US 20140256393A1

(19) **United States**

(12) **Patent Application Publication**

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(10) **Pub. No.: US 2014/0256393 A1**

(43) **Pub. Date: Sep. 11, 2014**

(54) **SYSTEMS AND METHODS FOR PLAYING A GAME OF CHANCE INCLUDING A PLURALITY OF PATTERNS**

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(21) Appl. No.: **13/788,079**

(22) Filed: **Mar. 7, 2013**

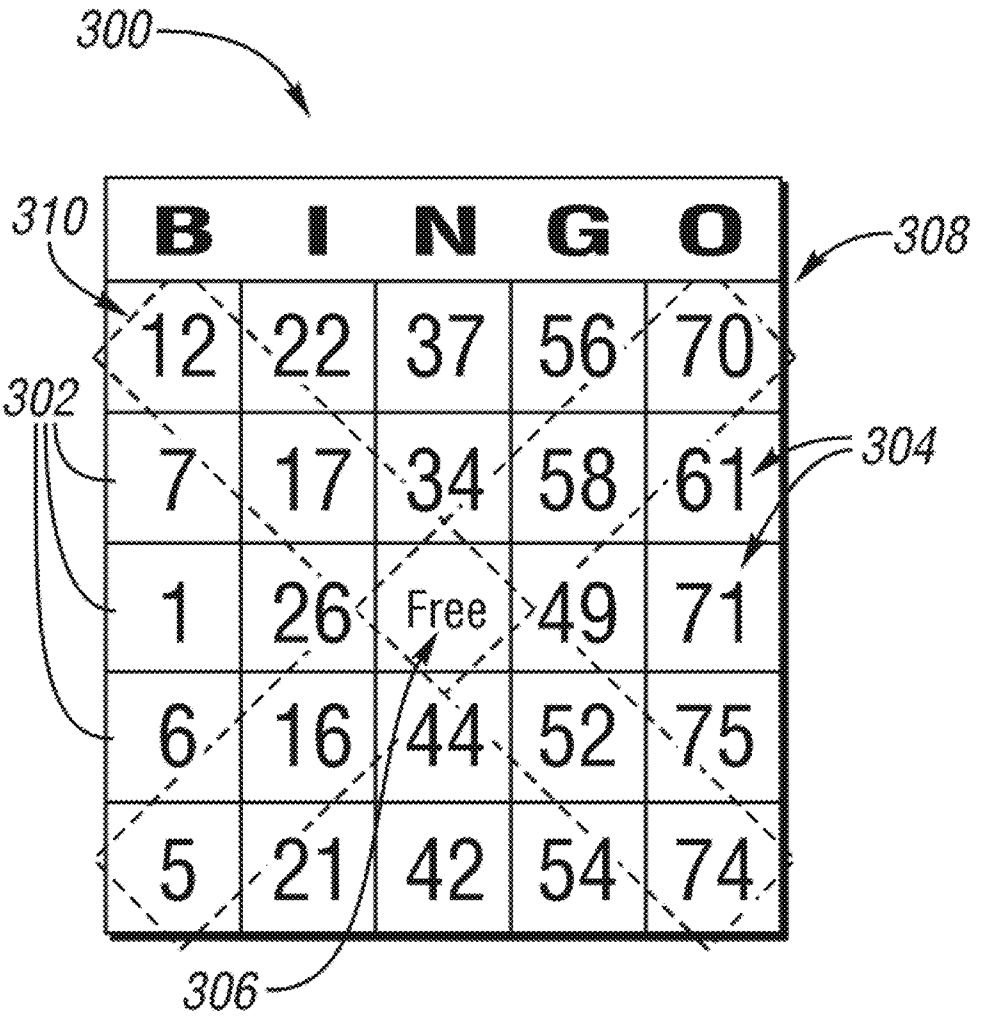
Publication Classification

(51) **Int. Cl.**
A63F 3/06 (2006.01)

(52) **U.S. Cl.**
CPC ***A63F 3/0645*** (2013.01); ***A63F 3/062*** (2013.01)
USPC **463/17**

(57) **ABSTRACT**

Systems and methods enable a player to play a game of chance. The methods include providing a player card to be used with the game, wherein the player card includes a predetermined number of spaces for displaying player indicia. A processor enables a player to select one of a plurality of available patterns for the player card, wherein a plurality of the spaces is included within each of the available patterns. The processor also enables the player to select a plurality of player indicia for the selected pattern, wherein each player indicia is displayed within one of the spaces included within the selected pattern. A plurality of house indicia is randomly selected. The processor determines whether the house indicia matches the selected player indicia for the selected pattern, and determines a payout based upon the determination whether the house indicia matches the selected player indicia for the selected pattern.



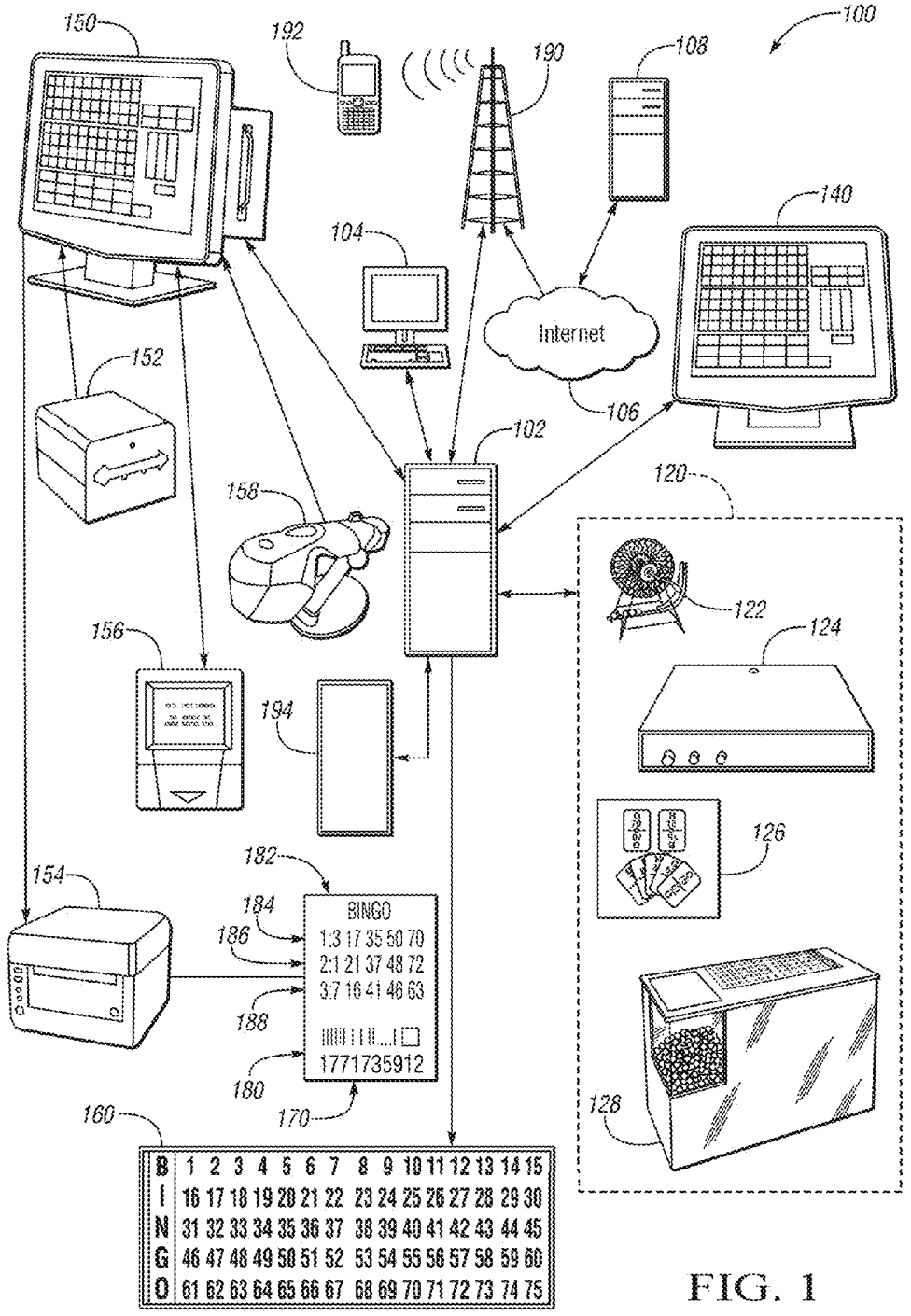

100
150
192
190
108
140
104
Internet
106
152
102
120
158
122
124
156
194
126
182
154
184
186
BINGO
1 3 17 35 50 70
2 1 21 37 48 72
3 7 16 41 46 63
188
1771735912
180
170
160
128
B 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
I 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
N 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45
G 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
O 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75

