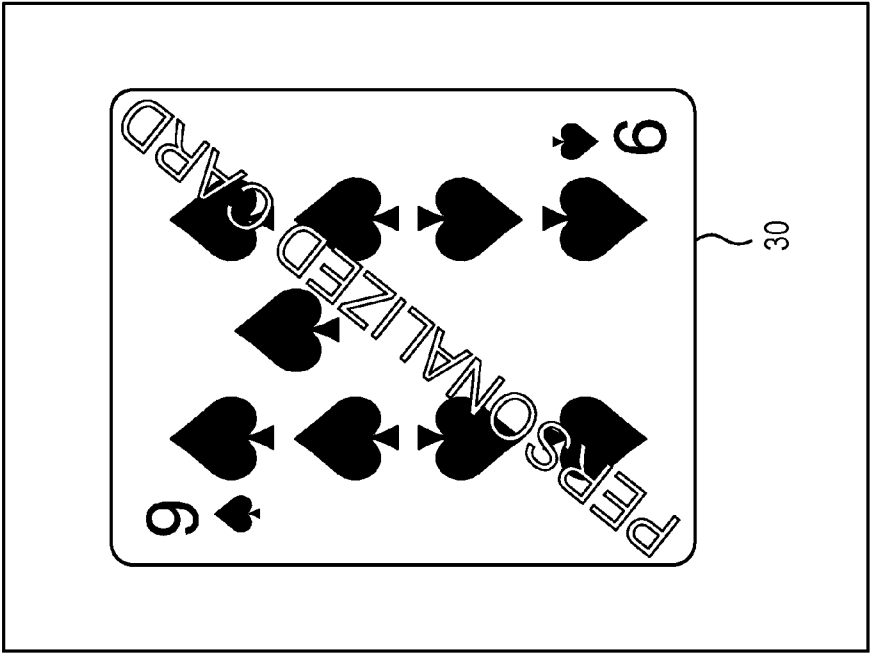


FIG. 6a

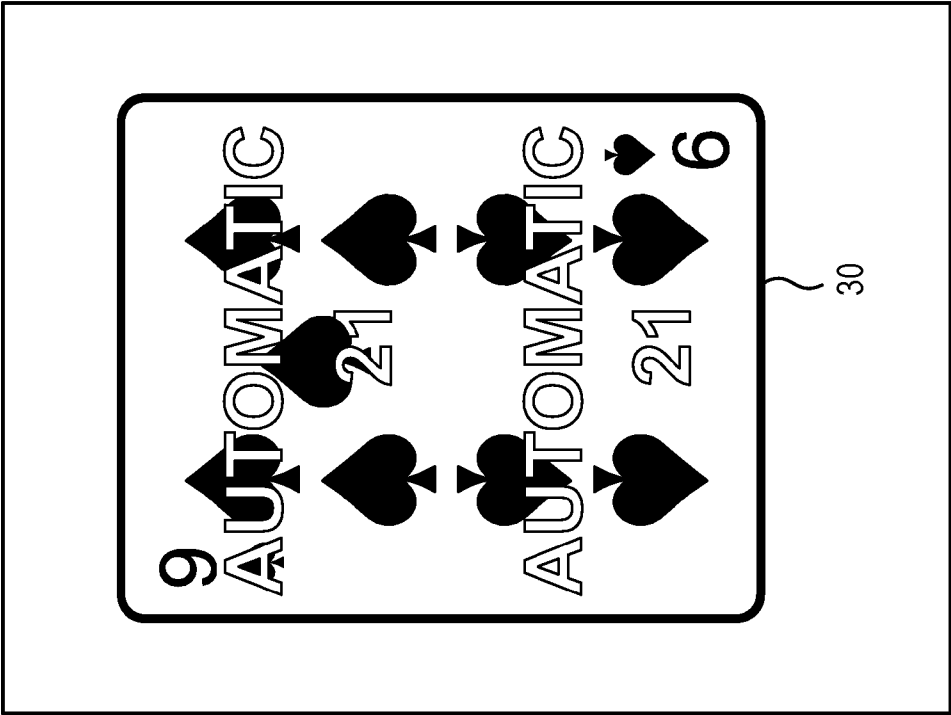


FIG. 6c

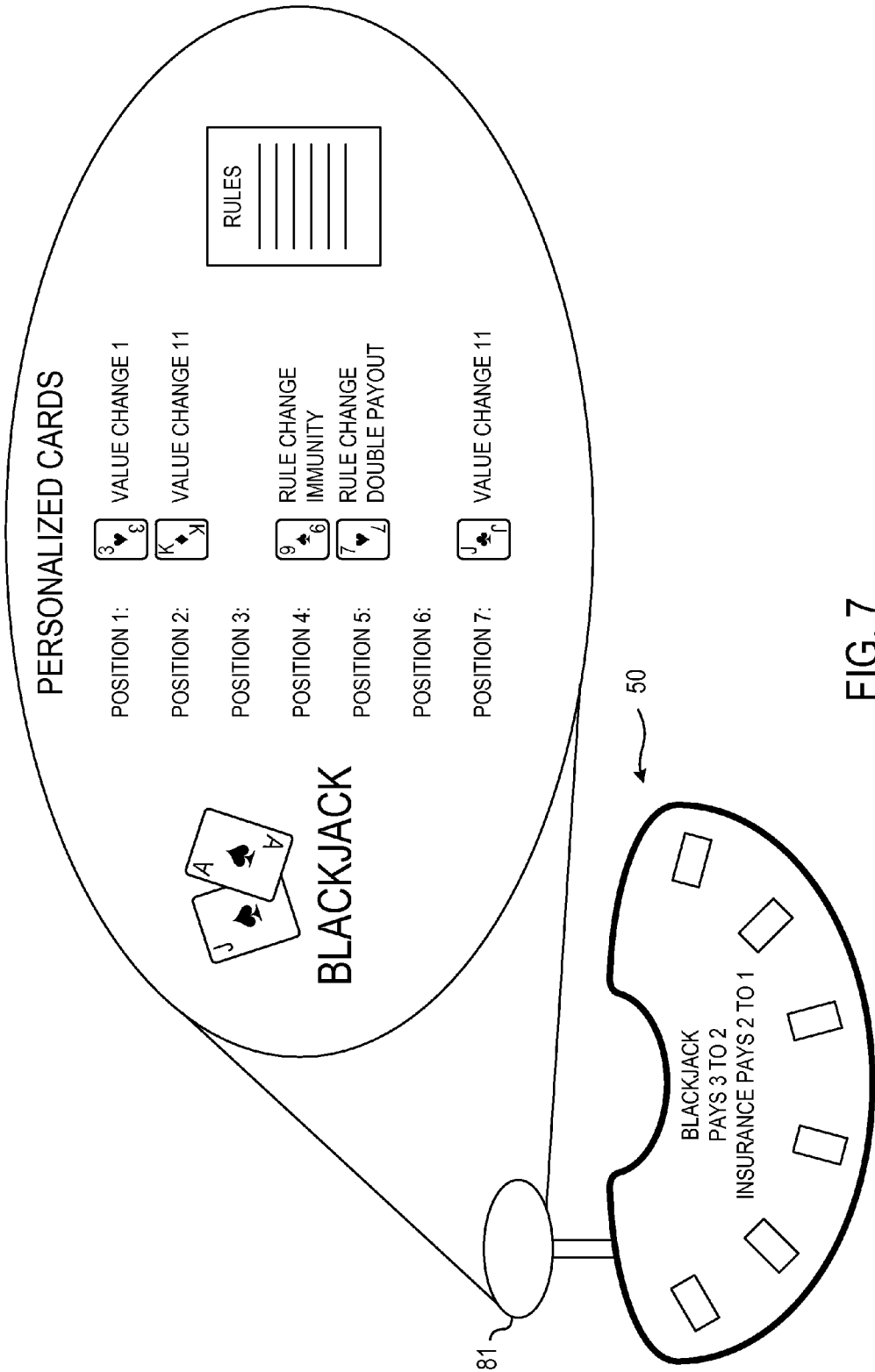


FIG. 7

SYSTEM AND METHOD FOR PERSONALIZING PLAYING CARDS AT A TABLE GAME

FIELD OF THE INVENTION

[0001] The present disclosure relates to personalizing game play and more particularly to personalizing playing cards at a table game.

BRIEF DESCRIPTION OF THE DRAWINGS

[0002] FIG. 1 is an illustration of an exemplary and non-limiting embodiment of a system for practicing one or more embodiments described herein.

[0003] FIG. 2 is an illustration of a method for practicing exemplary and non-limiting embodiments described herein.

[0004] FIG. 3 is an illustration of an exemplary and non-limiting embodiment of an output device described herein.

[0005] FIGS. 4a-4c are illustrations of exemplary and non-limiting embodiments of displays described herein.

[0006] FIG. 5 is an illustration of an exemplary and non-limiting embodiment of a database described herein.

[0007] FIGS. 6a-6c are illustrations of exemplary and non-limiting embodiments of markers described herein.

[0008] FIG. 7 is an illustration of an exemplary and non-limiting embodiment of a system for practicing one or more embodiments described herein.

DETAILED DESCRIPTION

[0009] As described below in accordance with various exemplary and non-limiting embodiments, cards are personalized for use in table games.

[0010] In accordance with an exemplary and non-limiting embodiment, a method comprises receiving a request for at least one personalized card from a player, associating at least one value change with the at least one personalized card, providing an indication of the at least one value change, and enabling a game play in accordance with the value change.

[0011] In accordance with another exemplary and non-limiting embodiment, a computer readable medium stores instructions configured to direct a processor to perform a method comprising receiving a request for at least one personalized card from a player, associating at least one value change with the at least one personalized card, providing an indication of the at least one value change, and enabling a game play in accordance with the value change.

[0012] In accordance with another exemplary and non-limiting embodiment, an apparatus comprises a processor and a computer readable medium in communication with the processor and storing instructions configured to direct the processor to perform a method comprising receiving a request for at least one personalized card from a player, associating at least one value change with the at least one personalized card, providing an indication of the at least one value change, and enabling a game play in accordance with the value change.

[0013] In accordance with an exemplary and non-limiting embodiment, a method comprises receiving a request for at least one personalized card from a player, associating at least one rule change with the at least one personalized card in exchange for consideration, providing an indication of the at least one rule change, and enabling game play in accordance with the rule change.

[0014] In accordance with another exemplary and non-limiting embodiment, a computer readable medium stores

instructions configured to direct a processor to perform a method comprising receiving a request for at least one personalized card from a player, associating at least one rule change with the at least one personalized card in exchange for consideration, providing an indication of the at least one rule change, and enabling game play in accordance with the rule change.

[0015] In accordance with another exemplary and non-limiting embodiment, an apparatus comprises a processor and a computer readable medium in communication with the processor and storing instructions configured to direct the processor to perform a method comprising receiving a request for at least one personalized card from a player, associating at least one rule change with the at least one personalized card in exchange for consideration, providing an indication of the at least one rule change, and enabling game play in accordance with the rule change.

[0016] In accordance with an exemplary and non-limiting embodiment, a method comprises receiving a request for at least one personalized card from a player, associating at least one of a value change and a rule change with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and determining whether the at least one personalized card is applicable.

[0017] In accordance with another exemplary and non-limiting embodiment, a computer readable medium stores instructions configured to direct a processor to perform a method comprising receiving a request for at least one personalized card from a player, associating at least one of a value change and a rule change with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and determining whether the at least one personalized card is applicable.

[0018] In accordance with another exemplary and non-limiting embodiment, an apparatus comprises a processor and a computer readable medium in communication with the processor and storing instructions configured to direct the processor to perform a method comprising receiving a request for at least one personalized card from a player, associating at least one of a value change and a rule change with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and determining whether the at least one personalized card is applicable.

[0019] In accordance with an exemplary and non-limiting embodiment, a method comprises receiving a request for at least one personalized card from a player, identifying at least one of a rank, a color, and a suit for the at least one personalized card, identifying at least one of a value change and a rule change associated with the at least one personalized card, providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.

[0020] In accordance with another exemplary and non-limiting embodiment, a computer readable medium stores instructions configured to direct a processor to perform a method comprising receiving a request for at least one per-

sonalized card from a player, identifying at least one of a rank, a color, and a suit for the at least one personalized card, identifying at least one of a value change and a rule change associated with the at least one personalized card, providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.