FIG. 1

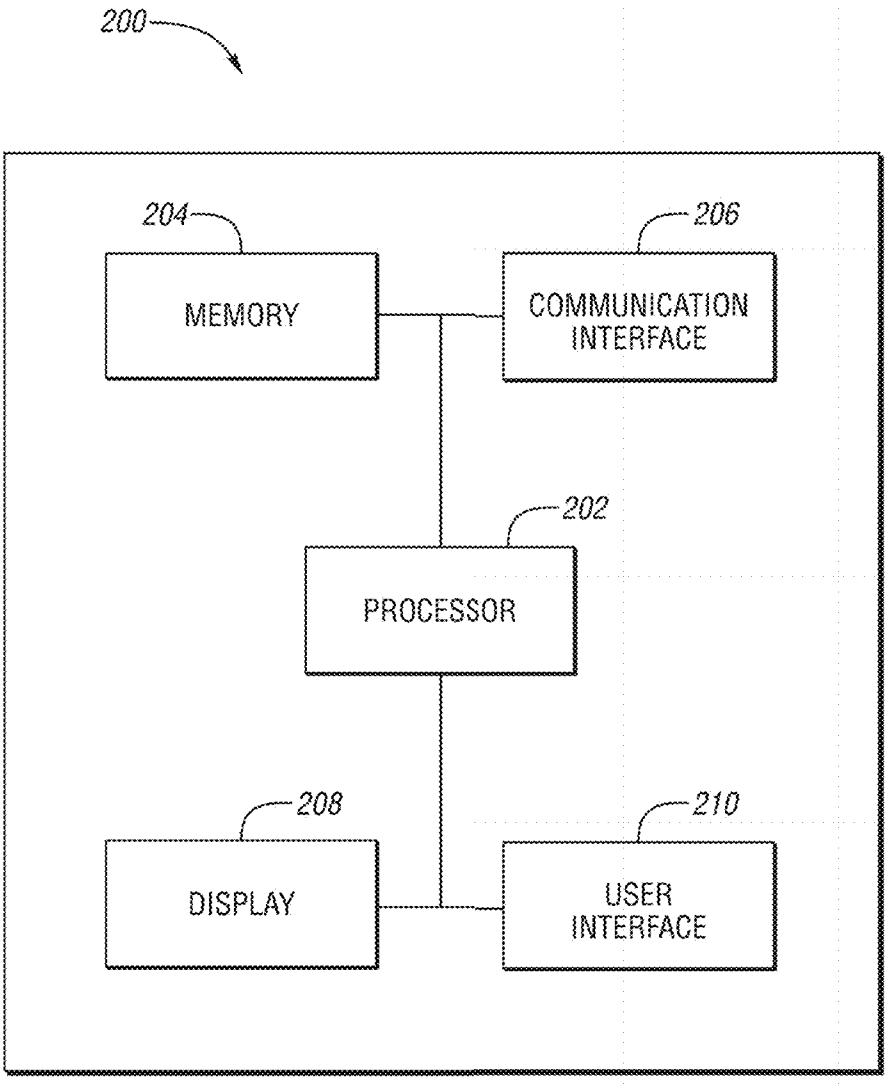

200
204
MEMORY
206
COMMUNICATION INTERFACE
202
PROCESSOR
208
DISPLAY
210
USER INTERFACE

FIG. 2

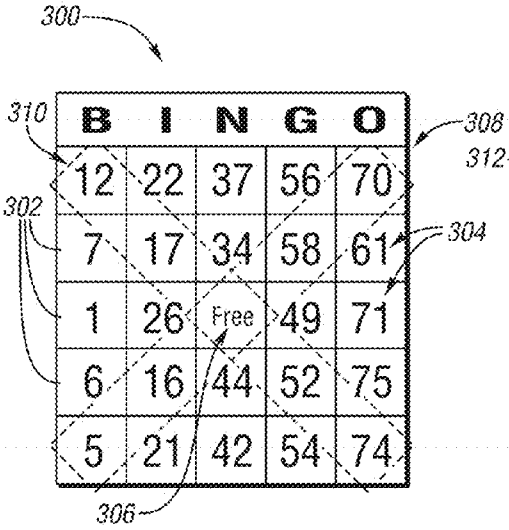


FIG. 3A

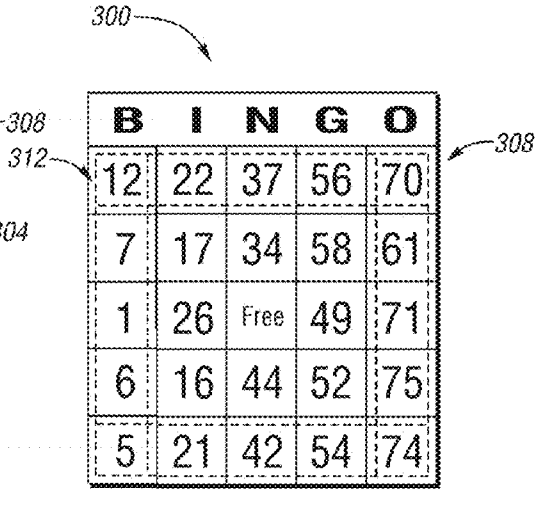


FIG. 3B

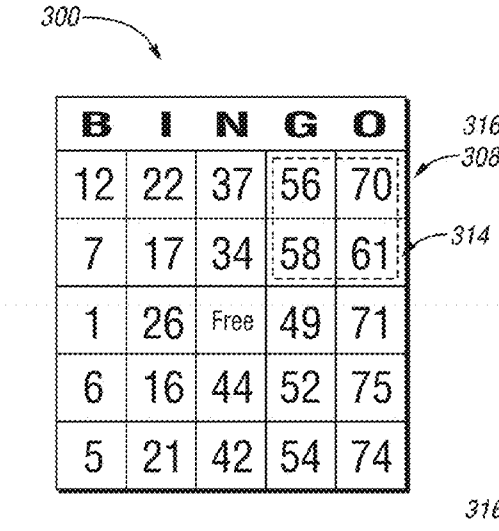


FIG. 3C

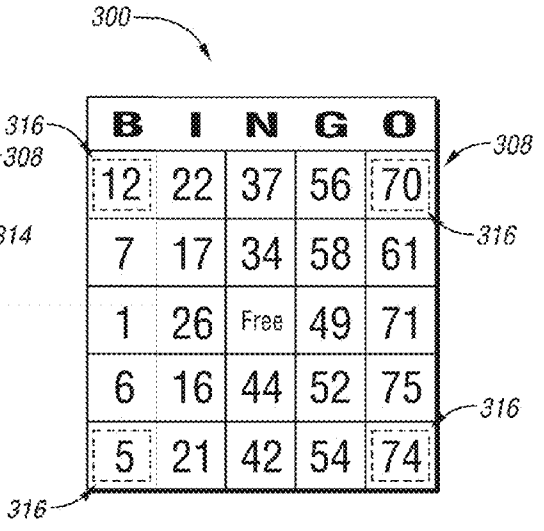


FIG. 3D

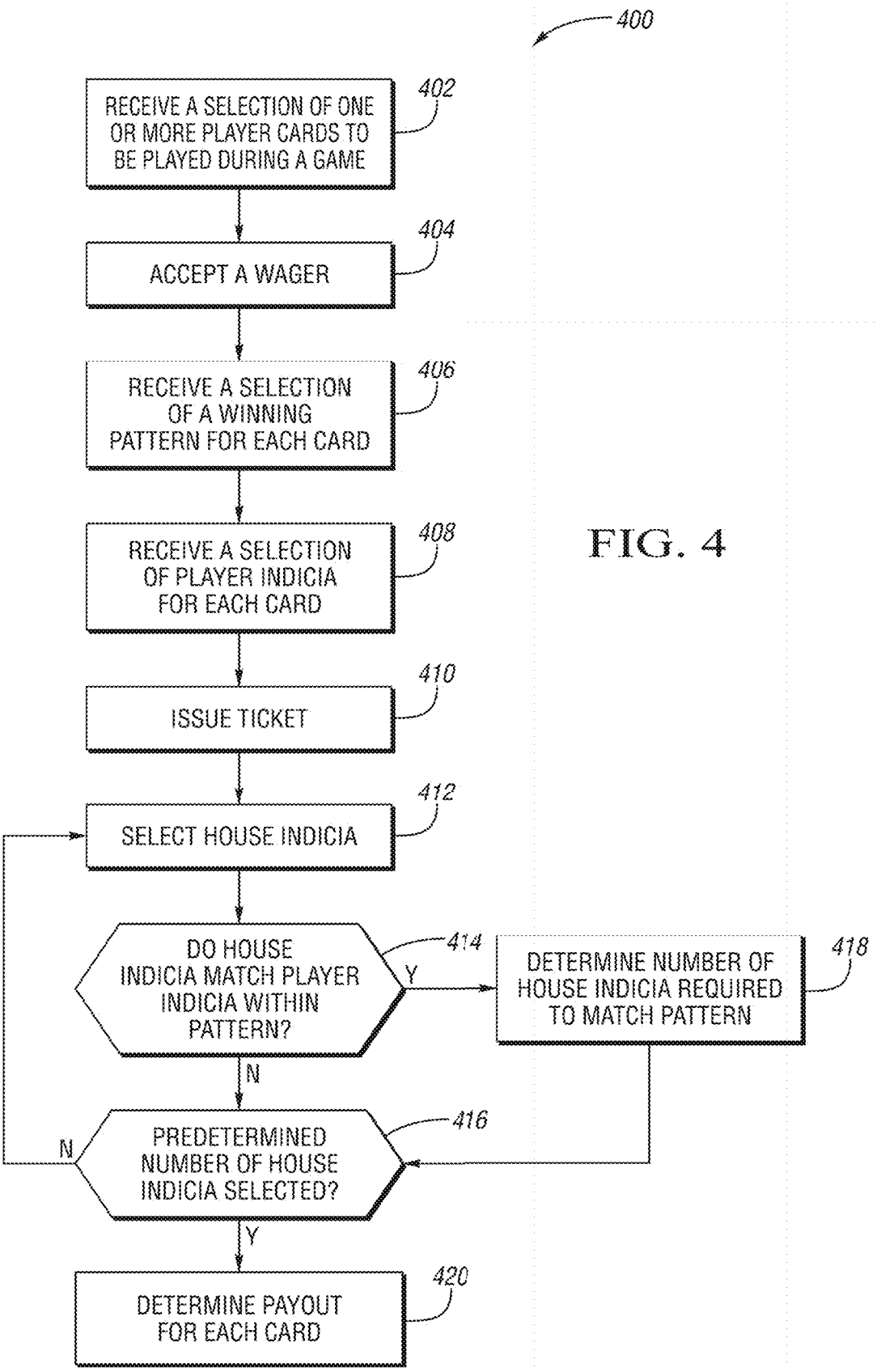

400
RECEIVE A SELECTION OF ONE OR MORE PLAYER CARDS TO BE PLAYED DURING A GAME
402
ACCEPT A WAGER
404
RECEIVE A SELECTION OF A WINNING PATTERN FOR EACH CARD
406
RECEIVE A SELECTION OF PLAYER INDICIA FOR EACH CARD
408
ISSUE TICKET
410
SELECT HOUSE INDICIA
412
DO HOUSE INDICIA MATCH PLAYER INDICIA WITHIN PATTERN?
414
Y
DETERMINE NUMBER OF HOUSE INDICIA REQUIRED TO MATCH PATTERN
418
N
PREDETERMINED NUMBER OF HOUSE INDICIA SELECTED?
416
N
Y
DETERMINE PAYOUT FOR EACH CARD
420

FIG. 4

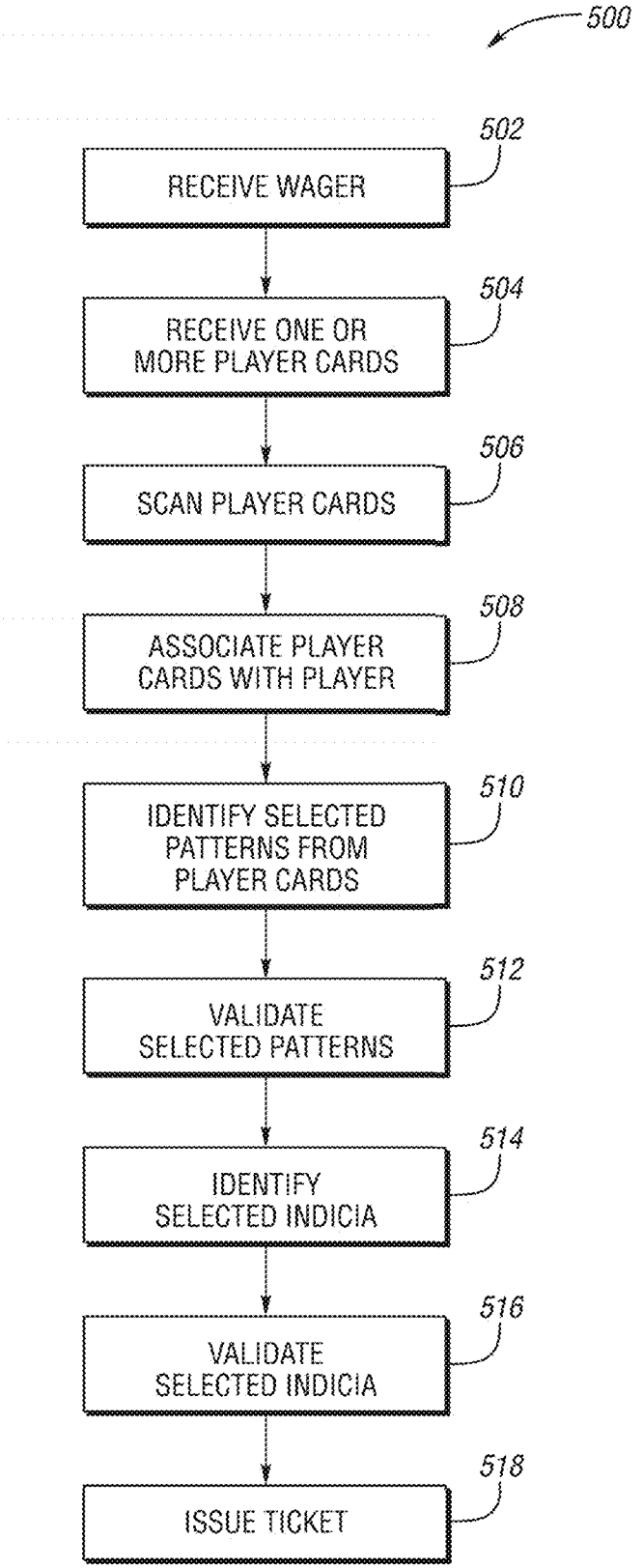

500
502
RECEIVE WAGER
504
RECEIVE ONE OR MORE PLAYER CARDS
506
SCAN PLAYER CARDS
508
ASSOCIATE PLAYER CARDS WITH PLAYER
510
IDENTIFY SELECTED PATTERNS FROM PLAYER CARDS
512
VALIDATE SELECTED PATTERNS
514
IDENTIFY SELECTED INDICIA
516
VALIDATE SELECTED INDICIA
518
ISSUE TICKET

FIG. 5

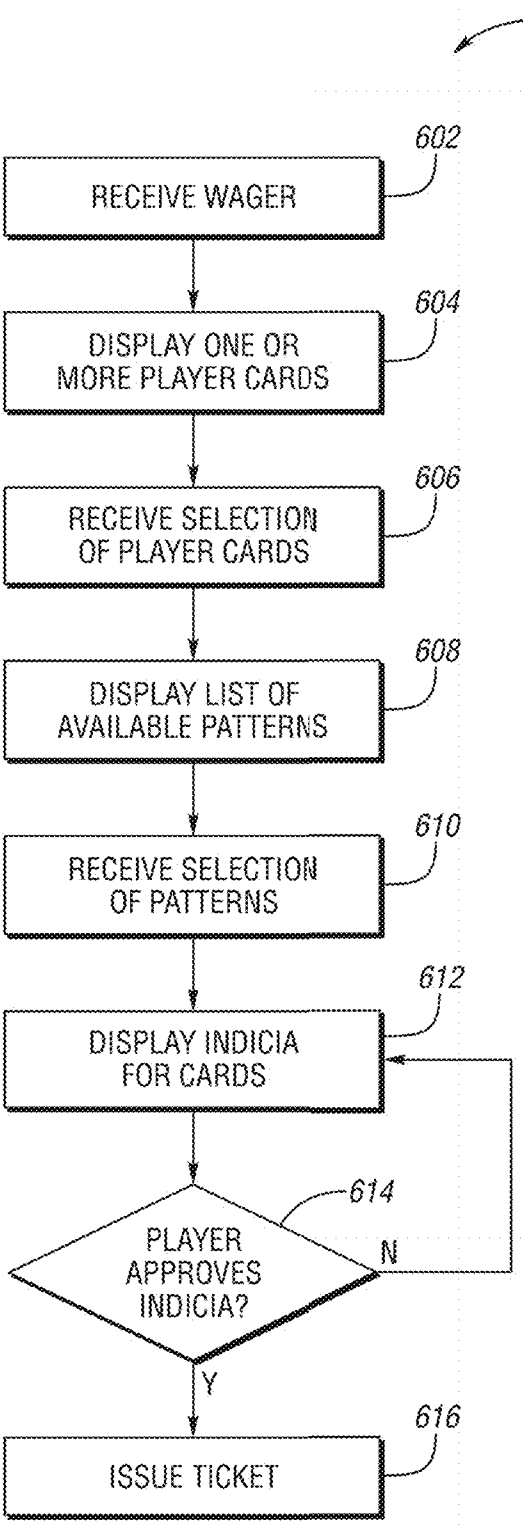

600
602
RECEIVE WAGER
604
DISPLAY ONE OR MORE PLAYER CARDS
606
RECEIVE SELECTION OF PLAYER CARDS
608
DISPLAY LIST OF AVAILABLE PATTERNS
610
RECEIVE SELECTION OF PATTERNS
612
DISPLAY INDICIA FOR CARDS
614
PLAYER APPROVES INDICIA?
N
Y
616
ISSUE TICKET

FIG. 6

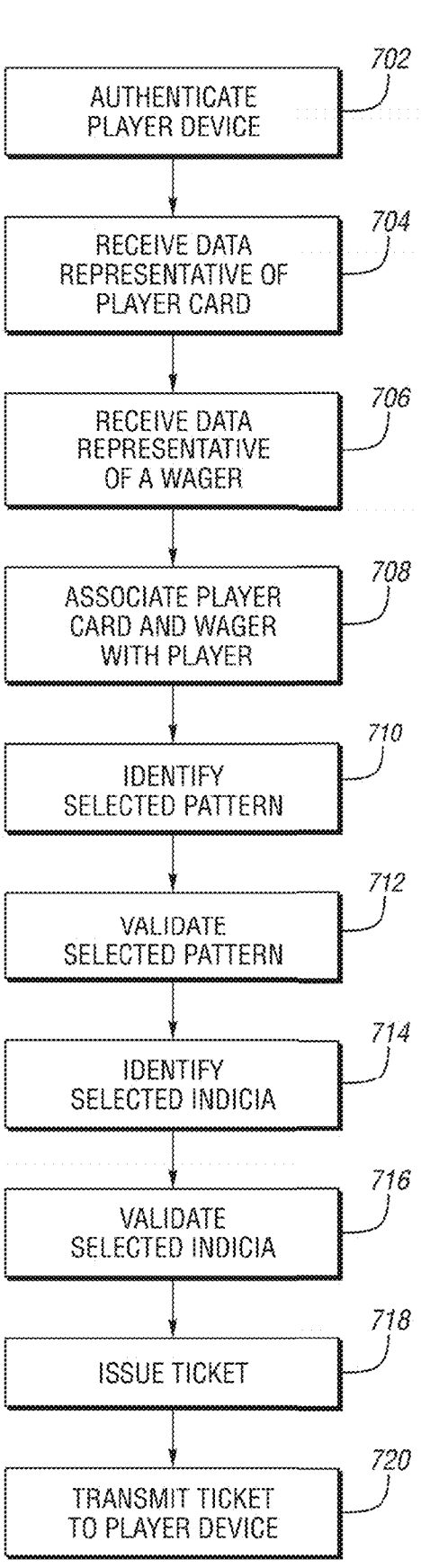

700
AUTHENTICATE PLAYER DEVICE
702
RECEIVE DATA REPRESENTATIVE OF PLAYER CARD
704
RECEIVE DATA REPRESENTATIVE OF A WAGER
706
ASSOCIATE PLAYER CARD AND WAGER WITH PLAYER
708
IDENTIFY SELECTED PATTERN
710
VALIDATE SELECTED PATTERN
712
IDENTIFY SELECTED INDICIA
714
VALIDATE SELECTED INDICIA
716
ISSUE TICKET
718
TRANSMIT TICKET TO PLAYER DEVICE
720