[0021] In accordance with another exemplary and non-limiting embodiment, an apparatus comprises a processor and a computer readable medium in communication with the processor and storing instructions configured to direct the processor to perform a method comprising receiving a request for at least one personalized card from a player, identifying at least one of a rank, a color, and a suit for the at least one personalized card, identifying at least one of a value change and a rule change associated with the at least one personalized card, providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card, enabling at least one game play in accordance with the at least one of a value change and a rule change, and applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.

[0022] One of the most popular games in American and European casinos is Blackjack. The object of Blackjack is simple, specifically, each player tries to achieve a hand value as close to, without exceeding, 21 and greater than the dealer's hand value. In each round of a session, players place a wager to initiate the hand which is paid or forfeited based on whether or not the player beats the dealer with bets being returned in the event of a tie. The dealer then deals each player and himself two initial cards to form a starting or initial hand and each player successively chooses whether to "stand", "double down", "split" or "hit" as described in greater detail below. A standard fifty-two card poker deck is used wherein numbered cards are worth their rank (e.g., 2=2, 3=3, 4=4, etc), face cards are worth 10 and Aces are worth 1 or 11.

[0023] Exemplary and non-limiting embodiments of the invention offer players the chance to "personalize" specific cards in the deck in order to keep players interested and to add more excitement to the game. The option to personalize a card may also provide a player with a feeling of greater control of the game. For example, a player of a card game may designate a particular rule/value change, advantageous or disadvantageous, to be associated with specific a card. As a result, players can therefore have "personalized" cards that may be worth an alternate value (e.g., Kings can be worth 1 or 11, the value of 3's are changed to 10, etc.) or trigger a special rule change (e.g., the 7♦ makes the player automatically lose, the appearance of a suicide King increases winning payouts to 2:1). In order to allow such options and still keep the game profitable for the casino, a required fee, a reduced payout, a negative rule change, etc. may be activated.

[0024] For example, a player sits down at a blackjack table that offers players the option to designate a personalized card. She thinks that the 3♥ is particularly lucky, and so she declares that any winning hand in which the 3♥ is present will be paid out at 2:1. However, in order to offer this option, the casino requires that the player choose an "unlucky" card that

will cause any hand containing that card to immediately end in a push. The player chooses the 9♣. Miniature replicas of these cards are placed near the player's position in order to remind the dealer of these rule changes.

[0025] Changing the value of a card or instituting beneficial or malefic rule changes based on the appearance of particular cards may change the standard odds of blackjack. For instance, if a player chooses to change the value of all face cards in a specific suit to 1 or 11, he or she is effectively increasing the chances of receiving a natural blackjack. Some casinos may choose to offer this benefit in order to increase play. However in some instances, casinos may make changes to counter this advantage so that the game remains profitable. In other embodiments, these changes may be added to a session based blackjack game such as Guaranteed Play™ Blackjack. By adding personalized value/rule changes periodically over the course of a Blackjack session, the casino can swing the odds in favor of the player, perhaps at the end of a session, making him or her more likely to end the session with a positive perception of the game.

[0026] Smart and dumb tables may offer a plurality of methods for a player to designate and indicate a personalized card such as via a table display, a player display, a specialized felt, using a marker, etc. In some embodiments, a smart table apparatus may automatically counter a player's improved odds from such alterations by implementing negative rule changes, requiring fees, taxing winnings, etc. Additionally, although this disclosure specifically discusses personalized cards in the context of Blackjack, such an embodiment may be applied to any card game such as Pai Gow, Baccarat, Three Card Poker, and the like.

[0027] Various terms are defined as follows:

[0028] Double Down—Doubling a bet after seeing an initial hand. Doubling down is most common in instances involving a card count of 9, 10, or 11. After doubling down, players receive one single hit card to be added to their initial hand value, which is sometimes dealt face down and revealed after the dealer's hand is resolved.

[0029] Hand Count/Total/Value—The value of each individual card of a hand added together (e.g., if a player has 4, K, 6 then the player's count is 20).

[0030] Hit—An additional optional card that is dealt after receiving at least two dealt cards. Specifically, after being dealt their first two cards (the initial hand), players may choose to receive additional cards (known as hit cards), the value of which is added to their hand total.

[0031] Personalized Card—One of the cards in a deck of 52 indicative of the activation of a rule change or having a value inconsistent with traditional blackjack rules. A player and/or the casino declare which cards are personalized cards.

[0032] Push—An occurrence wherein the player's wager is returned without being paid. In blackjack, a push occurs when the player and the dealer's hands tie (e.g., the player and dealer both have a hand totaling 18).

[0033] Rule Change—A change in a game's traditional rules that is activated by the appearance of a personalized card. In some exemplary embodiments, the rule may be activated for the player who designated the personalized card, and may be activated for the hand in which the personalized card appears. The following are some examples of rule changes: any winning hand in which the 3♥ is present will be paid out at 2:1; Kings can be worth 1 or 11; the 7♦ results in a player loss.

[0034] Session—A block or group of hands sold for a pre-determined price (e.g., the player buys 30 hands of blackjack for \$40). Traditional rules may be altered within session based play as described, for example, in commonly owned U.S. Pat. No. 6,077,163, commonly owned U.S. Pat. No. 6,319,127 and commonly owned Provisional Application No. 60/986382 which are incorporated in their entirety by reference herein.

[0035] Split—An option to divide a hand comprising two cards forming a pair into two separate hands. Players are allowed to “split” their hand when they have a pair in their initial hand (e.g., the first two cards are 8’s). When a player splits, the dealer separates the two cards and deals two new cards, one to each hand, such that the player is now playing two separate hands against the dealer. The player is required to post another wager equal to his original bet to cover the second hand.

[0036] Stand—Choosing not to receive additional cards. After being dealt an initial hand, a player may choose not to receive any additional cards, which is called “standing”.

[0037] Value Change—A change in the traditional value of a personalized card dealt in a game of, for example, blackjack. Normally, numbered cards are worth their rank (e.g., 2=2; 3=3; 4=4, etc), face cards are worth 10 and Aces are worth 1 or 11. However, a personalized card may be valued based on the preference of the player, for instance a player may declare that all red 7’s are now worth 10 when applied to the value of their hand. Similarly, for table games where suits matter (e.g., any type of poker game, Hearts, Spades, etc.) the suit of a card may be designated. For instance a player may make it easier to get a flush by changing a single card, an entire suit, etc to a count as a defined suit (e.g., all spades are now diamonds).

[0038] Numerous embodiments are described, and are presented for illustrative purposes only. The described embodiments are not intended to be limiting in any sense. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural, logical, software, electrical and other changes may be made without departing from the scope of the invention. Accordingly, those skilled in the art will recognize that the invention may be practiced with various modifications and alterations. Although particular features may be described with reference to one or more particular embodiments or figures that form a part of the present disclosure, and in which are shown, by way of illustration, specific embodiments, it should be understood that such features are not limited to usage in the one or more particular embodiments or figures with reference to which they are described. The present disclosure is thus neither a literal description of all possible embodiments nor a listing of features that must be present in all embodiments.

[0039] The terms “an embodiment”, “embodiment”, “embodiments”, “the embodiment”, “the embodiments”, “an exemplary embodiment”, “some embodiments”, “an example embodiment”, “at least one embodiment”, “one or more embodiments” and “one embodiment” mean “one or more (but not necessarily all) embodiments of the invention (s)” unless expressly specified otherwise. The terms “including”, “comprising” and variations thereof mean “including but not limited to”, unless expressly specified otherwise.

[0040] The term “consisting of” and variations thereof mean “including and limited to”, unless expressly specified otherwise.

[0041] The enumerated listing of items does not imply that any or all of the items are mutually exclusive. The enumerated listing of items does not imply that any or all of the items are collectively exhaustive of anything, unless expressly specified otherwise. The enumerated listing of items does not imply that the items are ordered in any manner according to the order in which they are enumerated.

[0042] The term “comprising at least one of” followed by a listing of items does not imply that a component or subcomponent from each item in the list is required. Rather, it means that one or more of the items listed may comprise the item specified. For example, if it is said “wherein A comprises at least one of: a, b and c” it is meant that (i) A may comprise a, (ii) A may comprise b, (iii) A may comprise c, (iv) A may comprise a and b, (v) A may comprise a and c, (vi) A may comprise b and c, or (vii) A may comprise a, b and c.

[0043] The terms “a”, “an” and “the” mean “one or more”, unless expressly specified otherwise.

[0044] The term “based on” means “based at least on”, unless expressly specified otherwise.

[0045] The methods described herein (regardless of whether they are referred to as methods, processes, algorithms, calculations, and the like) inherently include one or more steps. Therefore, all references to a “step” or “steps” of such a method have antecedent basis in the mere recitation of the term ‘method’ or a like term. Accordingly, any reference in a claim to a ‘step’ or ‘steps’ of a method is deemed to have sufficient antecedent basis.

[0046] Headings of sections provided in this document and the title are for convenience only, and are not to be taken as limiting the disclosure in any way.

[0047] Devices that are in communication with each other need not be in continuous communication with each other, unless expressly specified otherwise. In addition, devices that are in communication with each other may communicate directly or indirectly through one or more intermediaries.

[0048] A description of an embodiment with several components in communication with each other does not imply that all such components are required, or that each of the disclosed components must communicate with every other component. On the contrary, a variety of optional components are described to illustrate the wide variety of possible embodiments described herein.

[0049] Further, although process steps, method steps, algorithms or the like may be described in a sequential order, such processes, methods and algorithms may be configured to work in alternate orders. In other words, any sequence or order of steps that may be described in this document does not, in and of itself, indicate a requirement that the steps be performed in that order. The steps of processes described herein may be performed in any order practical. Further, some steps may be performed simultaneously despite being described or implied as occurring non-simultaneously (e.g., because one step is described after the other step). Moreover, the illustration of a process by its depiction in a drawing does not imply that the illustrated process is exclusive of other variations and modifications thereto, does not imply that the illustrated process or any of its steps are necessary to the invention, and does not imply that the illustrated process is preferred.

[0050] It will be readily apparent that the various methods and algorithms described herein may be implemented by, e.g., appropriately programmed general purpose computers and computing devices. Typically a processor (e.g., a micro-

processor or controller device) will receive instructions from a memory or like storage device, and execute those instructions, thereby performing a process defined by those instructions. Further, programs that implement such methods and algorithms may be stored and transmitted using a variety of known media.

[0051] When a single device or article is described herein, it will be readily apparent that more than one device/article (whether or not they cooperate) may be used in place of a single device/article. Similarly, where more than one device or article is described herein (whether or not they cooperate), it will be readily apparent that a single device/article may be used in place of the more than one device or article.

[0052] The functionality and/or the features of a device may be alternatively embodied by one or more other devices which are not explicitly described as having such functionality/features. Thus, other embodiments described herein need not include the device itself.

[0053] The term “computer-readable medium” as used herein refers to any medium that participates in providing data (e.g., instructions) that may be read by a computer, a processor or a like device. Such a medium may take many forms, including but not limited to, non-volatile media, volatile media, and transmission media. Non-volatile media include, for example, optical or magnetic disks and other persistent memory. Volatile media may include dynamic random access memory (DRAM), which typically constitutes the main memory. Transmission media may include coaxial cables, copper wire and fiber optics, including the wires or other pathways that comprise a system bus coupled to the processor. Transmission media may include or convey acoustic waves, light waves and electromagnetic emissions, such as those generated during radio frequency (RF) and infrared (IR) data communications. Common forms of computer-readable media include, for example, a floppy disk, a flexible disk, hard disk, magnetic tape, any other magnetic medium, a CD-ROM, DVD, any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, a RAM, a PROM, an EPROM, an EEPROM, a FLASH-EEPROM, any other memory chip or cartridge, a carrier wave as described hereinafter, or any other medium from which a computer can read.

[0054] Various forms of computer readable media may be involved in carrying sequences of instructions to a processor. For example, sequences of instruction (i) may be delivered from RAM to a processor, (ii) may be carried over a wireless transmission medium, and/or (iii) may be formatted according to numerous formats, standards or protocols, such as Transmission Control Protocol, Internet Protocol (TCP/IP), Wi-Fi, Bluetooth, GSM, CDMA, EDGE and EVDO.