FIG. 7

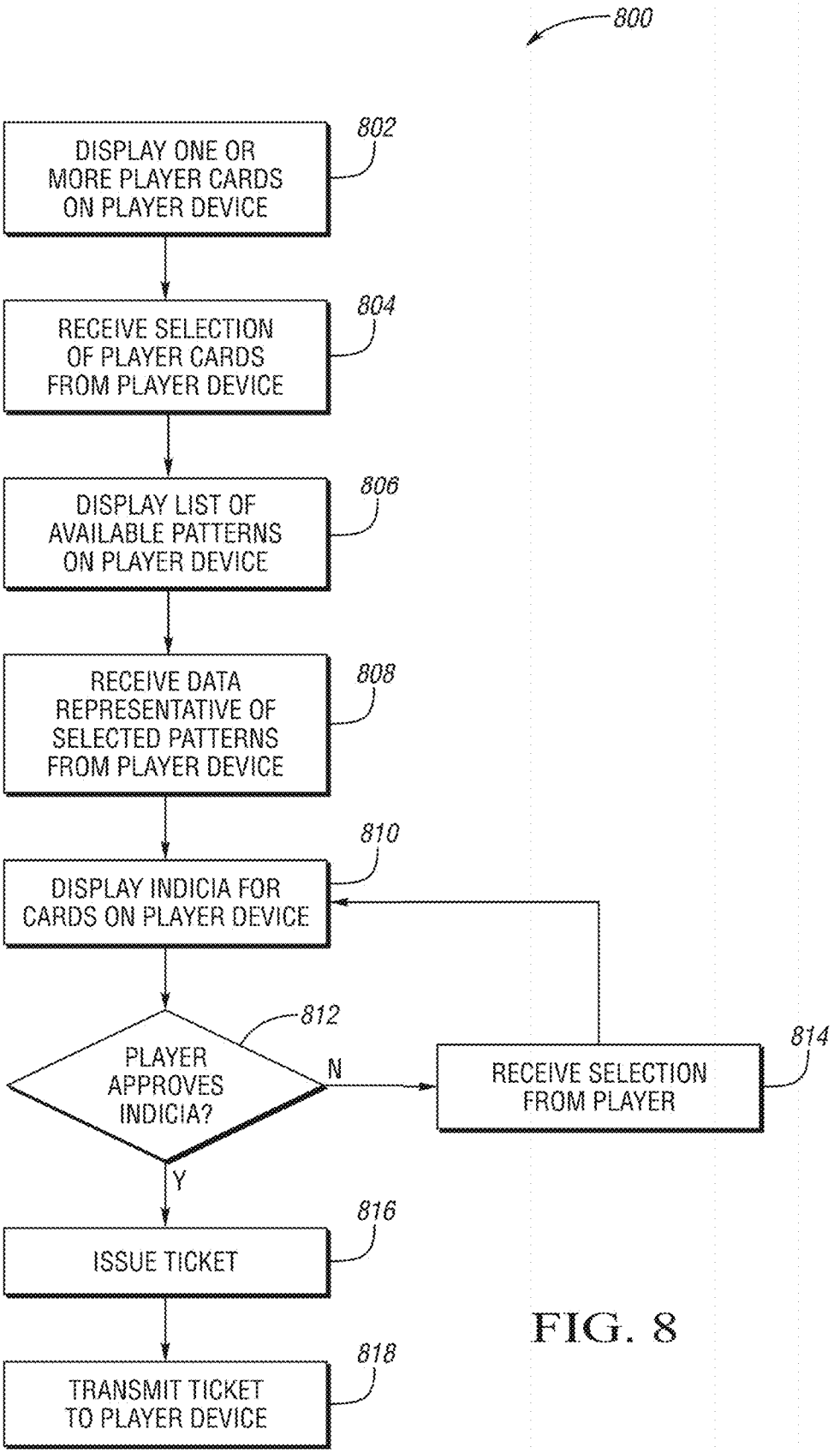
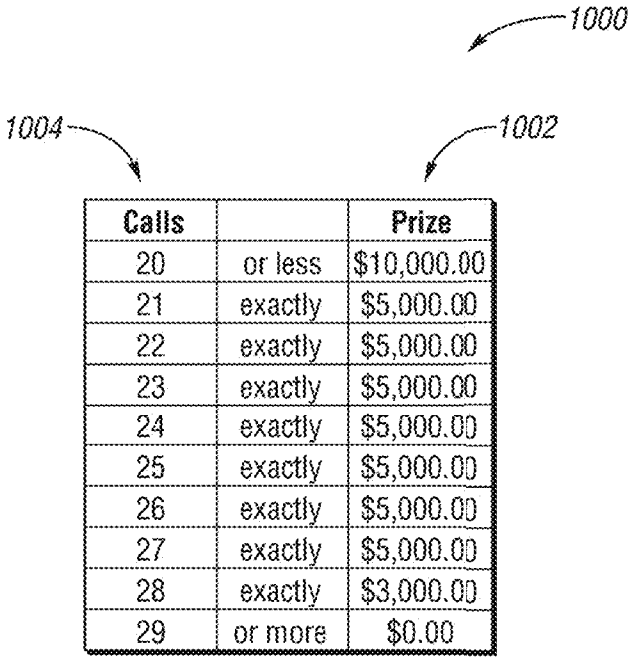

800
DISPLAY ONE OR MORE PLAYER CARDS ON PLAYER DEVICE
802
RECEIVE SELECTION OF PLAYER CARDS FROM PLAYER DEVICE
804
DISPLAY LIST OF AVAILABLE PATTERNS ON PLAYER DEVICE
806
RECEIVE DATA REPRESENTATIVE OF SELECTED PATTERNS FROM PLAYER DEVICE
808
DISPLAY INDICIA FOR CARDS ON PLAYER DEVICE
810
PLAYER APPROVES INDICIA?
812
N
RECEIVE SELECTION FROM PLAYER
814
Y
ISSUE TICKET
816
TRANSMIT TICKET TO PLAYER DEVICE
818

FIG. 8

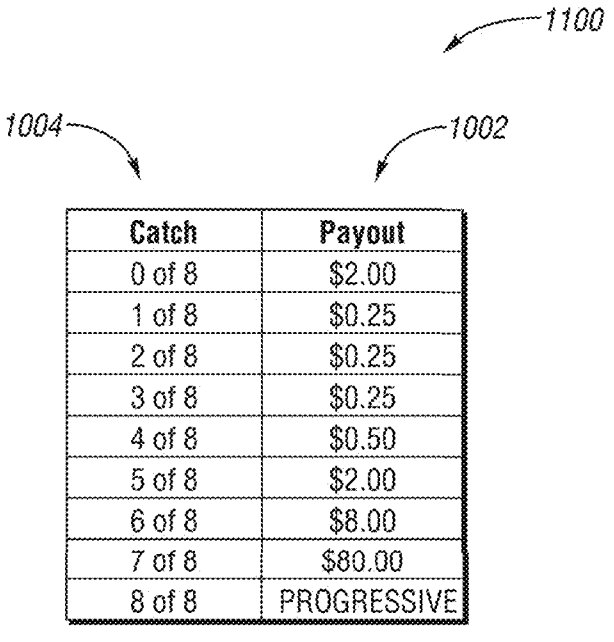
Calls		Prize	Calls		Prize
14	or less	$5,000.00	37	exactly	$50.00
15	exactly	$5,000.00	38	exactly	$50.00
16	exactly	$5,000.00	39	exactly	$20.00
17	exactly	$5,000.00	40	exactly	$20.00
18	exactly	$5,000.00	41	exactly	$20.00
19	exactly	$5,000.00	42	exactly	$20.00
20	exactly	$5,000.00	43	exactly	$10.00
21	exactly	$5,000.00	44	exactly	$10.00
22	exactly	$500.00	45	exactly	$10.00
23	exactly	$500.00	46	exactly	$5.00
24	exactly	$500.00	47	exactly	$5.00
25	exactly	$500.00	48	exactly	$5.00
26	exactly	$500.00	49	exactly	$5.00
27	exactly	$500.00	50	exactly	$5.00
28	exactly	$500.00	51	exactly	$1.00
29	exactly	$500.00	52	exactly	$1.00
30	exactly	$500.00	53	exactly	$1.00
31	exactly	$500.00	54	exactly	$1.00
32	exactly	$50.00	55	exactly	$1.00
33	exactly	$50.00	56	or more	$0.25
34	exactly	$50.00			
35	exactly	$50.00			
36	exactly	$50.00			

FIG. 9



Calls		Prize
20	or less	$10,000.00
21	exactly	$5,000.00
22	exactly	$5,000.00
23	exactly	$5,000.00
24	exactly	$5,000.00
25	exactly	$5,000.00
26	exactly	$5,000.00
27	exactly	$5,000.00
28	exactly	$3,000.00
29	or more	$0.00

FIG. 10



Catch	Payout
0 of 8	$2.00
1 of 8	$0.25
2 of 8	$0.25
3 of 8	$0.25
4 of 8	$0.50
5 of 8	$2.00
6 of 8	$8.00
7 of 8	$80.00
8 of 8	PROGRESSIVE

FIG. 11

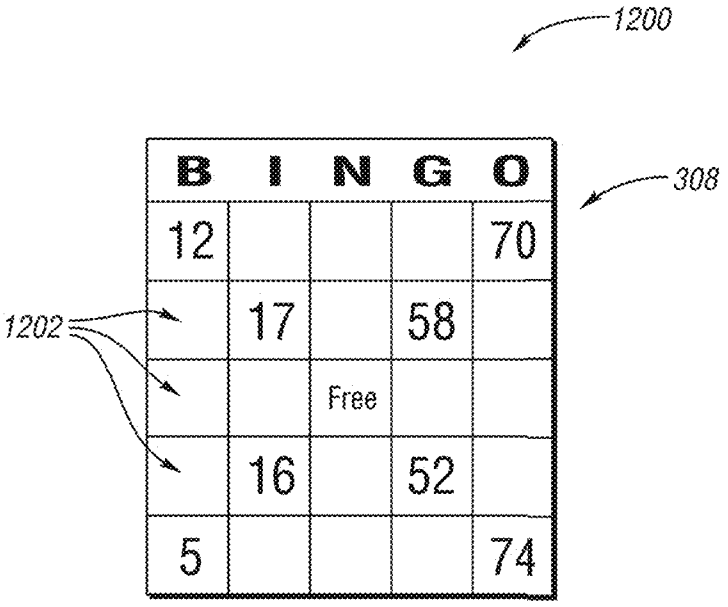


FIG. 12A

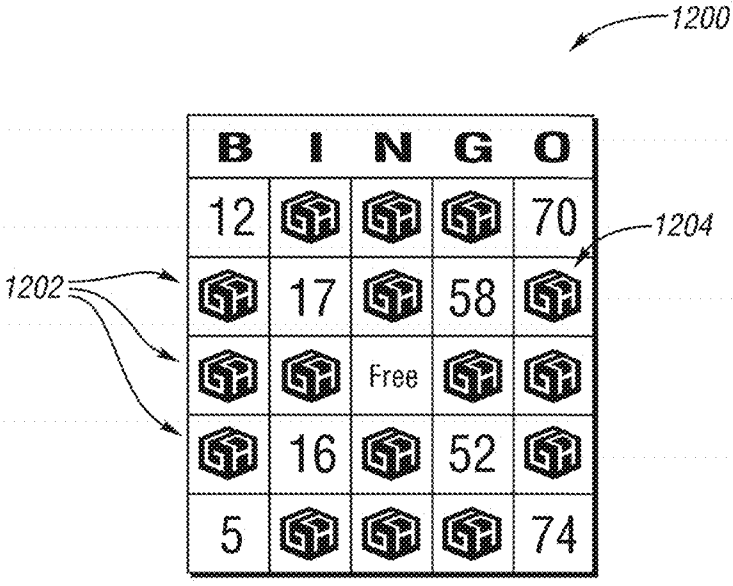


FIG. 12B

SYSTEMS AND METHODS FOR PLAYING A GAME OF CHANCE INCLUDING A PLURALITY OF PATTERNS

BACKGROUND

[0001] Embodiments of the present disclosure relate to systems and methods for playing bingo and other games of chance.

[0002] Bingo is a game of chance played with randomly drawn articles typically having numbers or other indicia that players match against corresponding indicia on a player card or ticket. Traditional bingo games have numbers pre-arranged in a table, grid, matrix, or array, with winners determined by making a predetermined winning pattern with called numbers. The numbers may be printed on paper or cardstock, or electronically represented on a display with the subset of numbers for each play generally referred to as cards or tickets. When a single paper or other playing piece includes multiple cards, each may be referred to as a card face with the group of card faces referred to as a card or ticket. Players try to obtain the winning pattern or number of matches on their faces by covering or marking numbers on their cards as numbers are randomly selected or preselected from a predetermined group of numbers, such as 75 or 90 numbers, for example. Once a winning pattern is achieved or a predetermined number of calls are made, the game ends.

[0003] In contrast to keno, lotto, and related odds-based numbers games, regulations for bingo and related games generally include some requirement that the game must be played to conclusion. Although requirements may vary considerably by jurisdiction, this requirement is generally interpreted as requiring one or more winners. As such, if there are no winners in the prescribed number of calls, players continue to play for a consolation prize. Consolation prizes may be a fixed amount or a pari-mutuel prize based on the total or aggregate number and price of cards or tickets purchased by all players for that game. Payment of consolation prizes may be a significant operating expense for bingo gaming establishments. In addition, because of the uncertainty in the number of calls that may be required for a consolation prize winner, the use of consolation prizes to meet the requirement that the game be played to conclusion may reduce the total number of games that can be played in a given time period and thereby adversely affect scheduling of games and overall revenue for the operator.

[0004] Alternative methods of play have been developed to increase participation by creating excitement. Since its invention in 1934, modern bingo has evolved into multiple variations, with each jurisdiction's gambling laws regulating how the game is played. There are also nearly unlimited winning criteria that may be specified for playing a particular game. Some patterns only require one number to be matched whereas cover-all games require an entire card to be matched or covered to award the jackpot. Other games may award prizes to players for matching no numbers or achieving none of the specified patterns.

[0005] There are many variations of bingo games and even bingo cards. For example, double-action cards have two numbers in each square. However, the most common bingo cards are flat pieces of cardboard or paper that contain 25 squares arranged in five vertical columns and five horizontal rows. More recently, computer generated visual representations of bingo cards and related game cards or tickets may be presented on a screen or display. Each space in the grid contains a single number, except there may be one or more "Free" spaces, which typically include at least the center space. The "Free" spaces are considered covered or filled from the beginning of the game. For games played utilizing 75 numbers or another multiple of 5 numbers, the letters B, I, N, G, and O may be pre-printed above the five vertical columns with one letter appearing above each column to assist players in more quickly locating a called number on their card(s). Players often play multiple cards for each game. For 75 number games, the numbers printed on the card are commonly arranged as follows: 1 to 15 in the B column, 16 to 30 in the I column, 31 to 45 in the N column, 46 to 60 in the G column, and 61 to 75 in the O column. Depending on how many numbers are in each column for a particular game, the numbers are generally randomly selected from the number ranges above for each column. For example, a standard bingo game may include 25 spaces with 5 randomly selected numbers between 1 and 15 assigned to the B column, and so on. However, one variation randomly assigns the numbers to the available columns. In another variation, sometimes referred to as "U-Pic'Em" bingo, players may be issued three cards each having ⅓ of the total available numbers with all numbers that may be called or drawn included. Players then identify or mark which numbers they wish to play and then cover or mark the selected numbers when a corresponding number is called or drawn. Rather than a predetermined pattern, a predetermined number (such as 5 or 10) of matches to the called numbers determines a winning card.

[0006] With the expansion of Tribal gaming across the U.S., there are numerous versions of bingo that emulate the fast action of casino-like table games, but utilize the principals of bingo where players mark and monitor grid or matrix cards. Casino games like Roulette, Acey Duecy, and Money Wheel have bingo counterparts, which are permitted to be played under bingo licenses in many parts of the country. Similarly, U Pic'Em-style bingo is played in many markets, including in Native American bingo halls across the United States, and has been federally recognized as Class II gaming pursuant to the Indian Gaming Regulatory Act codified at 25 U.S.C. §2703. It is similar to keno in that players are seeking to match a specific set of numbers rather than a set of numbers that form a specific pattern on a bingo card. In keno, 20 numbers are drawn from a pool of 80 numbers. Players select 1 to 20 numbers and prizes are awarded based on the probabilities of matching a specific set or sets of numbers. Keno is strictly odds-based with a known theoretical chance to win. In contrast, U-Pic'Em bingo games generally have a pool of 75 or 90 available numbers or indicia rather than the 80 used in keno, and the number of indicia drawn is generally 24 rather than the 20 numbers drawn in keno. Unlike keno, a U-Pic'Em game may be combined or offered as a bonus in combination with a more traditional bingo game having a winning criterion associated with a pattern formed on a player card or ticket by the matched numbers in addition to the number of matched indicia, and played to conclusion, i.e. until at least one player wins a prize.

[0007] In some variants of U-Pic'em Bingo, a specific set of numbers (usually three or five) are not chosen by the player, but instead are pre-printed at the top of a bingo card. In other variations, players choose their numbers (usually six to eight) and write them down on two-part paper, depositing one part in a locked box and keeping the other part to track their numbers. This method generally requires manual verification and is rather time consuming and labor intensive for the operators.

There may also be variations on the way(s) to win with the numbers. For example, one common method is if the first n numbers (usually in the three to five number variant) drawn during the course of the bingo game match the numbers a player has, the player wins a bonus prize that is above and beyond the prize for completing the winning bingo pattern(s). Other variations (more commonly found in the six to eight number variant) include awarding a prize to the player who matches the greatest number of indicia, or to all players who match specific numbers of indicia. The latter variant does not require the indicia be called as part of a session-based bingo game. Rather, the latter variant is odds-based similar to keno, and facilitates play in locations that may not offer bingo, as well as those facilities that have more traditional bingo games.

[0008] Some jurisdictions do not recognize odds-based games as being bingo, though many do. However, odds-based games may still be classified as bingo or Class II gaming when players are competing against one another for a prize, or where a winner is determined and a prize awarded for every game as previously described. In addition to prize awards based on the number of player indicia matching called indicia (also referred to as house or game indicia), various patterns may be used to determine a winner for a particular game. In addition to a straight horizontal, vertical, or diagonal line, many bingo halls consider other patterns as a valid bingo, usually in special games. For example, a 2×2 square in the upper right-hand corner would be considered a "postage stamp." Another common special game requires players to cover each of the four corner squares. Games may also require two lines (double) or three lines (triple) to win. Combination games may have multiple bingos and/or winners based on different winning criteria, such as matching numbers or patterns of numbers. For example, the players initially play to achieve a first winning pattern, such as a single line, to determine a first winner and then continue playing with the same cards and numbers to achieve a second winning pattern, such as a double line or coverall for another prize.

[0009] The called numbers may be randomly selected using various methods for any of the variations of the game. With the expansion of computer technology, electronic random number generators (RNG) are now commonplace in many jurisdictions. However, some jurisdictions require physical draws that may utilize a randomly shuffled deck of bingo or other calling cards, a mechanical ball blower that mixes balls with blown air, or a cage that is turned to mix small wooden balls, for example. All methods essentially generate a sequence and/or group of random numbers for players to match to their card(s) or ticket(s).

[0010] In another version of play sometimes referred to as "Quick Shot," numbers are pre-drawn and players purchase sealed cards that are then matched against the pre-drawn numbers. If a specified pattern is achieved, then the player usually wins a prize according to a prize table. This is an odds-based, keno-like game that may be found on various Class II gaming devices manufactured by companies such as GameTech, Video King, Lightning Games, and others. Some versions are played until a player achieves a top level prize, and then new numbers are drawn and the game begins anew. This type of bingo may be played over days, weeks, or months depending on the difficulty of achieving a top level prize.

[0011] In "Bonanza Bingo" played with 75 numbers, typically 45 numbers are pre-drawn at the beginning of a bingo session. Players purchase sealed cards that are then matched against the pre-drawn numbers. At a designated time, the caller asks if anyone has a winning pattern or bingo. If no winners are identified, the caller then draws one more ball. This game is commonly played as a "progressive" game, where the jackpot increases as more cards are sold. If no one has achieved bingo after the single ball has been drawn, players then hold their cards for the next session of bingo, which may take place the following day or following week, for example. During each session thereafter, a single ball is drawn and players may continue to purchase additional sealed cards until someone achieves a cover-all.

[0012] Many bingo gaming establishments have a call board or flashboard with called numbers illuminated or displayed for the players to see previously called numbers. In U.S. style bingo using 75 numbers, the flashboard is often arranged in 5 rows of 15 columns with the numbers arranged in sequence from left to right. In a version referred to as "Horse Racing Bingo," up to 15 players are randomly issued a number from 1 to 15 corresponding to the top row of numbers on the flashboard. Numbers are then drawn and the first person to match all five numbers in their assigned column wins. This is a fast paced and exciting form of bingo typically played in fraternal organizations.

[0013] As previously described, various types of bingo games may use different types of progressive prizes. The first involves increasing a prize amount based on contributing a portion (either fixed amount or percentage) of each ticket sold to the progressive prize pool. Some progressive prize pools are increased per unit of time, such as a day, week, etc. Progressive prize pools may be grouped in different ways, including by winning pattern, days of the week, bingo session (time of day), etc. Some progressive prize games may change the contribution amount after the game starts and/or stop contributions once the prize reaches a certain value. Progressive prize pools may also be aggregated across multiple gaming locations.

[0014] In virtually all keno, lottery, bingo, and slot machines, the progressive portion of the prize is split when there are multiple winners. The progressive portion is the current amount of the progressive meter less the amount of the base jackpot. The progressive portion grows by allocating a portion of every wager to the progressive meter. Thus, when there are multiple winners, the progressive amount is generally split evenly among all winners. For example, a game starts with a base jackpot of $10,000. As players make wagers, a portion of each wager is added to the progressive meter causing it to grow to $14,000. If two people were to win the progressive jackpot during the same game, they would each be paid the base amount of $10,000 in addition to half of the progressive amount of $4,000 for a total prize award of $12,000. Additionally, in many instances the progressive prize is paid on an aggregate basis and would be split evenly among the winners for $7,000 each in this example.

[0015] The various styles of bingo and related games generally have some common features. For example, a particular game (i.e. winning criterion) ends when the first winner satisfies the winning criterion. In combined games, play may continue after a first winner has been identified, but the winning criterion and/or prize are changed for a second or subsequent winner. For example, a group of player selected numbers is matched first, and the game play is continued to match one or more patterns, such as a single line followed by double line, or a double line followed by a coverall. Similarly, because many jurisdictions require bingo and related games

to be played to conclusion (in contrast to keno or lotto type games where it is acceptable to not have a winner), if there is no winner matching the winning criterion within the required number of calls, the winning criterion and/or prize may be changed for a consolation game that is played until a winner is determined, for example. Another common feature of the various games, including keno, lotto, and progressive style games, is that multiple winners generally split or share the prize.