[0055] Where databases are described, it will be understood by one of ordinary skill in the art that (i) alternative database structures to those described may be readily employed, and (ii) other memory structures besides databases may be readily employed. Any schematic illustrations and accompanying descriptions of any sample databases presented herein are illustrative arrangements for stored representations of information. Any number of other arrangements may be employed besides those suggested by the tables shown. Similarly, any illustrated entries of the databases represent example information only. Those skilled in the art will understand that the number and content of the entries can be different from those illustrated herein. Further, despite any depiction of the databases as tables, other formats (including

relational databases, object-based models and/or distributed databases) could be used to store and manipulate the data types described herein. Likewise, object methods or behaviors of a database can be used to implement the processes of embodiments described herein. In addition, the databases may, in a known manner, be stored locally or remotely from a device that accesses data in such a database.

[0056] It should also be understood that, to the extent that any term recited in the claims is referred to elsewhere in this document in a manner consistent with a single meaning, that is done for the sake of clarity only, and it is not intended that any such term be so restricted, by implication or otherwise, to that single meaning.

[0057] In a claim, a limitation of the claim which includes the phrase “means for” or the phrase “step for” means that 35 U.S.C. §112, paragraph 6, applies to that limitation.

[0058] In a claim, a limitation of the claim which does not include the phrase “means for” or the phrase “step for” means that 35 U.S.C. §112, paragraph 6 does not apply to that limitation, regardless of whether that limitation recites a function without recitation of structure, material or acts for performing that function. For example, in a claim, the mere use of the phrase “step of” or the phrase “steps of” in referring to one or more steps of the claim or of another claim does not mean that 35 U.S.C. §112, paragraph 6, applies to that step(s).

[0059] With respect to a means or a step for performing a specified function in accordance with 35 U.S.C. §112, paragraph 6, the corresponding structure, material or acts described in the specification, and equivalents thereof, may perform additional functions as well as the specified function.

[0060] Reference will now be made in detail to various exemplary and non-limiting embodiments, some examples of which are illustrated in the accompanying drawings.

[0061] As used herein, “gaming device” refers to a device that is capable, at a minimum, of displaying gaming outcomes of a wagering game. Similarly, as used herein, a “wireless gaming device” refers to a gaming device configured or otherwise adapted to engage in electronic communication via a wireless medium and attendant protocol. Examples of gaming devices include, but are not limited to, slot machines, video poker machines, video blackjack machines, video keno machines, and casino table games (such as baccarat, blackjack and roulette) equipped with electronic components that may facilitate embodiments described herein (e.g., electronic virtual tables with simulated cards, chips and/or dealer; “smart” tables with a live dealer and one or more electronic devices such as chip/card readers, display screens and/or player/dealer input devices; etc.).

[0062] With reference to FIG. 1, there is illustrated a physical gaming table 50 capable of being utilized to enable various exemplary and non-limiting embodiments described more fully below. In some embodiments, such a physical gaming table 50 may comprise various “smart” technologies. Hardware may include: (i) a computing device 51 associated with one or more gaming tables 50 (e.g., a “table computer,” a “central table server”), (ii) gaming chips 72 (e.g., “smart” gaming chips comprising means for storing data and/or means for communicating with other devices, such as RFID), (iii) playing cards 74 (e.g., radio frequency identification-enabled cards that may identify themselves to a reader device, or cards that are marked to enable identification by an optical reader), (iv) output devices 80, 58 associated with a gaming table 50 (e.g., LED or LCD displays incorporated into the table), (v) input devices 57 to be utilized by players and/or

dealers (e.g., physical buttons, a touch-screen, a bill/ticket validator, etc.), and/or (vi) sensors **59** or other devices for wirelessly communicating with objects such as cards **74** and chips **72** (e.g., optical readers or RFID receivers commonly associated with table areas such as betting circles **76**, card shoes **68**, chip trays **64** and the like; U.S. patent Ser. No. 11/672,301 to MILLER, ET AL. provides an example of an RFID-enabled chip tray). Each of these technologies will now be described in some detail. It is understood that each of the above disclosed devices including, but not limited to, output devices, **80**, **58**, input devices **57**, and the sensors **59**, may be in communication, via a wireless or physical connection, with computing device **51**.

[0063] The control system for the gaming table **50** may be distributed amongst the various components of the gaming table **50**. That is, for example, each dealer station **54** and player station **56** may have its own processor that controls operation of sensors, displays and other input/output mechanisms for each station. Alternatively, a central table control system may be used which controls all the elements of the gaming table **50**. The central table control system, such as computing device **51**, may be located proximate the gaming table **50** (e.g., underneath the table or beside the table) or remotely therefrom such as might be the case for a casino controller. In short, the control system for the gaming table **50** may be unitary or distributed, local or remote.

[0064] Some embodiments of the present disclosure may be configured to work in a network environment including a computing device **51** (e.g., a table computer) that may communicate, via a communications network **73**, with one or more other devices, such as other computing devices (e.g., other table computers), servers (e.g., a central table server, a server for storing player data), components of a table (e.g., output devices **80**, **58**, input devices **57**, smart playing cards (such as one card of a player's hand **74**), smart betting chips **72**, electronic gaming devices (e.g., slot machines, video poker machines) and the like.

[0065] The computing device **51**, or "computer", may communicate with the devices directly or indirectly, via any appropriate communications means or combination of communications means. Each of the devices may comprise computers, such as those based on the Intel® Pentium® processor, that are adapted to communicate with the computer **51**. Any number and type of devices may be in communication with the computer **51**. Some, but not all, possible communication networks that may comprise the network or be otherwise part of the system include: a local area network (LAN), a wide area network (WAN), the Internet, a telephone line, a cable line, a radio channel, an optical communications line, and a satellite communications link. A variety of communications protocols may be part of the system, including but not limited to: Ethernet (or IEEE 802.3), SAP, SAS™, Super-SAS™, ATP, Bluetooth™, TCP/IP, GSM, GPRS, EDGE, GPS, or WiFi.

[0066] In some embodiments, such a computer **51** may comprise a program for executing steps of the present disclosure (e.g., instructing output devices **80**, **58** to display session data). A memory (e.g., ROM, RAM) of such a computer may store such a program, as well as maintain or otherwise communicate with one or more databases **53** (e.g., for storing data regarding flat rate sessions). Further, such a computing device **51** may comprise a communications port for communicating

with other devices (e.g., an Ethernet port), input devices (e.g., a keyboard, a mouse), output devices (e.g., a CRT monitor), and the like.

[0067] Table computers and/or central table servers may be networked in a variety of manners as would be practical for a given casino floor or group of games. In one example, each gaming table **50** in a group of gaming tables **50** may be associated with a table computer **51**, with a central table server (not shown) being responsible for sending/receiving data from the group (e.g., player data used for loyalty programs may be transmit from a table computer to a central table server, while each table computer may governs actions associated with a particular table). In another example, each player station **56** at a gaming table **50** may be associated with a table computer **51** (e.g., a blackjack table with five player positions features five table computers).

[0068] Applicants' co-pending, provisionally filed Application No. 60/826,977, hereby incorporated by reference for all purposes, describes various embodiments of smart gaming chips; specifically, Section 2.1 ("Gaming Chips") of this document offers various technologies that may be utilized in accordance with the disclosures herein. For example, Section 2.1 describes various embodiments of chip casings, displays, wireless transceivers, power sources, memory, input devices and output devices that may be useful in the context of this invention. Alternatively, or in addition, gaming chips **72** and other objects near a gaming table **50** may be tracked using a camera system (i.e., optically), such as the one described in US Patent Application No. 2005/0026680 to Gururajan, the entirety of which is herein incorporated by reference for all purposes. Note that such a camera system may not require the use of RFID-enabled gaming chips **72**. In one embodiment, gaming chips **72** may be marked to enable easy identification by cameras. Further information about RFID chips can be found in U.S. Pat. Nos. 5,166,502; 5,676,376; 6,021,949; and 6,296,190, which are all incorporated by reference herein. Gaming Partners International (GPI) of 1182 Industrial Rod, Las Vegas, Nev. 89102 and Shufflemaster Inc. of 1106 Palms Airport Drive, Las Vegas Nev. 89119 both sell RFID chips suitable for use with the present disclosure although neither product is specifically required to practice embodiments set forth herein. The gaming chips **72** may be interrogated through RF interrogators such as those sold by GPI or those described in U.S. Pat. Nos. 4,1814,589; 5,283,422; 5,367,148; 5,651,548; and 5,735,742, all of which are incorporated by reference. Another interrogator is the TAG-IT product line produced by Texas Instruments. An improved interrogator is discussed in U.S. Patent Publication 2006/0077036, which is incorporated by reference.

[0069] In some exemplary and non-limiting embodiments, playing cards, such as a card forming the player's hand **74**, may communicate with other devices. For example, a playing card may wirelessly identify itself to a reader device by transmitting an identifier via radio-frequency identification to one or more RFID reader devices, such as sensor **59**, associated with a gaming table **50** (e.g., embedded within a card shoe, underneath a felt surface, etc.). Other known methods and technologies for reading data from playing cards are contemplated (e.g., optically scanning card markings). One method for reading data from playing cards at table game is taught by German Patent Application No. P44 39 502.7, the entirety of which is herein incorporated by reference for all purposes. Other methods are taught by U.S. Patent Application No. 2007/0052167 to Galatan and U.S. Patent Application No.

2004/0207156 to Soltys, the entirety of which are herein incorporated by reference for all purposes.

[0070] Another example of technology for tracking playing cards at table games is the iShoe™ Intelligent Shoe, manufactured by ShuffleMaster Incorporated™. This intelligent shoe reads the rank and suit of each card being dealt, and can transmit game results to a separate device (e.g., table computer **51**) via a casino communication network **73**. Exemplary intelligent card shoes **68** are the IS-T1 and IS-B1 sold by ShuffleMaster. Further information is available at the Internet address: www.shufflemaster.com/02_eu_products/utility_products/its/intelligent_shoe_B1.asp, and in U.S. Pat. Nos. 5,941,769 and 7,029,009 and U.S. Patent Publications 2005/002681; 2001/786227; 2005/0051955; 2005/0113166; 2005/0219200; and 2005/0062226 all of which are incorporated in their entireties.

[0071] The present disclosure contemplates utilizing various input and/or output devices (e.g., touch-sensitive screens, CRT screens, LEDs, etc.) embedded within and/or otherwise associated with a gaming table for purposes of (i) outputting information to players and/or dealers (e.g., data is output to players and/or dealers via one or more small display screens) and/or (ii) receiving input from players and/or dealers (e.g., a player requests that he'd like to perform a game-related activity; a dealer authorizes a payout to a player). Various technology described in the following patents and patent applications may be helpful in enabling such inventive embodiments: 2006/0205472 to Sines et al. (touch-screen displays allowing player/dealer input at table games); 2006/0014577 to Snow (player-specific push buttons and display screens in communication with a table game computer); and U.S. Pat. No. 5,779,546 to Meissner et al. (outputting instructions to a dealer via a display screen); these documents are hereby incorporated by reference for all purposes.

[0072] In one embodiment, a player may use a wireless electronic device **71** (sometimes referred to herein as a mobile terminal, e.g., a Personal Digital Assistant (PDA), tablet computer, pager, and/or a cell phone) to provide one or more indications or receive and view data related to gaming. That is, the wireless electronic device **71** may provide a substitute for a player terminal at a gaming table **50**. For example, a player may place the wireless electronic device **71** on the gaming table **50** during game play.

[0073] In some embodiments, a gaming table **50** may be configured such that each player station **56** (e.g., each of six "seats" at a blackjack table) may be associated with (i) one or more betting circles **76** for indicating a bets with physical chips **72** or tokens, (ii) a display device **80** (e.g., an embedded LCD screen for outputting session data), (iii) one or more input devices **57** (e.g., physical buttons, a touch-screen, etc.), (iv) means for receiving/outputting payment (not shown) (e.g., a multi-purpose "TITO"/bill validating device, such as a FutureLogic GEN2™ PSA-66 device configured to operate within an EZ-Pay™ system of International Game Technology of Reno, Nev.), and/or (v) means for identifying players such as player tracking mechanism **78** (e.g., systems for identifying and tracking players at table games via player tracking card readers, as taught in U.S. Pat. No. 5,586,936 to Bennett et al; this patent is hereby incorporated by reference for all purposes).

[0074] Applicants' co-pending Application No. 60/826,977 (previously incorporated by reference) features description of sensors, cameras and/or technologies for wirelessly (e.g., optically or via RFID) reading data from and/or other-

wise communicating with objects such as smart playing cards and smart chips. Specifically, Section 2.2 ("Game Table and System") describes various embodiments using a wireless transceiver (e.g., for wireless communication with betting chips). For example, an RFID reader embedded within a betting circle or card shoe may operate to activate a passive transponder associated with a smart betting chip or smart playing card, and thereby read data from it. Another method of wirelessly reading values associated with betting chips is taught by U.S. Pat. No. 5,651,548 to French et al.; the entirety of this patent is incorporated by reference of all purposes.

[0075] Another example of enabling technology for tracking cards and chips at a gaming table is the Table Management System (TMS™) from Bally™, formerly known as the Mind-Play™ system. This system utilizes a specially-designed blackjack tabletop that incorporates specially encoded playing cards, using invisible ink and barcodes, and 14 tiny cameras built into the dealer's chip tray. These cameras can read every card in play by reading the invisible ink printed on them. In addition, the system uses special chips, so that sensors embedded in the table can automatically calculate each player's bet. Other intelligent tables are sold by PGI with ShuffleMaster and IGT under the moniker Intelligent Table System (ITS) together with software titled TABLE MANAGER. More information about intelligent tables can be found in U.S. Pat. Nos. 6,676,517; and 7,011,309 as well as U.S. Patent Publications 2002/0147042; 2003/0003997; 2005/0026680; 2005/0026682; and 2005/0054408, all of which are incorporated by reference.

[0076] In some embodiments, a multiplayer electronic ("virtual") gaming table **50** may be utilized. Such a device may allow numerous players to partake in rounds of gambling games, without any/all of a live dealer, physical playing cards, or physical wagering chips. Numerous such devices are currently available. For example, Shuffle Master, Inc. of Las Vegas, Nev. manufactures a multiplayer electronic table, marketed as the Table Master™. In some embodiments, memory of a computing device associated with such a table may be loaded with software for executing steps of the present disclosure.

[0077] A single-player, standalone electronic gaming device comprising, for example, a wireless electronic device **71**, may also be utilized for some exemplary embodiments disclosed herein. For example, International Game Technology of Reno, Nev. offers a line of gaming devices known as Game King®, offering numerous different types of games for single-player play, including video slots, keno, blackjack and the like. Such software may be repurposed to execute steps of the present disclosure.

[0078] With reference to FIG. 2, there is illustrated an exemplary and non-limiting embodiment of a method according to the invention. Each step of the illustrated process will now be described in detail.

[0079] At step **200**, one or more available personalized cards are offered to the player. A player at a blackjack table, such a gaming table **50**, may have the opportunity to personalize rules or values for one or more cards in the deck/shoe. For instance, a player may change the value of the 6♣ from "6" to "11". As a result, whenever the player is dealt a 6♣, it counts as 11 points towards the player's hand total. Similarly, the player may associate a rule change with certain cards, for example a player may designate the 7♦ as a payout booster. Therefore, whenever the player wins a hand with the 7♦ he or she is paid 2:1 instead of 1:1.

[0080] In exemplary embodiments, there exist a plurality of modalities for offering personalized cards. In one exemplary embodiment, personalized cards may be offered individually to players, or may be offered to a group or set of players. For example, seven friends sit down for an hour-long session of blackjack at their reserved gaming table **50**. The friends pick a personalized card for their session of blackjack. The personalized card so chosen will apply to the entire gaming table **50**.

[0081] In another exemplary embodiment, physical personalized cards are utilized at physical gaming tables **50** with live dealers, cards, chips, etc. In some embodiments, a player display **80**, table felt **52**, a billboard, a poster, a tent card, etc. may visually indicate that a player may designate a personalized card. For example, the rules for personalized cards are posted on a tent card at the gaming table **50**. In another exemplary embodiment, a dealer may verbally indicate that a player may designate a personalized card. In yet another exemplary embodiment, a player may receive a voucher or coupon that offers personalized card values. The voucher may be presented to the player by a casino hostess, upon check-in at a hotel associated with a casino, as a complimentary, upon completion of meal at a restaurant, on the back of a ticket stub for show or sporting event, or the like. The player may then visit a gaming table **50** and present the voucher to request the personalized cards as described more fully below.

[0082] In another exemplary and non-limiting embodiment, electronic personalized cards are offered on electronic gaming machines (e.g., a video blackjack game) or an electronic table game **50** (e.g., a smart table). A display **80** on a machine or at a player station **56** may show personalized card rules, prices, instructions for implementation, etc. The display **80** may be part of a player interface comprising a display (e.g., cathode ray tubes, an LCD screen, a touch sensitive screen, an LED, Plasma Display Panels, electronic paper, a projection screen, etc.) Speakers in the table or on an EGM may audibly offer a personalized card option.

[0083] In exemplary and non-limiting embodiments, an offer for one or more personalized cards may be output in response to a trigger, such as the occurrence of an event or condition. For example, a dealer offers personalized cards when player sits down at a gaming table **50**. In another example, a player is only allowed to sign up for personalized cards at the start of a new deck. This may prevent players from gaining an advantage through card counting and may simplify calculations of the value of a personalized card. In yet another example, a smart gaming table **50** may prompt the dealer to offer a personalized card option to a player. A personalized card option may be offered to a player based on game play (e.g., when a particular outcome occurs).

[0084] In accordance with exemplary embodiments, a wide variety of rule changes may be implemented in the game of blackjack in order to give the player an advantage, give the player a disadvantage, make the game more exciting, etc. Any such rule changes may be associated with and activated upon the appearance of a personalized card. Some exemplary rule changes are discussed herein. In some exemplary embodiments, rule changes may be positive or advantageous. In other exemplary embodiments, rule changes may be negative or disadvantageous. One such advantageous rule change is "Automatic 21" (or other number). For example, whenever the player's personalized card is dealt, he or she has an automatic 21 (regardless of what the other card is). Likewise,

whenever the player's personalized card is dealt, the player has an automatic 20 (this gives the player less of an advantage).

[0085] Another exemplary rule change is the "Automatic Win". For example, anytime the player's personalized card is dealt, the player automatically wins.

[0086] Another exemplary rule change is the "Win Pushes". For example, if a player ties the dealer when using a personalized card, then it counts as a win.

[0087] Another exemplary rule change is the "Anytime Bust Limit". For example, a player is allowed to split his hand **74** even when the hand **74** is not a pair. In some embodiments, the casino may allow the player to play one of the hands **74** for free (in other words, the player does not have to post a bet for the second hand).

[0088] Another exemplary rule change is the "Extended Bust Limit". For example, a player does not bust until receiving a hand total of 23 or more.

[0089] Another exemplary rule change is the "Payout Boosters". For example, the payout on a winning hand **74** comprising a personalized card is increased by a predetermined amount. Alternatively, the payout may be increased based on the player's margin of victory.

[0090] Another exemplary rule change is the "Immunity". For example, a wager on a hand **74** comprising a personalized card cannot be collected by the dealer. A loss with this hand **74** may result in a push. In another example, a hand **74** comprising a personalized card can continue to take hits (any card that causes a bust is discarded) until the player has at least 17. In yet another example, a player can choose to surrender a hand **74** and receive 90% of his wager back.

[0091] Another exemplary rule change is the "Replacement Card". For example, a replacement card may be received for any card in a hand **74** comprising a personalized card.

[0092] Another exemplary rule change is the "Do-Over". For example, a player may request that the hand **74** is re-dealt, or that a hit card be discarded and re-dealt if his or her hand **74** comprises a personalized card.

[0093] In accordance with other exemplary and non-limiting embodiments of rule changes, additional bets may be activated. For example, a player may "triple down" on a hand **74** with a personalized card. A player can "Switch Sides" on a hand **74** with a personalized card. For example, a player can switch a bet that is paid if the dealer wins in blackjack (both dealer and player's hand **66**, **74** played according to preset strategy). A player may avail himself of a "Free Double Down". For example, the player is given the option of doubling down on his hand **74** for free. A player may "Piggy-Back". For example, the player may choose to move the bet, or a portion of the bet, to another player's hand **74**. Likewise, he player may get a free duplicate of his own bet to place on another player's hand **74**.

[0094] In accordance with other exemplary and non-limiting embodiments, players with a personalized card in their hand **74** may unlock additional "side bet" options. For example, the player may bet that he or she will win beating a blackjack dealer by more than two (e.g., player gets 20 and dealer gets 17). Players might even customize their own side bets. For example, a player chooses a side bet option when sitting down to start playing. When the personalized card is showing, the player may make a chosen side bet. In another example, when Player A places a bet in a generic "side bet active" circle, the player gets paid a bonus of \$10 if his Blackjack hand **74** features only diamonds. In another

example, when Player B places a bet in side bet in generic “side bet active” circle, he gets paid 5:2 on his bet if the dealer busts.

[0095] A personalized card may also be used to put a player at a disadvantage. Players may accept these negative rule changes in exchange for some other benefit, such as higher payouts. In other embodiments, the player may be forced to take a negative personalized card in addition to a positive personalized card in order to balance the odds. The opposite of many of the positive rule changes discussed above can be utilized or otherwise implemented, or the benefit of a positive rule change may be applied to the dealer’s hand 66 instead of the player’s hand 74.

[0096] Examples of negative rule changes include “Whammies”. For example, any hand 74 with a personalized card automatically loses.

[0097] Another exemplary negative rule change is “Reduced payouts”. For example, the payout on a winning hand 74 comprising a personalized card is decreased by a predetermined amount. In another example, a tax is paid to the house when a personalized card is used. (though the player may have the option to not apply a personalized card when it appears, and then not need to pay the commission or fee).

[0098] Another exemplary negative rule change is “No hits”. For example, any hand 74 with a personalized card cannot receive any hits (e.g., player is forced to stand with initial hand 74).

[0099] Another exemplary negative rule change is “Extended bust limit for the dealer”. For example, the dealer doesn’t bust until “23” when a player’s hand 74 has a personalized lowered bust limit for the player.

[0100] In addition to the rule changes discussed above, exemplary and non-limiting embodiments incorporate value changes. In one embodiment, a personalized card may be worth an alternate value. For example, $K♥=2$. The player may be able to choose any number, even negative numbers. For example, a card may be worth 14. Likewise, a card may be worth a negative value (e.g., “-6”). In another embodiment, the player may be restricted to a set of numbers. For example, the player may change the value of any card to be worth 9, 10, or 11. Likewise, the value of the personalized card may be a duplicate of another card in the player’s hand 74, the dealer’s and, or another player’s hand 74. For example, the player has a 7 in his hand 74, so a personalized card can also count as 7. In such instances, an additional benefit is the enablement of splitting.

[0101] In other exemplary and non-limiting embodiments, cards can have multiple values. For example, a personalized card may be worth the face value OR 1. A personalized card may be worth any odd number. A personalized card may be worth the face value or the negative of the face value (e.g., a $7♥$ may be 7 or -7). A personalized card may adopt a stretch rule, which would allow the card to be worth the face value, face value +1 or face value -1.

[0102] In an exemplary embodiment, a card may be any value, such as a wild card (e.g., $J♦=any\ value\ 1-11$). In yet another embodiment, a personalized card value may be determined based on an accumulated value (e.g., a player’s comp status). For example, a personalized card may be worth 9 if a player has silver level comp status, 10 if the player has gold level comp status, or 11 if a player has platinum level comp status.

[0103] In addition to the rule and value changes discussed above, exemplary and non-limiting embodiments incorporate suit changes. In one embodiment, a personalized card may be worth an alternate suit. Such changes may be useful if a player has a “lucky card”, for example, the $Q♥$. If $Q♠=Q♥$, the player now has two lucky cards in a single deck. Or if a player has an unlucky card, for example, the $7♦$, it can be designated as a $7♣$. Such suit changes are likewise desirable if there is a secondary game or jackpot being played at the table. For example, if a matching pair of cards is revealed in the player’s initial hand 74, the player wins a jackpot. If a player is dealt a $7♦$ and a $7♣$, this can be a winning pair if the player personalized $7♦=7♣$. In exemplary embodiments, a player can change both the value and the suit of a card. For example, $7♦=Q♥$.

[0104] In exemplary and non-limiting embodiments, there may be rules/restrictions governing when the effects associated with a personalized card are applicable. In one exemplary embodiment, the effect associated with a personalized card is only applicable when it appears as part of an initial hand 74 (e.g., it appears as one of the first two cards dealt to a player). For example, Player A declares the $6♣$ initiates “immunity”. In one hand 74, he receives the $6♣$ and the $10♦$ as his starting hand 74. If this hand 74 loses, immunity is activated and the result is a push. In another hand 74, he receives the $6♣$ as a hit card. If this hand 74 loses, immunity is not activated and the player loses his wager.