BRIEF SUMMARY

[0016] In one embodiment, a method of playing a game of chance includes providing a player card to be used with a game of chance, wherein the player card includes a predetermined number of spaces for displaying indicia. A plurality of available patterns is identified, by a processor, to be used with the player card, wherein each of the available patterns is shaped to enclose at least a plurality of the spaces. A player is enabled to select one of the available patterns for the player card and to select a plurality of player indicia for the selected pattern, wherein the selected plurality of player indicia is displayed within at least a portion of the spaces enclosed by the selected pattern. A plurality of house indicia is randomly selected. The processor determines whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern, and determines a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

[0017] In another embodiment, a method of playing a game of bingo includes providing a player card to be used with a game of bingo, wherein the player card includes a predetermined number of spaces for displaying indicia. A plurality of available patterns to be used with the player card is displayed on an electronic player device, wherein a plurality of the spaces is included within each of the available patterns. A plurality of player indicia is displayed on the electronic player device, and the player is enabled to select the plurality of player indicia for the selected pattern using the electronic player device, wherein each player indicia of the selected plurality of player indicia is displayed on the electronic player device within one of the spaces included within the selected pattern. A plurality of house indicia is randomly selected. The processor determines whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern, and determines a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

[0018] In yet another embodiment, a method of playing a game of bingo includes displaying, on a terminal, a player card to be used with a game of bingo, wherein the player card includes a predetermined number of spaces for displaying indicia. A processor identifies a plurality of available patterns to be used with the player card, wherein a plurality of the spaces is included within each of the available patterns. The plurality of available patterns is displayed on the terminal, and a player is enabled to select one of the available patterns for the player card using the terminal. A plurality of player indicia is displayed on the terminal, and the player is enabled to select the plurality of player indicia for the selected pattern, wherein each player indicia of the selected plurality of player indicia is displayed within one of the plurality of spaces included within the selected pattern. A plurality of house indicia is randomly selected. The processor determines whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern, and determines a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

[0019] In still another embodiment, a method of playing a game of bingo includes scanning, using a scanning device, a physical player card that includes a predetermined number of spaces for displaying indicia. The player card includes at least one pattern marking indicative of a player selected pattern shaped to enclose at least a plurality of the spaces, and at least one indicia marking indicative of at least one player indicia selected by the player. A processor identifies a selected pattern based on the at least one pattern marking and identifies a selected plurality of player indicia based on the at least one indicia marking. A plurality of house indicia is randomly selected. The processor determines whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern, and determines a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

[0020] In another embodiment, a system includes a randomization device configured to randomly select house indicia. The system also includes a selection device configured to receive a player card to be used with a game of chance, wherein the player card includes a predetermined number of spaces for displaying indicia, and to receive a plurality of available patterns to be used with the player card, wherein a plurality of the spaces is included within each of the available patterns. The selection device also is configured to enable a player to select one of the available patterns for the player card, and to enable the player to select a plurality of player indicia for the selected pattern, wherein each player indicia of the selected plurality of player indicia is displayed within one of the plurality of spaces included within the selected pattern. The system also includes a server coupled to the randomization device and to the selection device. The server includes a processor programmed to select a plurality of house indicia using the randomization device, determine whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern, and determine a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] FIG. **1** is a block diagram of a system for playing a game of chance.

[0022] FIG. **2** is a block diagram of a computing device that may be used with the system shown in FIG. **1**.

[0023] FIG. **3**A illustrates a player card having a first selected winning pattern that may be used with the system shown in FIG. **1**.

[0024] FIG. **3**B illustrates a player card having a second selected winning pattern that may be used with the system shown in FIG. **1**.

[0025] FIG. **3**C illustrates a player card having a third selected winning pattern that may be used with the system shown in FIG. **1**.

[0026] FIG. **3**D illustrates a player card having a fourth selected winning pattern that may be used with the system shown in FIG. **1**.

[0027] FIG. **4** is a flow diagram of a method of playing a game of chance that may be used with the system shown in FIG. **1**.

[0028] FIG. **5** is a flow diagram of a method of issuing a player card that may be used with the system shown in FIG. **1**.

[0029] FIG. **6** is a flow diagram of another method of issuing a player card that may be used with the system shown in FIG. **1**.

[0030] FIG. **7** is a flow diagram of another method of issuing a player card that may be used with the system shown in FIG. **1**.

[0031] FIG. **8** is a flow diagram of a method of selecting player indicia and/or patterns for an electronic player card that may be used with the system shown in FIG. **1**.

[0032] FIG. **9** illustrates a pay table that may be used with the system shown in FIG. **1**.

[0033] FIG. **10** illustrates another pay table that may be used with the system shown in FIG. **1**.

[0034] FIG. **11** illustrates yet another pay table that may be used with the system shown in FIG. **1**.

[0035] FIGS. **12**A and **12**B illustrate a bingo card with a selected pattern of numbers printed thereon.

DETAILED DESCRIPTION

[0036] Systems and methods for playing a game of chance, which may be played as a standalone game of chance or in combination with another game of chance are described herein. The game of chance includes one or more winning criteria associated with matching indicia, such as objects, graphics, symbols, numbers, letters, or the like, on a player card to indicia determined or selected by operator calls or an equivalent selection of house indicia identified by the gaming establishment. The house indicia may be selected and displayed individually and/or selected as a group during play and/or pre-selected prior to play. The systems and methods enable a player to select a winning pattern and to select one or more indicia to be associated with the selected pattern.

[0037] In one embodiment, player cards are presented to each player for use in the game. Each player selects a winning pattern to be used with one or more player cards and one or more player indicia to be used with the selected pattern. Various embodiments include player tickets and/or number selection devices with available numbers depicted as a bingo flashboard having five rows with each row associated with a designated bingo letter. In one embodiment, players may use a wireless mobile device, such as a cell phone or hand-held tablet computing device, to communicate selected patterns and indicia to a gaming server. In another embodiment, the numbers and patterns are implemented on a machine readable paper ticket or player card. For each game, a predetermined number of house indicia are selected from a pool of available indicia by the server or by another device or system. In one embodiment, players are awarded a prize based on a number of house indicia that were drawn before the indicia associated with the player's selected pattern were matched. House indicia may be generated manually by hand, ball cage, ball blower, playing cards, roulette wheel, or electronically called or generated by a random number generator or the like.

[0038] Gaming strategies according to the present disclosure may be applied to existing or future variations of bingo and similar games of chance. Various embodiments may be used with any winning pattern, combination, or number selections and the like. Cards or tickets may include paper, card stock, fixed, portable, or handheld electronic displays, and the like. Embodiments according to the present disclosure may be applied to fixed odds payouts, pari-mutuel, progressive, or any combination thereof.

[0039] Various embodiments of bingo and related games of chance may be played with at least one player that is playing one or more player cards or selection of indicia. Multi-player implementations may be required in some jurisdictions. For example, Class II gaming may require the game to be played with at least two players. The bingo and related games of chance according to the present disclosure may also be used in various computer or machine based implementations.

[0040] As those of ordinary skill in the art will understand, various features of the embodiments illustrated and described with reference to any one of the figures may be combined with features illustrated in one or more other figures to produce embodiments that may not be explicitly illustrated or described in detail. The combinations of features illustrated provide representative embodiments for typical gaming applications for electronic bingo and related games. However, various combinations and modifications of the features consistent with the teachings of the present disclosure may be desired for particular applications or implementations. The representative embodiments used in the illustrations relate generally to a game of chance, such as bingo or a related game, with multiple prizes and/or winners. Those of ordinary skill in the art may recognize similar games or other applications or implementations not specifically described, but that are within the scope of the claims.

[0041] The descriptions of various styles of bingo and related gaming are purely illustrative. The systems and methods for gaming according to various embodiments of the present disclosure are generally independent of the size of a pool of indicia and are not limited to the 75 or 90 indicia, elements, balls, or numbers used in traditional bingo as played in the United States or Europe as described with respect to various representative embodiments. In addition, those of ordinary skill in the art will recognize that any reference to balls or ball calls apply equally to games where other indicia such as letters, words, names, symbols, constellations, figures, patterns, and the like may be used in place of, or in combination with numbers.

[0042] In general, the bingo strategies described with reference to various embodiments of the present disclosure are independent of the particular manner or strategy for selecting, determining, sequencing, calling, etc. of the house or game indicia. As such, the winning combination or pattern, matched selection, number of matches, etc. may generally be obtained by any predetermined or random selection of indicia using manual, electrical, mechanical, electronic, or computer controlled or assisted devices to match less than or equal to the total number of possible selections. Likewise, operator calls or house indicia may be determined, selected, or sequenced individually, and/or in groups or sets and subsequently displayed or otherwise provided to game players. Whether selected individually or as a group or set, house or game indicia may be displayed or presented individually and/or as a group. For example, a group of game or house indicia may be pre-selected prior to the beginning of a game and displayed or presented as a group to the players. Subsequent selection and presentation may occur for individual calls in substantially real time during game play. As another example, all of the available pool of indicia may be pre-selected or

sequenced prior to game play and then called or presented individually to the game players to determine prize awards as described herein.

[0043] As used herein, the term "player indicia" refers to indicia, such as objects, graphics, symbols, numbers, letters, or the like, that are printed, displayed, or otherwise associated with a player card used by the player to play a game of chance. In at least some embodiments, the player may select one or more player indicia for each player card. The term "house indicia" or "game indicia" refers to indicia generated, called, or otherwise selected by a gaming establishment or an operator of the game. House indicia are compared to player indicia on each player card to determine if each player card satisfies one or more winning conditions.

[0044] As used herein, the term "pattern" refers to a predetermined combination of spaces of a player card. In at least some embodiments, a winning combination is satisfied if indicia included within the spaces associated with a pattern are matched to house indicia called during the game.

[0045] It should be recognized by those of ordinary skill in the art that the term "random" is not limited to true randomness, such as truly random numbers. Rather, pseudorandom numbers and pseudorandom algorithms are included within the meaning of "random."

[0046] FIG. **1** is a block diagram illustrating operation of a system for playing a game of chance, such as electronic bingo or a related game, according to various embodiments of the present disclosure. System **100** includes a computer server **102** in communication with various local and/or remote client devices using standard communication protocols, which may include secure, encrypted communications. Server **102** performs various functions associated with operation, management, and reporting for bingo and related games of chance as described in greater detail herein according to various embodiments of the present disclosure. Server **102** may be connected to other devices via a local and/or a wide area network using any of a number of standard wired and/or wireless communication protocols and technologies.

[0047] A management or administrator terminal or computer **104** may be used to manage various game-related operations performed by server **102**. Computer **104** may be directly connected to server **102**, or may be connected via a public or private network, such as the Internet, generally represented by **106**. Server **102** may also be connected to one or more computers **108**, which may include one or more website servers and/or gaming servers at one or more gaming establishments or properties, for example, via a private network and/or the Internet **106**. Server **102** may control and/or coordinate games for multiple gaming establishments or properties to facilitate multi-property progressive prizes, for example. One or more website servers **108** may be used to remotely play bingo or a related game of chance where regulations permit. Similarly, a website server **108** may provide status information for player tickets or cards to allow players to obtain information relative to multi-game tickets as described in greater detail herein.