[0105] In other exemplary embodiments, an effect associated with a personalized card is only applicable when it is dealt to the player who has declared a personalized effect. For example, Player A declares the $9♠$ to be “wild”. In one hand 66, the dealer is dealt a $9♠$, however no change is applied. In another hand 74, Player A is dealt the $Q♦$ and the $9♠$, the result of which is a 21 because of the wild feature. In another example, Player A declares the $J♥$ initiates “double payouts.” In one hand, the player beats the dealer and Player B has a hand showing the $J♥$. Because Player A’s hand does not include the $J♥$, the double payouts rule change is not applied.

[0106] In other exemplary embodiments, whenever a personalized card is dealt, regardless of whose hand it is in, the player’s rule/value change may be given effect. For example, Player A personalizes the $K♥$ to be worth 11. While playing, the dealer is dealt the $K♥$ and the $10♠$. This hand may then be considered a natural (two initial cards totaling 21) when compared to Player A’s hand 74, and possibly when compared to other player’s hands 74 as well. In another example, Player A personalizes the $7♦$ to initiate a “payout booster”. His hand 74 wins and the $7♦$ appears in Player B’s hand 74. As a result, Player A’s payout is doubled. In a related embodiment, Player A and Player B’s payouts are doubled. In yet another similar embodiment, Player A, Player B, and any other winning player at the table are awarded a double payout.

[0107] In an exemplary embodiment, there may be special rules applied when the game is played with a multi-deck card shoe 68. For example, if Player A designates the $8♥$ as a personalized card, (theoretically) he or she might see up to six $8♥$ in one hand 74 (e.g., when using a six deck card shoe 68). In other exemplary embodiments, if more than one personalized card appears, then the effect is multiplied by the amount of personalized cards. For example, if the player receives two “double payout” cards, then the payout is quadrupled. In another exemplary embodiment, if more than one personalized card is dealt, then the effect is cancelled. For example, if

the player receives two “Immunity” cards, then the effect is cancelled and no Immunity is activated.

[0108] In an exemplary and non-limiting embodiment, if more than one personalized card is dealt, then a bonus is awarded to the player. For example, if a player receives two (of the same) personalized cards in their initial hand **74** then he or she gets a \$1000 bonus.

[0109] In an exemplary embodiment, there may be restrictions based on the amount wagered and/or payouts that dictate when a personalized card is applicable. In one such embodiment, there may be a ceiling placed on the amount payable for favorable rule/value changes. For instance, at a 25\$ minimum table, payouts for hands **74** using personalized cards may not exceed \$200. In other exemplary embodiments, there may be a minimum or maximum wager amount necessary for a personalized card to be activated. For example, the player must have wagered at least \$50 for the personalized card to be used. Likewise, for example, the player may not use a personalized card if the wager is greater than \$200.

[0110] In an exemplary embodiment, personalized card may only be good for a predetermined amount of time. For example, a personalized card may only be valid for the duration of a flat rate session, the last ten minutes of a flat rate session, ten minutes every hour starting when a bell rings, for one hour, for one shuffle of the deck or show, for a set number of hands or a set number of cards, etc.

[0111] In other exemplary embodiments, personalized card privileges may be activated based on a defined event. For example, a player may reach “personalized card status” only after gambling over a certain amount of money in a set period of time (e.g. \$500 in a session, \$1000 in a day, during group play after a group gambles \$1000 at a table, etc.)

[0112] In another exemplary embodiment, personalized card privileges may be activated after winning a predetermined number of hands. For example, personalized card privileges may be activated after successfully collecting five designated symbols from different areas of the casino, like a scavenger hunt or only when there are certain number of people at a table, such as only when the table is full.

[0113] In another exemplary embodiment, personalized card privileges may be discontinued based on a defined event. In an exemplary embodiment, a player may purchase a personalized card that is only active for a predetermined amount of hands or rounds. For example, a player may have a personalized card that is good for 50 hands. A counter is decremented each time a hand is dealt may keep track of allotted hands. In another exemplary embodiment, a personalized card is active as long as the player plays at that table. For example, personalized card privileges are awarded until the player stops playing.

[0114] In another exemplary embodiment, personalized cards may be good for one use only, and privileges are discontinued after they have been used. Similarly, a predetermined number of uses other than one use may be implemented. Any of a variety of counting methods may be used. For instance, the player may be given an allotment of Personalized Card Tokens that are forfeited each time a personalized card is used. There may also be counters, perhaps as part of player output device **80**, at each player's station **56** that are decremented for each use of a personalized card. In another exemplary embodiment, when a personalized card is used, the card may be placed next to an indication of the personalized card instead of going into the discard pile. In another example, players may be required to pay a fee, post a bet, etc.

every time a personalized card is used (either before to activate it, or afterwards as compensation for use).

[0115] In some exemplary and non-limiting embodiments, a personalized card is only active for a predetermined amount of card shoes **68**. For example, the personalized card privilege is nullified once the dealer reaches the cut card. In another example, a personalized card may be active throughout the next three card shoes **68**.

[0116] In another exemplary embodiment, cards of certain suit and/or rank may be restricted from value/rule change purchases (e.g., players cannot buy a value/rule change for an Ace).

[0117] At step **210**, a request for a personalized card is received. In exemplary and non-limiting embodiments, it may be necessary to define two specific settings when requesting or configuring a personalized card: (I) There should be a defined rank and or suit of the card that will be personalized and (II) There should be a defined rule, suit or value change that is associated with the selected personalized card. Other settings or attributes of a personalized card may be defined as well (as described above) such as duration of a personalized card and restrictions or terms of applicability.

[0118] In an exemplary embodiment, the request for a personalized card is a physical request. The player may verbally declare a personalized card and an associated value/rule change. For example, the player tells the dealer that he would like 2♣ to be wild. Likewise, the player tells the dealer that he would like the K♥ to be worth 11.

[0119] In an exemplary and non-limiting embodiment, there may be a designated spot on the table felt **52** for the player to indicate a personalized card and an associated value/rule change. The player may have one or more personalized chips, lammers, markers, etc. that he or she places (or has the dealer place) on a specialized spot on the felt. With reference to FIG. **3** there is illustrated an exemplary embodiment of a manner in which specialized spots on the table felt **52** or other area associated with a surface or surfaces of gaming table **50** and personalized markers **30** may be utilized. In this example, players make use of two personalized markers **30**, or tokens, that are associated with their player station (shown as “X”, “Y” and “Z”). One personalized marker **30** is placed on the upper grid **32** on the specialized felt to designate the rank and suit of a personalized card. Another personalized marker **30** is placed on the lower grid **34** to designate a value or rule associated with the personalized card (numbered boxes represent value changes, the others represent rule changes). Additional text and graphics may be added to the table felt **52** to indicate fees, alternate payouts, offsetting rule changes, rules for use of personalized cards, etc.

[0120] In an exemplary embodiment, the player may purchase or configure a personalized card somewhere other than the blackjack table or gaming table **50** at which it is used. In such an instance, the player may be required to provide the dealer with an indication of a personalized card that was set up prior to the player sitting down. For example, the player may purchase or define a personalized card at a kiosk, a cashier's desk, an electronic gaming machine (EGM), etc. The player is then provided with an indication (e.g., a receipt, a ticket, a special chip, a marker or lammer, an electronic indication associated with a player account, etc.) which he or she shows or presents to the dealer. In another example, the player has purchased a personalized card at a blackjack table, which is good for twenty-four hours. When the player leaves that table, the player receives an indication (e.g., a receipt, a

ticket, a special chip, a marker or lammer, an electronic indication associated with a player account, etc.) of the personalized card and its effect, which can be presented and activated at any other table. In yet another example, a player may acquire a voucher or coupon that entitles him to a personalized card. This voucher or coupon may be purchased, available as a promotion, or provided as a complimentary. The player may present the voucher at a game table to receive the personalized card feature. For example, a player may insert a voucher into a bill acceptor on a smart game table **50**.

[0121] In accordance with exemplary embodiments where a personalized card is not purchased or set up at the table where the personalized card is used, a personalized card indication may be required to include information about the selected personalized card and the rule/value change, as well as indication of any restrictions related to applicability (e.g., the duration of the personalized card, wager limits, etc.).

[0122] In another exemplary embodiment, the request for a personalized card is an electronic request. In some embodiments, an interactive player display **80** may allow a player to pick a Personalized Value/Rule Change. Such a display may comprise one or more of the following input/output devices: an LCD, an LED, a CRT, a Plasma Display Panel, a touch screen, a keyboard/keypad, a button (hard or soft), an air mouse, a Wii-type controller, a trackball, a microphone, speakers, etc.

[0123] With reference to FIGS. **4a-4d**, there are illustrated various exemplary embodiments of interactive player displays **80** for use when configuring a personalized card. Assuming the player has already indicated that he/she would like a personalized card, the player is presented with FIG. **4a** on a player display **80** that prompts the player to pick a personalized card rank and suit. After choosing the card to personalize, the player is presented FIG. **4b** which prompts the player to select either a “rule change” or a “value change.” If the player selects a “value change”, then the player is presented with FIG. **4c** which prompts the player to pick a value to associate with the previously selected personalized card. If the player selects “rule change” via the display of FIG. **4b**, then the player is presented with the display shown in FIG. **4d**. As illustrated in FIG. **4d**, the player is prompted to select a desired rule change to be associated with the personalized card. The player may also be provided with a description of the rule change by pressing the “How Does it Work?” button.

[0124] In an exemplary and non-limiting embodiment, a dealer uses an interactive display **58** to input a desired Personal Value/Rule Change (e.g., at his own discretion or according to a player request.) Additional screens may be utilized in order for the casino to receive confirmation of the personalized card settings and/or compensation for the personalized card as discussed below.

[0125] In accordance with an exemplary embodiment, when a player chooses to use a personalized card, the settings (e.g., the personalized card’s rank/suit, the associated rule/value, restrictions, etc.) may be automatically configured by a computer **51** or dealer. For example, the player indicates (either via the player interface or by asking the dealer) that he or she would like a personalized card. Upon indication, (again, provided by the player or the dealer) a table computer **51** randomly generates a set of personalized card settings to be associated with that player. In another example, a personalized card value may be determined using a bonus round or

other mini-game that is played on a smart gaming table **50**. For example, a mini-game is initiated when the personalized card is dealt.

[0126] In another exemplary embodiment, a personalized card may be determined based on an accumulated value (e.g., a counter associated with a player or a number of tokens in a player’s possession). For example, a smart gaming table **50** may keep track of a “personalized card power meter” which is updated based on game play by the player or other players at the game table. When a personalized card is dealt, the value change may be determined based on the accumulated value “personalized card power meter”.

[0127] In an exemplary and non-limiting embodiment, periodic changes may be made automatically to a personalized card’s settings. For example, a new group of personalized card settings may be automatically chosen for each new hand and displayed to the player/dealer via a table display **80**, **58**. For example, a rule/value associated with a personalized card is automatically changed, the personalized card’s rank/suit is automatically changed, a new group of personalized card settings may be automatically chosen for each new card shoe **68**, and/or a new group of personalized card settings may be automatically chosen every ten hands. It is to be appreciated that periodic new player card settings may be chosen manually instead of automatically. While automatic selection may slow down the game, the result is provision of an activity to occupy the player while the dealer shuffles and sets up a new card shoe **68**.

[0128] In an exemplary embodiment, a player may purchase a personalized card that is associated with his or her player account. When the player provides indication of his or her identification or account (e.g., by presenting or swiping a player/credit/ID card), the personalized card is recognized or activated. For example, a player purchases or defines a personalized card at a kiosk thus associating the personalized card with the player’s card account. When the player sits down at a blackjack table and swipes the player’s card, an indication of the personalized card is presented to the dealer via an electronic dealer/table display. In another example, a player purchases or defines a personalized card at another designated location (e.g., with the aid of a casino rep at the player’s club desk). The personalized card settings are then associated with the player’s account. In yet another example, an indication of a player’s personalized card may be physically printed on a player card, identification card, voucher, etc. as well.

[0129] In accordance with some exemplary and non-limiting embodiments, in order to keep the game of blackjack profitable when offering players the option to personalize cards, the casino may charge a fee, alter payouts, or implement rule changes to counter the a player’s advantage.

[0130] In an exemplary embodiment, a player may be charged a tax or a fee for a Personalized Value/Rule Change. When determining an appropriate tax or fee for personalized cards, the casino may calculate the difference in the player’s odds or expected value (EV) as a result of the personalized card. Those of ordinary skill in the art are able to determine how much the odds of blackjack are affected by value and rule changes (e.g., by running a Monte Carlo simulation).

[0131] Other factors may also be considered. Personalized cards may be priced differently based on how frequently a personalized card appears or is expected to appear. (E.g., the odds of a K appearing is 1 in 13, the odds of a K♣ appearing is 1 in 52). For example, a player that purchases a rule change

for red kings (i.e., kings of hearts or diamonds) will most likely be charged more than a player that only purchases a rule change for the K♠.

[0132] Personalized cards may be priced differently based on traditional game implications. For example, certain cards within the deck are considered more valuable to the player's chances, and therefore it may be more expensive to purchase a rule change for one card than another. For instance, Aces are traditionally advantageous cards for the player because of their dual value (1 or 11) and because they are the only card with which a player can make a natural 21. Therefore, changing the value of an already valuable card may be less expensive than changing the value of a less valuable card.

[0133] In another example, some values are more beneficial than others. If a player wants to change the value of a 5♦ to "11" it increases his chances of getting a blackjack (because a card worth 11 is necessary for natural blackjacks). This value change may therefore cost more than if a player changed the 5♦ to be worth "9".

[0134] The size of the player's wager may also be a determining factor when determining odds. For instance, if a player is betting \$10 per hand, it may cost less to purchase a personalized card than if the player were betting \$100 per hand. In other words, the more the player is betting per hand, the more it may cost the player for a personalized card. Thus, when a player sets up a personalized card, he or she may have to bet a minimum or maximum bet amount in order for the personalized card to be active.

[0135] In an exemplary embodiment, when a player makes a request for a Personalized Value/Rule change, a computer may evaluate the player's EV change based on one or more Personalized Value/Rule changes, and configure or otherwise determine a fee based on the change in EV. In some exemplary embodiments, prices for a rule/value change may be predetermined and permanently displayed on the table felt **52**, a tent card, a flyer, an electronic table display, etc. In yet other exemplary embodiments, a flat fee may be paid that enables a personalized card for a specific duration of time. In some embodiments a player may pay periodic fees (e.g., \$1 every 10 hands) to keep a personalized card enabled. In another embodiment, prices for a rule/value change may be configured by a player device, smart table, player interface, etc. In addition, a player may pay a fee using cash, credit, chips, electronic credits, etc. In an alternative embodiment, a player's winnings are taxed (e.g., \$1 for every win is taken by the casino) in lieu of collecting an upfront fee.

[0136] In exemplary and non-limiting embodiments, altered or adjusted payouts may be offered in exchange for a Personal Value/Rule change. For example, a player who gets 3:1 payouts from wins with a personalized card may only receive 0.95:1 payouts on other winning hands. In another example, based on a calculated difference in EV, a player may receive higher or lower payouts. For instance, if the personalized card reduces the player's odds of winning, then he may receive payouts of 1.1:1 for winning hands. Similarly, if the personalized card increases the player's odds of winning, then the player may only receive payouts of 0.9:1 for winning hands. In an exemplary embodiment, an altered payout may only be applied to hands when the personalized card is active. For example, the player may receive normal payouts for most hands, but a reduced payout when his or her personalized card is included in an outcome.

[0137] In some exemplary embodiments, rule changes may be implemented to counter a benefit or a disadvantage result-

ing from a personalized card. In one embodiment, when a player selects a personalized card associated with an advantageous rule or value change, the player must also select a personalized card with a negative rule or value change. The inverse may also apply (i.e., if a player picks a negative rule change, then the player also picks a positive rule change to counter). For example, Player A joins a blackjack table and designates the 6♠ as a wild card. To counter that benefit, Player A must also choose another card that will act as a Whammy card. Therefore, any advantage the player receives from the wild card (which gives him the ability to make any hand **74** into a "21") is countered or balanced by the whammy card (any hand **74** comprising the whammy card automatically loses). In another example, Player A joins a blackjack table and designates the 8♥ to have the alternate value of 11. To counter the benefit, the player may have to change the value of one or more 10's to 5.

[0138] In an exemplary embodiment, when a player selects a personalized card with an advantageous rule or value change, another negative rule or value change may be implemented automatically. For example, Player A joins a blackjack table and designates the 6♠ as a wild card. To counter the benefit, 22 no longer counts as a bust for the dealer, and instead the player and dealer push when the dealer has a count of 22 and the player has a 21. In another example, Player A joins a blackjack table and designates the 8♥ to have the alternate value of 11. To counter the benefit, the Ace of ♠ only counts as 1 (not 1 or 11).

[0139] Static pricing models may be stored in a database **53** (e.g., at a table computer **51**, within a kiosk, etc.) For instance, when a player is offered a personalized card or when the player requests a personalized card, a computer may search a database for an associated offsetting rule change, fee, adjusted payout, etc. and output this information to the player.

[0140] With reference to FIG. 5, there is illustrated an exemplary and non-limiting embodiment of a table **56** as may be stored in database **53** showing fees, rule changes, and adjusted payouts as might be defined for a selected personalized card and rule or value change. As illustrated, column designations include, but are not limited to, a "personalized card rank/suit", a "personalized rule change", a "personalized value change", a "fee/rule change/adjusted payout", and "restrictions". For example, with reference to entry **57**, if a player selects the 2♥ as a personalized card and associates the Whammy rule with the personalized card, the payout is adjusted to be 0.5:1 and the restriction is enforced that personalized card is only applicable for the first three pushes.

[0141] With continued reference to FIG. 2, at step **220**, a personalized card is indicated. Once a personalized card has been chosen and defined, a physical indication of the personalized card may be placed on the table to remind the player and the dealer to apply a personalized card's effect if the personalized card appears. The indication also provides proof that a player purchased the personalized card. Similarly, personalized cards can be indicated using an electronic display. Physical or electronic indicators may display one or more of the following: the suit and rank of one or more personalized cards, the rule or value change associated with a personalized card, the player associated with a personalized card, the duration of the personalized card, and rules or restrictions for applicability of a personalized card.

[0142] In some exemplary and non-limiting embodiments, physical indicators of a personalized card may be utilized. In an exemplary embodiment, designated areas on the gaming

table 50, such as, for example, on the table felt 52, may be used to indicate a personalized card. With reference once again to FIG. 3, an area on the gaming table 50 has been designated to indicate personalized cards. The upper grid 32 on the top indicates the personalized card and the lower grid 34 on the bottom indicates a corresponding value or rule change. Personalized markers 30 placed over boxes on the grid are used indicate a player's selection of a personalized card. For example, two personalized markers 30 have been placed on the grids to represent that player "Y" receives 2:1 payouts on winning hands 74 with the 2♠.

[0143] In an exemplary embodiment, each player station 56 may have either a rule or value change, or a specific card printed on the felt 52. For example, each position may be associated with a specific card and the player sitting at the position has the option of activating and choosing an associated rule or value change. In another exemplary embodiment, specially designed markers 30 may be used to indicate a personalized card. While markings or designs on the felt can be used to indicate static information such as possible personalized card values, rule changes, suits and/or ranks, markers may be used to indicate a player's selection and other specific details. As shown in FIG. 3 and discussed above, for example, personalized markers 30 are used show the specific rank and suit of a personalized card, the associated player and the associated rule/value change.

[0144] With reference to FIGS. 6a-6c, there are illustrated other examples of how a marker might indicate a personalized card. In accordance with such exemplary embodiments, a set of markers 61 may be created to resemble the cards in the deck, one of which may be chosen by the player and placed near his position to indicate a personalized card. For example, with reference to FIG. 6a, there is illustrated one of a set of markers 61 that resemble the cards being used for the game, however the words "PERSONALIZED CARD" have been printed across the front in order to differentiate the marker 61 from the playing cards used in the game and to indicate that the player at the position has designated a personalized card. In this example, Player A has chosen the 9♠ as a personalized card, thus the depicted marker 30 is placed at Player A's position.

[0145] With reference to FIG. 6b, there is illustrated another example of how a marker 30 may be designed and implemented. In this example, Player A has chosen the 9♠ and the diagonal lines across the marker 30 can be used to differentiate the marker 30 from the playing cards used in the game. The dealer may have separate sets of markers 30 (e.g., replica decks) with varied designs. Therefore, the type of design on the marker 30 may be indicative of a variety of variables such as, a value change selected by the player, a rule change selected by the player, a set of restrictions, as well as the duration of the personalized card.

[0146] With reference to FIG. 6c, there is illustrated a version of the example illustrated in FIG. 6b. The "Automatic 21" rule change has been printed across the front of the marker, thereby indicating that the 9♠ will cause a player's hand 74 to automatically total 21. Markers 61 may be printed with other information as well, such as a value change selected by the player, another rule change selected by the player, a set of restrictions, as well as the duration of the personalized card. As noted, any type of marker may be used in conjunction with markings on the table felt 52. The marker 30 illustrated in FIG. 6a, for example, might be placed on a designated area on the felt to indicate more information. In

another example, each player's station 56 may have a variety of designs depicting one or more value or rule changes. Therefore, after a player has picked the 9♠ as the suit and rank of their personalized card, the marker 30 from FIG. 6a may be placed over text representing an associated rule change.

[0147] In an exemplary and non-limiting embodiment, markers may also comprise text, colors, designs, etc to indicate restrictions such as the maximum and minimum bet amounts required for the personalized card to be active. Similarly, a personalized marker 30 may be representative of a personalized card's duration as well. For example, when a player sets up a personalized card, he or she may receive a personalized marker 30 that is printed specifically for that personalized card (much like the receipts or tickets described above). The personalized marker 30 can therefore contain any information necessary and can be placed at the associated player's position.

[0148] In yet another exemplary embodiment, a playing card may be removed from the deck to act as a personalized marker 30. For example, upon being dealt a K♠, a player may indicate to the dealer that he would like this card to be his personalized card (counting as 11 rather than 10). The K♠ may then be moved to a special location on the felt or other surface of the gaming table 50 to act as a personalized marker 30. When subsequent K♠s are dealt, they may be treated as personalized cards. Benefits to casino of using an existing playing card as a personalized card include a reduced likelihood of card being dealt (e.g., only 5 K♠s remaining in a 6-deck shoe) and the simplicity of not needing to stock additional markers 30.

[0149] In accordance with exemplary and non-limiting embodiments, an electronic indication may provide information associated with a personalized card. An electronic display 81 may be provided or retrofitted to a gaming table 50 in order to display information associated with a personalized card. The display 81 may comprise an LCD, an LED, a CRT, a Plasma Display Panel, a touch screen, etc. and may be controlled by a table's computer. In such an embodiment, a player or dealer inputs information associated with a selected personalized card, and this information is output on the display 81. The display 81 may have the capability of depicting more than one personalized card (e.g., all personalized cards at a table may be indicated on the same display). For example, with reference to FIG. 7, there is illustrated an exemplary embodiment of a display 81 placed on or next to a gaming table 50 and used to indicate a personalized card's suit and rank, associated player, associated rule or value change, and associated restrictions and/or duration. As illustrated, the display 81 clearly shows that the player at position 1 has chosen to change the value of the 3♥ to be worth "1". The portion of the sign labeled "Rules" indicates various restriction or duration limitations. In some embodiments, this information may be displayed next to each row corresponding to a specific position or station. For example, separate timers may be added next to each position on the display and used to count down the time remaining for each individual personalized card. In another example, a maximum and minimum bet amount may be indicated next to each position on the display. Therefore, the personalized card is only active if the player has made a wager within the max and min wager limits.

[0150] In another exemplary embodiment, a game machine or smart gaming table 50 may have a dedicated server based (SB) window. An SB window may be used to implement

functionality relating to personalized table card values (e.g., displaying a personalized card).

[0151] In other exemplary embodiments, for instance, a blackjack table may have input devices and displays **80**, **58** designated for the players and/or dealer, as well as a table computer **51**. Once the player or dealer has defined specific details of a personalized card, these details may be displayed using the player/dealer dedicated displays **80**, **58**. For example, Player A may sit down at a blackjack table and set up a personalized card using his or her interactive display **80**. Afterwards, Player A's display **80** indicates information related to the player's personalized card (e.g., suit and rank, restrictions, duration, associated rule or value, etc.) as a reminder to the player. The dealer's display **58** may also indicate this information as well.