[0048] Randomization devices used with bingo and related games of chance according to the present disclosure may include at least one device as generally represented by reference numeral **120** for selecting house indicia or called objects from a pool of available indicia or objects for a particular game. For example, device **120** may be implemented by one or more of a ball cage **122**, an electronic or computer controlled random number generator (RNG) **124**, a deck of cards **126**, or a ball blower or console **128**, although typically only one device is used in any particular game.

[0049] RNG **124** may be implemented by a dedicated hardware device with associated embedded software. Alternatively, RNG **124** may be implemented entirely in software executing on server **102** or another computer or server. In one embodiment, RNG **124** is implemented by a dedicated hardware device or network appliance that communicates via a standard network protocol, such as a wired or wireless Ethernet protocol, and supports multiple games at multiple locations with house or game draws of between 2 and 120 numbers. RNG **124** may be programmed via hardware, software, or firmware to provide a particular range of numbers (or other indicia) and numbers of draws for a particular application. For example, in one embodiment of bingo according to the present disclosure, RNG **124** initially provides 24 randomly generated numbers having values between 1 and 75 for each game similar to a traditional bingo draw. Additional draws or numbers may be provided to play the game to conclusion depending on the particular implementation as described in greater detail herein.

[0050] Although various house indicia selection devices or methods may have advantages over others, those of ordinary skill in the art will recognize that the present disclosure is independent of the particular type of device **120** or method used to select, sequence, or otherwise determine house indicia represented by called numbers or objects as previously described. Depending on the particular device used to select or otherwise determine house indicia, the selected indicia may be manually entered by an operator and/or automatically determined and communicated to server **102** in near real time and/or as a group upon conclusion of a game or at other selected intervals. For example, a ball blower console **128** may be used to manually draw each number. Each ball drawn is electronically or otherwise detected by console **128**, or an associated device, and communicated to server **102**. In applications having an RNG **124**, selected house indicia are automatically communicated to server **102** in response to a particular request, which may be manually or automatically initiated. For example, an operator may initiate an electronic ball draw via an associated touch screen display **140** or similar device as illustrated and described herein. Alternatively, touch screen **140** may be used to enter ball calls determined using a manual device, such as ball cage **122**, cards **126**, ball blower **128**, or the like, which are then communicated to server **102**. In one embodiment, a desk terminal implemented using touch screen **140** with embedded software facilitates various game functions, such as game close, clear boards, and re-display, for example. In other embodiments, server **102** may automatically generate a request for multiple draws when a game is initiated. Of course, various other manual and/or automatic strategies for selecting or otherwise determining house indicia may be used.

[0051] As also shown in FIG. **1**, system **100** may include one or more point-of-sale (POS) terminals and/or writer terminals, represented by reference numeral **150**, to facilitate various game-related functions. In one embodiment, each terminal **150** is a client device implemented by a touch-screen display with embedded software to provide a user interface to control gaming functions and communicate with server **102**. Terminals **150** may be located at multiple gaming establishments and communicate with a single centralized server **102**. Each terminal **150** may also include an integrated secondary customer display for displaying selected player indicia, for

example. Various accessories may also be connected to, or integrated within, terminal **150**. For example, a magnetic card reader may be provided to read player affinity cards, credit cards, and similar cards to track player habits. In addition, a fingerprint reader may be provided to enhance login security for operators of terminal **150**. As previously described, terminal **150** may communicate with server **102** and one or more peripheral devices directly and/or using any standard communication protocol, such as a wired or wireless Ethernet protocol, for example. Terminal **150** may also include cash register features such as subtotal, total, and tender. A single terminal **150** may be used to provide gaming functions for any of a number of games being coordinated by server **102**.

[0052] Terminal **150** may be directly connected to, integrated with, or otherwise in communication with various peripheral or accessory devices such as a mark sense reader **152** and a ticket or card printer **154**, for example. Reader **152** may be used to automatically read player tickets or card requests, which may include one or more player selected indicia. In one embodiment, players may select numbers printed on a paper ticket request by marking the ticket request with a pen or pencil. The ticket request is then fed into reader **152** which reads the marks and communicates associated information to terminal **150**. As described in greater detail below, terminal **150** communicates the information associated with the player selected indicia to server **102**. The ticket or card request may include all available numbers depicted as a bingo flashboard, for example, as generally represented by flashboard **160**. Of course, various other arrangements may be provided. For example, a ticket request may only include numbers written by hand by the player. Ticket requests may be presented to an operator with selected player indicia automatically and/or manually entered via terminal **150**. However, use of a machine-readable ticket request in combination with a corresponding device such as reader **152** facilitates reducing or eliminating errors associated with manually selecting or entering player indicia selected by a particular player. Upon collecting an associated wager and verifying ticket information, a paper ticket or card **170** may be printed by printer **154**. Alternatively, or in combination, a virtual ticket or card may be provided in electronic form to an associated display on a handheld device, such as a cell phone or a tablet device, represented generally as **192**, or a player terminal, such as a kiosk **194**. As illustrated in FIG. **1**, printer **154** may be directly connected to terminal **150** and/or server **102** via a wired or wireless connection. Alternatively, or in combination, one or more printers **154** may be networked to one or more writer terminals **150** and/or server **102** and distributed at convenient locations throughout a gaming establishment depending upon the particular application and implementation.

[0053] System **100** includes and/or generates a plurality of player cards or tickets **170**. The actual type, arrangement, and content of player cards **170** may vary by the game being played. Cards **170** may have various common features, such as a game identifier **182** and indicia or objects **184**, **186**, **188** (which represent numbers in this example) that may include multiple wagers and/or multiple games with one or more player selected indicia. For example, the wagers associated with indicia **184**, **186**, **188** may represent multiple wagers for a single game. Alternatively, each group **184**, **186**, **188** of player indicia may represent wagers for three different games. Alternatively, the three wagers may apply to multiple future games at various intervals, such as one a day, one a week, ten per day, etc. In one embodiment, player requested or selected indicia include randomly generated numbers produced in response to a player request for a quick pick card or ticket.

[0054] Cards **170** may also include computer readable indicia, such as a machine readable identification and/or security code **180**. For example, computer readable indicia may include a linear or two-dimensional bar code, a three-dimensional bar code or image, machine readable numbers, a magnetic stripe, etc. Similarly, card **170** may include human readable numbers and/or letters associated with a machine-readable symbol or barcode to identify a particular ticket or card. Various other information may also be printed on cards **170**, such as the amount of a wager, a session ID, a number of games associated with card **170**, a date that card **170** was issued or is valid to be played, etc., depending on the particular implementation. Of course, arrangements of numbers or indicia other than those shown or described are possible and contemplated within the scope of this disclosure.

[0055] Cards **170** generally include a first plurality of indicia (for example, 24 numbers plus a free marker) selected from a pool of a second plurality of indicia (for example, 75 numbers). Some or all of the player indicia may be selected or requested by the player, with any remaining player indicia randomly generated by the house using RNG **124** or a similar device. The indicia may be prearranged in a particular order, such as from low to high, or associated with a particular bingo letter, for example. Player cards **170** may be physically implemented on paper, cardstock, or similar material, or may be electronically or virtually represented on a fixed, portable, or handheld electronic device having a display, such as a player kiosk **194**, or a handheld device **192**, for example. In one embodiment, cards **170** are implemented as paper or cardboard cards having player indicia preselected and concealed by pull tabs. In this embodiment, house indicia may be preselected prior to the beginning of the game. Players open the pull tabs to reveal the player numbers or other designations on player card **170**. The prize award or payout may be determined based on the number of pull tabs opened by the player to match the previously designated number of indicia or other winning conditions.

[0056] In addition, cards **170** may include an indication of a winning pattern of player indicia that must be matched by house indicia drawn during a game to receive a payout. For example, as described more fully herein, card **170** may include a pattern of an X that includes player indicia from a top left corner of card **170** to a bottom right corner of card **170** (including a free space marker) and from a bottom left corner of card **170** to a top right corner of card **170**. If the player indicia included in the spaces of card **170** covered by the pattern are matched by house indicia drawn during the game, the player may win a predetermined payout based on a total number of house indicia that were drawn in order to match the pattern. The player may select the pattern to be matched before the game begins. For example, the player may use kiosk **194**, handheld device **192**, terminal **150**, or another suitable device (also referred to herein as a selection device) to select a pattern from a list or display of available patterns. Alternatively, the player may approve a preselected pattern or may choose a quick select option to enable server **102** or terminal **150** to automatically select the pattern.

[0057] In one embodiment, the player also selects the player indicia included within the spaces of card **170** covered by the selected pattern. For example, the player may select a

number to be placed in each space of card **170** that is covered by the X pattern described above. Alternatively, server **102** or another device may randomly select the player indicia included within the pattern using RNG **124** or another device, and the player may approve the randomly selected indicia or may cause the server **102** or RNG **124** to randomly select another set of player indicia.

[0058] In one embodiment, the player may select and store one or more favorite cards **170** in server **102** or in a gaming device, such as handheld device **192** or kiosk **194**. The favorite cards **170** may include a designation or selection of one or more winning patterns to be played and/or one or more player indicia selected to be included within the pattern or card **170**. Accordingly, a player may store favorite patterns and numbers to be used in future games. The favorite cards **170** (or the patterns and/or indicia thereof) may be accessed and selected to be used during a later game as desired.

[0059] Various accessories or peripherals may also be provided as generally represented by a card or ticket checker **156**, a barcode scanner **158**, and a display or flashboard **160**. Ticket checker **156** may include a barcode reader in addition to a magnetic stripe reader, for example. The magnetic stripe reader may be used to read a customer affinity program card and display associated information, for example. Ticket checker **156** is a player activated device that may be used to scan a ticket or card **170** and determine the ticket ID and display the status of that ticket **170**. For example, ticket checker **156** may scan the barcode on ticket **170** to determine the ticket ID. The ticket ID information is communicated to server **102** to determine the status of ticket **170**. The ticket status is returned to ticket checker **156** and displayed on an embedded display. The ticket status may include a variety of information related to the game or games associated with the particular ticket **170**, such as the date and time ticket **170** was issued, the wager associated with ticket **170**, the time of completion of associated games, any winnings or payouts, and the like. Barcode scanner **158** may also be used to scan or read machine-readable information encoded on a ticket or card. The information is communicated to server **102** to identify the ticket. Associated information stored in a database in server **102** may then be communicated to any associated terminal or display.