[0152] In an exemplary and non-limiting embodiment, an electronic gaming machine (e.g., a video blackjack machine) may be utilized. In such an exemplary embodiment, information related to a personalized card (e.g., suit and rank, restrictions, duration, associated rule or value, etc) may be displayed on a main game display or another display. This information may be displayed permanently or periodically as the player plays the game. For example, a portion of the main game display is dedicated to displaying personalized card information. In another example, a separate display (e.g., the top glass display, a retrofitted display, etc) is dedicated to displaying personalized card information. Visual indication of a personalized card is not always necessary. The step of providing a visual indication acts as proof and a reminder of the personalized card. In some instances, particularly in computerized embodiments, an internal indication may be sufficient for the computer to compare the personalized card with a player's hand **74**. For instance, indication may not be necessary for a player at a video blackjack machine. The indication may therefore only be performed on the appearance of a personalized card in order to remind the player why a particular rule change or value change was enacted. For example, when a personalized card appears and it has a different value than its standard value, the screen displays the top half of the card as what was dealt, and the bottom half as its personalized value. In another example, if the gaming cards are made of electronic paper, they may display their personalized value and their original value simultaneously, while no other indication of the personalized card choice is shown on the table.

[0153] With continued reference to FIG. 2, at step **230**, the appearance and applicability of a personalized card is determined. Once a personalized card has been defined and indicated, dealt cards are compared with the indication, described above, to determine if a personalized card appears in a player's or dealer's hand **74**, **66**. Additional steps may also be required to determine if an associated value or rule change may be used based on various restrictions or the duration set when setting up the personalized card.

[0154] In an exemplary and non-limiting embodiment, the player and/or dealer may visually compare the cards dealt to a personalized card indication. For example, once a dealer deals an initial hand, the player and/or the dealer may then compare the cards dealt with those identified on the personalized card indicator, such as on display **80**. In other exemplary embodiments, a computer **51** may compare the cards dealt with a stored indication of a personalized card. For example, a table computer **51** stores an indication of a player's personalized card in its memory or database **53** when the player sets up a personalized card at a smart table **50**. Then,

when the cards are dealt, their suit, rank, and the position receiving each card is detected by a sensor **59** (e.g., RFID cards may be detected by RFID sensors in the table, overhead cameras may record a card's rank and suit, optical scans of cards dispensed from an intelligent shoe may record a card's suit and rank, etc). This information is compared with the stored personalized card information. In another example, a game using electronic representations of cards (e.g., an EGM or an automated electronic gaming table) may compare the rank and suit of the cards dealt with stored indications of personalized cards.

[0155] In accordance with exemplary embodiments, there may be rules/restrictions that determine when a personalized card is applicable as well as limits governing the duration of a personalized card as discussed above. In such embodiments, the player and/or the dealer may visually confirm that a card is applicable based on a set of restrictions and/or duration information. In other embodiments, restrictions and/or durations are monitored by an application stored on the game's hardware (e.g., stored on a video blackjack machine, stored on a smart table computer **51**).

[0156] In an exemplary embodiment, rules and restrictions governing applicability or duration of a personalized card may be standard and applicable to all personalized cards, and are therefore easy to enforce. For example, a personalized card must appear in the associated player's hand **74** to be active. A dealer or application would therefore only compare each player's individual hand **74** to each player's associated personalized card (instead of comparing all of the cards on the table to all personalized cards). In another example, a personalized card is only applicable if it appears in the player's initial hand **74**. A dealer or application would therefore only look for a personalized card after the initial deal. In yet another example, all personalized cards are applicable for one entire card shoe **68**. When the cut card is dealt, players may choose to renew personalized cards, pick a new personalized card, or play without a personalized card.

[0157] In an exemplary embodiment, rules/restrictions governing the applicability or duration of a personalized card may be different for each player. In such embodiments, dealers may have to be careful to check the rules/restrictions associated with a personalized card before determining applicability. For example, personalized cards may only be applicable for a predetermined duration. Dealers and applications may have to check that a personalized card has not expired before determining applicability. In another example, personalized cards may only be applicable if a bet amount is within a predetermined minimum and maximum amount. Dealers and applications may have to check that a player's wager is within the approved range before determining applicability.

[0158] In accordance with exemplary and non-limiting embodiments, the applicability of a personalized card may be determined by:

[0159] a dealer—For example, a dealer may perform a visual comparison as describe above.

[0160] a player—For example, it may be a player's responsibility to notify a dealer that a personalized table card value is applicable.

[0161] a smart table **50**—For example, a smart table **50** (using a camera system or smart shoe) may determine when a personalized card is dealt. Based on this determination, the smart table **50** may either alert the dealer or

player to the event, or apply a value or rule change associated with the personalized card as described more fully below.

[0162] With continued reference to FIG. 2, at step 240 the associated rule or value change is applied. In an exemplary embodiment, a person playing or operating the game (e.g., the player, the dealer, the pit boss, etc) may apply a rule or value change associated with a personalized card. For example, if the associated rule change for a personalized card is an Automatic Win, then the dealer may immediately pay the player's wager (similar to how natural blackjacks are handled). In another example, if the associated value change for a personalized card is "11" then the dealer may verbally remind the player that the card is worth "11" when it appears, after dealing, at the player's turn, etc. In another example, if the associated rule change for a personalized card is a 2x Payout Boost, then the dealer may verbally remind the player of the rule change. If the player wins the hand, then the dealer will multiply the payout by 2. No change takes place if the player loses the hand.

[0163] An application operating on, for example, computing device 51, may interact with a smart table 50 or an EGM to provide a warning or alert for the player and/or dealer regarding a rule or value change via an output device, such as dealer display 58 or player display 80. The warning or alert may comprise: a text box, a pop up box, a recorded audio message, a beep, siren, or other audible sound, a message displayed on an alternate screen, etc. The output device may comprise an LCD, an LED, a CRT, a Plasma Display Panel, a touch screen, speakers, etc. For example, if the associated value change for a personalized card is "Wild", a dealer display 58 may alert the dealer to ask the player to verbally declare a value for the wild card. Similarly, a player's display 80 may prompt the player to pick a value from a displayed range and indicate his or her choice by touching the screen in the appropriate spot. In another example, if the associated rule change for a personalized card is Immunity, an alert may be output on the display screen of a video blackjack machine. The alert may be a text box that pops with the following message: "Your Personalized Card Has Been Dealt! The Immunity Rule Allows You To Keep Your Wager Even If You Lose This Hand!"

[0164] In accordance with exemplary and non-limiting embodiments, an alert that is output by a smart table 50 may indicate one or more of the following: (1) that a personalized card has been dealt (e.g., buzzer or blinking light), (2) which card is the personalized card (e.g., highlight card onscreen on player display 80), (3) which player received the personalized card (e.g., indicated on dealer display 58), and/or (4) how the personalized card should be applied (e.g., rules printed on dealer display 58, highlighted on display 81, or new value displayed on player display 80).

[0165] In an exemplary embodiment, an application operating on a smart table 50 or an EGM may automatically apply a rule or value change associated with a personalized card. For example, if the associated rule change for a personalized card is a Whammy, then a video blackjack machine may automatically take the player's wager and discard the hand 74. A message may be output to the player letting him or her know why the hand 74 lost. In another example, if the associated value change for a personalized card is "11", the hand total may automatically be changed to account for the alternate value. In another embodiment, the hand total may initially be displayed using the personalized card's original

value, then an animation may be displayed to change the initial total in order to account for the personalized card's value change.

[How Does "Applicability" Differ From "Activation"?]

[0166] In an exemplary embodiment, personalized cards may be used in a flat rate session of blackjack. For example, players may purchase personalized cards at the beginning of a session and the card may be applicable throughout the entire session. One advantage to including personalized cards in a session based blackjack format is that the cost of a personalized card may be built into the price of the session. Therefore, a thirty hand session that would normally cost \$20 may instead cost \$23 if the player elects to use a personalized card. For example, when setting up a flat rate session for thirty hands of blackjack, Player A opts to associate an Automatic Win rule with the K♠. Player A pays \$20 for the session and \$1.50 for the personalized card. If Player A receives the K♠ at any time during the session, the player's hand 74 wins automatically.

[0167] An advantage arising from including personalized cards in a session based blackjack format is that, since the casino and the player can anticipate playing a predetermined amount of hands, the casino can offer "packages" of personalized cards. A package of personalized cards may comprise one or more personalized cards that are activated or deactivated based on a set of triggers within a session. In some embodiments, players may be able to choose a personalized card's suit, rank, associated rule or value change, restrictions and duration. In other embodiments, these variables may be determined by the casino.

[0168] In an exemplary embodiment, a personalized card "package" may comprise a plurality of personalized cards that gradually become active as the player progresses through the session. In such a situation, the player's odds of winning get better as the player gets closer to the session's conclusion. For example, Player A purchases a thirty hand session of blackjack with a package of personalized cards. The personalized cards are defined as any face card of the diamond suit is worth 11. At the beginning of the session, none of the personalized cards are activated, however the J♦ is activated once the player has played ten hands. The Q♦ and K♦ are also activated once the player has completed twenty hands. Thus, the player plays the first third of the session with no advantage, gains a small advantage during the second third of the session, and has the greatest advantage in the last third of the session.

[0169] In another exemplary embodiment, a personalized card "package" may comprise a plurality of personalized cards that are all active at the start of the session, and gradually deactivate as the player progresses through the session. In such a situation, the player's odds of winning are highest at the beginning of the session, and decrease as the player gets closer to the session conclusion. For example, Player A purchases a 30 hand session of blackjack with a package of personalized cards. The personalized cards are defined as any face card of the diamond suit is worth 11. At the beginning of the session, all of the personalized cards are active, however the Q♦ and K♦ are both deactivated once the player has played 10 hands. Then, the J♦ is also deactivated once the player has completed 20 hands. Thus, the player plays the first third of the session with the greatest advantage, loses some of the advantage during the second third of the session, and has no advantage during the final third.

[0170] In another exemplary embodiment, a package of personalized cards may comprise a plurality of personalized cards that are activated based on the game's outcomes. For example, personalized cards may become active based on how much a player has lost or won in a session. In another example, a player purchases a package of personalized cards. Once the player has lost \$20, one of the personalized cards becomes active. If the player loses another \$20, another personalized card may become active, etc. In yet another example, a player purchases a package of personalized cards. If the player wins \$20, then one of the personalized cards becomes active. If the player wins another \$20, another personalized card becomes active, etc.

[0171] In some exemplary embodiments, personalized cards may become active based on individual or a combination of outcomes. For example, a player purchases a package of personalized cards. Each time the player and the dealer tie, one of the personalized cards becomes active. In another example, a player purchases a package of personalized cards. If the player loses five or more hands in a row, the personalized cards become active. In yet another example, a player purchases a package of personalized cards. If the player wins four or more hands in a row, the personalized cards become active.

[0172] In another exemplary embodiment, a player may buy a rank, a Whammy and/or a wild card whereby the suit defines a rule change, such as a balancing rule change. For example, a player buys a rank of cards (e.g., 2,3,4,5,J,Q,K etc.) and the suit of that card defines the value or rule change that is applied. In another example, a player buys the Jacks. From then on, every Jack that the player gets in his hand 74 could have good or bad implications based on the suit. For instance, a red Jack may count as a wild card, and a black Jack may count as a whammy. In some exemplary embodiments, each separate suit may have an associated value or rule change. For example, a player buys the Kings of a deck or decks. From then on, K♠ is a whammy, K♥ is a wild card, K♣ is a 1.5× payout booster, K♦ is a -0.5 payout buster.

[0173] In an exemplary embodiment, a Rule/Value change is applied to a defined combination of a plurality of cards. For example, a pair of kings may trigger an automatic win. In another example, if all cards in dealer's/banker's hand 66 are spades, the hand automatically loses. In yet another example, an initial hand consisting of two aces counts as a blackjack.

[0174] In another exemplary embodiment, a dealer deals one card at the beginning of the shoe, and players can choose whether or not to designate the dealt card with a Personalized Value/Rule change. For example, after shuffling, the dealer deals the top card: 7♣. This card is placed in a designated area on the gaming table 50, such as the felt, to indicate it is a special card, and players may choose whether or not they want to designate a Personalized Value/Rule Change. In another example, a separate deck or shoe 68 may be available such that the player can pick a specific card from the deck, which is placed at the player's position to indicate a Personalized Value/Rule change. For instance, an off colored deck is placed in front of the player. The player cuts the deck and turns over the top card. This card is placed in a designated area at the player's position and acts as a personalized card. The deck is retrieved by the dealer and handed to the next player.

[0175] In an exemplary embodiment, a player may have multiple Personalized Value/Rule Changes. In accordance with such embodiments, a smart gaming table 50 may or may be used to keep track, record, indicate, configure, etc. a plu-

ality of Personalized Value/Rule Changes associated with a particular player. For example, a player has one or more cards with offsetting value/rule change that are monitored by a smart table 50 capable of recognizing when such cards are dealt, and indicating, or even applying, a Personalized Value/Rule Change. In one exemplary embodiment, a player may be issued a plurality of personalized cards, and the player may have to select which card to use before each deal.

[0176] In accordance with yet another exemplary embodiment, Personalized Value/Rule Changes may be dynamically changed. For example, a player may be able to change a personalized card rank and/or suit at the start of every hand 74. In another example, a player may use a touch screen between each hand 74 to indicate which card is a designated wild card. If the player takes no action before the deal, a previously selected personalized card is used. In one exemplary embodiment, a display may change the wild or whammy card automatically between each hand 74. For example, a player display cycles through random cards ranks and suits between each hand 74. When the display stops cycling, the resulting displayed card is used as that player's personalized card.

[0177] In another exemplary embodiment, a pair of offsetting cards is selected at random. For example, a player presses a button and the K♥ is designated and displayed as a wild card, and the 7♣ is designated and displayed as a whammy. In another exemplary embodiment, the player may use a button to control a random number generator that causes a newly selected random card to be displayed. The displayed card becomes that player's personalized card. The value of a personalized card may be determined based on: other cards dealt, identity of a player, selection by the player, time of day, or an electronic random number generator. For example, a bonus round on a smart table may be used to determine the alternate value of a personalized card that is dealt.

[0178] In another exemplary embodiment, a personalized card may be selected for the entire table (i.e., same personalized card for everybody at the table). In an exemplary embodiment, players may choose Whammies or Wilds for other players. For example, a player may choose which card becomes his neighbor's Whammy card. In some embodiments, the value of his card may remain unknown until it appears in the player's hand 74. Then the player is surprised when his personalized card appears and "WHAMMY!" he loses the hand 74.

[0179] While described above in exemplary embodiments with respect to, generally, to the game of blackjack, the invention is drawn broadly to encompass any and all games involving the use of cards or other indicia of game play including, but not limited to, baccarat, poker, pai gow and roulette.

What is claimed is:

1. A method comprising:

receiving a request for at least one personalized card from a player;
 associating at least one value change with the at least one personalized card;
 providing an indication of the at least one value change; and
 enabling a game play in accordance with the value change.

2. The method of claim 1 wherein the at least one value change comprises a value different from a traditional value of the personalized card.

3. The method of claim 1 wherein the at least one value change is chosen by the player.

4. The method of claim 1 further comprising associating at least one rule change with the at least one personalized card.

5. The method of claim 1 wherein each of the at least one value change is deactivated after a predetermined period of time associated with the at least one value change.

6. The method of claim 1 wherein each of the at least one value change is activated after a predetermined period of time associated with the at least one value change.

7. The method of claim 1 wherein the at least one value change is activated upon the occurrence of a trigger.

8. The method of claim 7 wherein the trigger comprises an outcome of the game play.

9. The method of claim 1 wherein providing comprises providing the indication via a physical indicator.

10. The method of claim 9 wherein the physical indicator forms a portion of a game table.

11. The method of claim 10 wherein the physical indicator comprises a first grid comprising elements each corresponding to each of the at least one personalized card and a second grid comprising elements each corresponding to at least one of the at least one value change and a rule change.

12. The method of claim 11 wherein at least one object is placed on at least one of the first grid and the second grid to indicate at least one of a personalized card and at least one of a value change and a rule change.

13. The method of claim 12 wherein the at least one object is a token.

14. The method of claim 12 wherein the at least one object is a playing card.

15. The method of claim 1 wherein game play comprises at least one of blackjack and baccarat.

16. The method of claim 15 wherein the game play occurs on a smart table.

17. The method of claim 1 wherein game play occurs on an electronic gaming machine.

18. The method of claim 1 wherein the value change comprises at least one of a rank and a suite of at least one personalized card.

19. The method of claim 1 wherein the value change is specified in the request.

20. The method of claim 1 wherein the value change is determined by an electronic apparatus.

21. The method of claim 20 wherein the value change is at least partially randomly determined.

22. The method of claim 1 wherein the game play comprises a flat rate blackjack session.

23. The method of claim 22 wherein the flat rate blackjack session is comprised of a plurality of segments each of an associated predetermined length.

24. A computer readable medium storing instructions configured to direct a processor to perform a method comprising:
receiving a request for at least one personalized card from a player;
associating at least one value change with the at least one personalized card;
providing an indication of the at least one value change;
and
enabling a game play in accordance with the value change.

25. An apparatus comprising:
receiving a request for at least one personalized card from a player;
associating at least one value change with the at least one personalized card;

providing an indication of the at least one value change;
and

enabling a game play in accordance with the value change.

26. A method comprising:

receiving a request for at least one personalized card from a player;

associating at least one rule change with the at least one personalized card in exchange for consideration;

providing an indication of the at least one rule change; and
enabling game play in accordance with the rule change.

27. The method of claim 26 wherein the rule change comprises an automatic win rule.

28. The method of claim 26 wherein each of the at least one rule change is deactivated after a predetermined period of time associated with the at least one rule change.

29. The method of claim 26 wherein each of the at least one rule change is activated after a predetermined period of time associated with the at least one rule change.

30. The method of claim 26 wherein the at least one rule change is activated upon the occurrence of a trigger.

31. The method of claim 30 wherein the trigger comprises an outcome of the game play.

32. The method of claim 26 wherein an amount of the consideration is determined based upon an expected value of the player as a result of the at least one personalized card.

33. The method of claim 26 wherein an amount of the consideration is determined based upon an expected frequency of the appearance of the at least one personalized card during game play.

34. The method of claim 26 wherein an amount of the consideration is determined based upon an amount of a player's wager.

35. The method of claim 26 wherein an amount of the consideration is predetermined and displayed to the player.

36. The method of claim 26 wherein the consideration comprises a tax applied to a winning of the player.

37. The method of claim 26 wherein the associated at least one rule change is an advantageous rule change.

38. The method of claim 26 wherein the associated at least one rule change is a disadvantageous rule change.

39. The method of claim 26 wherein associating comprises the player associating both an advantageous and a disadvantageous rule change with the at least one personalized card.

40. The method of claim 26 wherein associating comprises the player associating the at least one rule change with the at least one personalized card.

41. The method of claim 40 wherein associating comprises automatically associating a disadvantageous rule change with the player associated at least one rule change.

42. A computer readable medium storing instructions configured to direct a processor to perform a method comprising:
receiving a request for at least one personalized card from a player;

associating at least one rule change with the at least one personalized card in exchange for consideration;

providing an indication of the at least one rule change; and
enabling game play in accordance with the rule change.

43. An apparatus comprising:

receiving a request for at least one personalized card from a player;

associating at least one rule change with the at least one personalized card in exchange for consideration;

providing an indication of the at least one rule change; and
enabling game play in accordance with the rule change.

44. A method comprising:
 receiving a request for at least one personalized card from a player;
 associating at least one of a value change and a rule change with the at least one personalized card;
 enabling at least one game play in accordance with the at least one of a value change and a rule change; and
 determining whether the at least one personalized card is applicable.
45. The method of claim 44 wherein determining comprises determining a segment of a flat rate session comprising a plurality of the at least one game play.
46. The method of claim 45 wherein the at least one personalized card is determined to be applicable based in part upon the segment.
47. The method of claim 44 wherein determining comprises determining whether the at least one personalized card appears in a player's initial hand.
48. The method of claim 44 wherein determining comprises determining a shoe from which the at least one personalized card is dealt.
49. The method of claim 44 wherein determining comprises determining a duration during which the at least one personalized card is applicable.
50. The method of claim 44 wherein determining comprises determining a minimum bet and a maximum bet associated with the applicability of the at least one personalized card.
51. The method of claim 44 wherein the determining is performed by a dealer.
52. The method of claim 51 wherein the dealer determines the applicability of the at least one personalized card based upon a visual inspection.
53. The method of claim 44 wherein the determining is performed by the player.
54. The method of claim 44 wherein the determining is performed by a smart table.
55. The method of claim 44 further comprising providing an indication of the applicability of the at least one personalized card.
56. The method of claim 55 wherein the indication comprises a verbal reminder.
57. The method of claim 55 wherein the indication comprises an alert delivered via an output device.
58. The method of claim 57 wherein the alert comprises at least one of a text box, a pop up box, an audio message, a beep, and a siren.
59. The method of claim 57 wherein the output comprises an LCD, a light emitting diode, a Cathode ray tube, a plasma display panel, a touch screen and a speaker.
60. A computer readable medium storing instructions configured to direct a processor to perform a method comprising:
 receiving a request for at least one personalized card from a player;
 associating at least one of a value change and a rule change with the at least one personalized card;
 enabling at least one game play in accordance with the at least one of a value change and a rule change; and
 determining whether the at least one personalized card is applicable.
61. An apparatus comprising:
 receiving a request for at least one personalized card from a player;
 associating at least one of a value change and a rule change with the at least one personalized card;
 enabling at least one game play in accordance with the at least one of a value change and a rule change; and
 determining whether the at least one personalized card is applicable.
62. A method comprising:
 receiving a request for at least one personalized card from a player;
 identifying at least one of a rank, a color, and a suit for the at least one personalized card;
 identifying at least one of a value change and a rule change associated with the at least one personalized card;
 providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card;
 enabling at least one game play in accordance with the at least one of a value change and a rule change; and
 applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.
63. The method of claim 62 wherein the at least one value change comprises a value different from a traditional value of the personalized card.
64. The method of claim 62 wherein the at least one value change is chosen by the player.
65. The method of claim 62 wherein each of the at least one value change is deactivated after a predetermined period of time associated with the at least one value change.
66. The method of claim 62 wherein each of the at least one value change is activated after a predetermined period of time associated with the at least one value change.
67. The method of claim 62 wherein the at least one value change is activated upon the occurrence of a trigger.
68. The method of claim 67 wherein the trigger comprises an outcome of the game play.
69. The method of claim 62 wherein providing comprises providing the indication via a physical indicator.
70. The method of claim 69 wherein the physical indicator forms a portion of a game table.
71. The method of claim 70 wherein the physical indicator comprises a first grid comprising elements each corresponding to each of the at least one personalized card and a second grid comprising elements each corresponding to at least one of the at least one value change and a rule change.
72. The method of claim 71 wherein an object is placed on at least one of the first grid and the second grid to indicate at least one of a personalized card and at least one of a value change and a rule change.
73. The method of claim 72 wherein the object is a token.
74. The method of claim 72 wherein the object is a playing card.
75. The method of claim 62 wherein game play comprises at least one of blackjack and baccarat.
76. The method of claim 75 wherein the game play occurs on a smart table.
77. The method of claim 62 wherein game play occurs on an electronic gaming machine.
78. The method of claim 62 wherein the value change comprises at least one of a rank and a suite of at least one personalized card.
79. The method of claim 62 wherein the value change is specified in the request.

80. The method of claim **62** wherein the value change is determined by an electronic apparatus.

81. The method of claim **80** wherein the value change is at least partially randomly determined.

82. The method of claim **62** wherein the game play comprises a flat rate blackjack session.

83. The method of claim **82** wherein the flat rate blackjack session is comprised of a plurality of segments each of a predetermined length.

84. A computer readable medium storing instructions configured to direct a processor to perform a method comprising:
receiving a request for at least one personalized card from a player;
identifying at least one of a rank, a color, and a suit for the at least one personalized card;
identifying at least one of a value change and a rule change associated with the at least one personalized card;
providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card;
enabling at least one game play in accordance with the at least one of a value change and a rule change; and

applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.

85. An apparatus comprising:
receiving a request for at least one personalized card from a player;
identifying at least one of a rank, a color, and a suit for the at least one personalized card;
identifying at least one of a value change and a rule change associated with the at least one personalized card;
providing an indication of at least one personalized card and at least one of a value change and a rule change associated with the at least one personalized card;
enabling at least one game play in accordance with the at least one of a value change and a rule change; and
applying the at least one of a value change and a rule change associated with the at least one personalized card upon the occurrence of the at least one personalized card.

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