[0060] Flashboard **160** may be used to present or display house indicia to players within a gaming establishment. While illustrated as a dedicated display, flashboard **160** may be alternatively implemented by a general-purpose display. Similarly, house indicia may be communicated in various other formats depending upon the particular application and implementation. In addition to a local display, house indicia may be presented to players via wireless devices such as one or more handheld devices **192**. The wireless devices may communicate with server **102** via an associated antenna or tower **190**. Antenna or tower **190** generally represents any wireless transmitting device such as a wireless router, cell phone tower, and the like. Alternatively, or in combination, house indicia and other related gaming information may be presented to one or more computers or servers **108** via the Internet **106** and/or any local private or public networks. Likewise, any devices illustrated in FIG. **1** may communicate with server **102** using a wireless connection.

[0061] In operation, a game of chance, such as bingo or a related game, is played for prizes, including monetary prizes, with cards or tickets **170** bearing numbers or other player indicia. Players or cardholders may cover the selected numbers or other indicia when objects similarly numbered or designated are drawn or electronically determined from ball cage **122** or ball blower **128**, from deck of cards **126**, or from RNG **124**, for example. Depending upon the particular implementation, the game may be won by the first person covering a preselected pattern of indicia on card **170**, which may include at least some of the player numbers or other indicia selected by a player. In one embodiment, a player may receive a payout or award for each player card **170** as each pattern is matched during the game.

[0062] Numbers or other indicia, in addition to the winning pattern to be matched, may be selected using a printed or electronic representation of a bingo flashboard as generally represented by flashboard **160**, for example. In one embodiment, at least some of the numbers and the pattern are selected by a player using a handheld device **192**, such as a cell phone or a tablet device, for example. Numbers and winning patterns may be requested or selected by a player using a standard text messaging protocol, such as SMS or a similar protocol, for example. Similarly, players may select or request one or more player indicia and a winning pattern to be matched for a particular card or ticket **170** via terminal **150** and/or by marking or requesting a quick pick, for example. In this case, the player selected indicia are randomly generated by server **102** and/or an associated RNG **124**.

[0063] In one embodiment, the game is played to conclusion by drawing or electronically determining house indicia until a predetermined number of house indicia have been drawn. Each player or cardholder that matches the pattern receives a payout or prize. For example, the game may be played until 60 house indicia have been drawn out of the pool of 75 house indicia. Accordingly, the game may end after a fixed number of draws have been completed. Each cardholder is awarded a prize or payout associated with the number of numbers or the patterns covered after the predetermined number of indicia are drawn. Alternatively, the game may be played to conclusion by drawing or electronically determining house indicia until the pattern on each player card **170** of each player is matched.

[0064] Prizes or payouts are awarded based on an associated pay table stored within server **102** as described in greater detail herein. Prize awards may be determined on a parimutuel basis based on wagers made less a designated house portion. Alternatively, prize awards may include a seeded prize (e.g., a progressive prize) beginning at a minimum value and increasing based on a cumulative amount of wagers or other meter until a winner is determined. As previously described, a ticket or card **170** may be valid for a predetermined number of future games based on a corresponding wager amount for each game.

[0065] FIG. **2** is a block diagram illustrating a computer or computing device **200** that may be used with system **100** (shown in FIG. **1**). More specifically, one or more computers, servers, or other devices described in system **100** may be implemented as a computing device **200**. For example, server **102**, administrator computer **104**, website server **108**, terminal **150**, handheld device **192**, and/or kiosk **194** may be computing devices **200**.

[0066] Computing device **200** includes one or more processors **202**, one or more computer-readable memories **204**, and one or more communication interfaces **206**. In one embodiment, computing device **200** may also include one or more displays **208** and/or one or more user interfaces **210**. It should be recognized that memory **204**, communication interface

206, display **208**, and user interface **210** (if provided) may be connected to processor **202** and/or to each other via any suitable bus or busses, interfaces, or other mechanisms.

[0067] Processor **202** includes any suitable programmable circuit including one or more microcontrollers, microprocessors, application specific integrated circuits (ASICs), systems on a chip (SoCs), programmable logic circuits (PLCs), field programmable gate arrays (FPGAs), and/or any other circuit capable of executing the functions described herein. The above examples are exemplary only, and thus are not intended to limit in any way the definition and/or meaning of the term "processor."

[0068] Memory **204** includes transitory or non-transitory computer readable medium, such as, without limitation, random access memory (RAM), flash memory, a hard disk drive, a solid state drive, a compact disc, a digital video disc, and/or any suitable memory. Memory **204** may include data as well as instructions that are executable by processor **202** to program processor **202** to perform functions described herein. For example, the methods described herein may be performed by one or more processors **202** executing instructions stored within one or more memories **204**.

[0069] Communication interface **206** may include, without limitation, a network interface controller (NIC) or adapter, a radio frequency (RF) transceiver, a public switched telephone network (PSTN) interface controller, or any other communication device that enables computing device **200** to operate as described herein. For example, communication interface **206** may connect to communication interfaces **206** of other computing devices **200** of system **100** through Internet **106** or another network using any suitable wireless or wired communication protocol.

[0070] Display **208** may include, without limitation, a liquid crystal display (LCD), a vacuum fluorescent display (VFD), a cathode ray tube (CRT), a plasma display, a light-emitting diode (LED) display, a projection display, and/or any suitable visual output device capable of displaying graphical data and text to a user. For example, display **208** may be used to display a graphical user interface to a player or an administrator, one or more images associated with a game such as bingo or another game of chance, player statistics, game statistics or status, and/or any other suitable data.

[0071] User interface **210** may include, without limitation, a keyboard, a keypad, a touch screen, a mouse, a scroll wheel, a pointing device, an audio input device employing speech-recognition software, a video input device that registers movement of a user, and/or any other suitable device that enables the user to input data into computing device **200** and/or retrieve data from computing device **200**.

[0072] FIGS. **3**A-**3**D illustrate a player card **300** having different winning patterns that may be selected by a player to play a game of bingo, for example, using system **100** (shown in FIG. **1**). Player card **300** includes a plurality of spaces **302** for displaying player indicia **304** (also referred to as player selected indicia **304**). In one embodiment, spaces **302** are arranged in a 5×5 grid or matrix in which the center space **302** is a free space **306** for displaying a free space marker or indicia. Alternatively, card **300** may include spaces **302** arranged in a 5×15 grid or in any other suitable arrangement. Free space **306** is considered to be automatically matched at the start of a game. In one embodiment, each space **302** (other than free space **306**) is populated with either player selected indicia **304**, or indicia selected by server **102** or by another system or device operated by the house. Alternatively, only a subset of spaces **302** are filled with player indicia **304** as described more fully herein. While indicia **304** are illustrated as numbers in FIGS. **3**A-**3**D, those of ordinary skill in the art should recognize that indicia **304** may be symbols or any other suitable indicia as desired.

[0073] In addition, the player selects a winning pattern **308** to be used with each card **300** from a list of available patterns that satisfy predetermined rules and/or requirements. In one embodiment, the player may cycle through a list of patterns available for selection on handheld device **192**, kiosk **194**, or terminal **150**. Alternatively, the player may choose to have a pattern **308** automatically selected by a device of system **100**, such as server **102**. For example, server **102** may randomly choose a pattern **308** from a list of available patterns **308** and display the randomly selected pattern **308** to the player. If the player is satisfied with the pattern **308**, the player selects the pattern **308** presented by server **102**. If the player is not satisfied with the pattern **308** selected by server **102**, the player may direct server **102** to select another pattern **308**, or the player may select a pattern **308** from the list of available patterns **308**. Each card **300** associated with a player may have the same pattern **308** as one or more other cards **300** associated with the player, or may have a different pattern **308** from each other card **300** associated with the player. In one embodiment, the player may create one or more patterns **308** to be included within the list of available patterns **308** and/or to be used with card **300**.

[0074] When a pattern **308** is displayed that meets the player's approval, the player selects the pattern **308** for use with card **300**. Each card **300** is populated with player indicia **304**. In one embodiment, the player may select or change one or more player indicia **304** for each card **300**. For example, the player may select one or more numbers or other indicia to be displayed in each space **302** of card **300**, or may select one or more numbers or other indicia to be displayed within each space **302** of pattern **308** (i.e., within each space **302** enclosed by pattern **308**). If the player does not select indicia **304** for each space **302** of card **300** or pattern **308**, the remaining spaces **302** are populated with indicia **304** that are randomly selected by server **102** or another device.

[0075] In one embodiment, server **102** and/or randomization device **120** randomly selects some or all of the player indicia **304** for player card **300**. The player may replace one or more player indicia **304** with player indicia **304** selected by the player. For example, the player may replace all player indicia **304** within a player card **300**, or may replace player indicia **304** within the selected pattern **308**.

[0076] In one embodiment, the selected pattern **308** is electronically or otherwise displayed on card **300**. For example, if card **300** is an electronic or virtual player card that is electronically displayed on a computing device **200**, such as handheld device **192** or kiosk **194**, the selected pattern **308** is graphically overlaid on or around spaces **302** of card **300** associated with pattern **308**. Pattern **308** may be displayed or represented by a border surrounding spaces **302** included within pattern **308**, by highlighting spaces **302** or indicia **304** included within pattern **308** with a color or shading that is different than spaces **302** outside of pattern **308**, by bolding or otherwise emphasizing indicia **304** of spaces **302** included within pattern **308**, graying out or otherwise de-emphasizing indicia **304** of spaces not included within pattern **308**, and/or any other suitable identification of spaces **302** or indicia **304** included within pattern **308**. In embodiments in which card **300** is a paper or cardboard card, for example, pattern **308**

may be printed on card **300** by terminal **150** or another suitable device in a similar manner as described above with reference to the electronic card **300**.

[0077] As shown in FIG. **3**A, a first selected pattern **310** may include an X shape or configuration of spaces **302** that includes spaces **302** from a top left corner of card **300** to a bottom right corner of card **300** (including free space **306**) and from a bottom left corner of card **300** to a top right corner of card **300** (including free space **306**). As shown in FIG. **3**B, a second selected pattern **312** may include a frame shape or configuration that includes each space **302** along a top edge, a right edge, a bottom edge, and a left edge of card **300**. As shown in FIG. **3**C, a third selected pattern **314** may include a "postage stamp" shape or configuration that includes the four spaces **302** in the top left corner of card **300**. As shown in FIG. **3**D, a fourth selected pattern **316** may include a corner shape or configuration that includes the top left space, the top right space, the bottom right space, and the bottom left space of card **300**. Those of ordinary skill in the art should recognize that patterns **308** shown in FIGS. **3**A-**3**D are exemplary only and do not limit the types or number of patterns **308** that may be used. Rather, any suitable type and number of patterns **308** may be used and selected by the player.

[0078] During operation, before a game is started, the player uses handheld device **192**, kiosk **194**, terminal **150**, or another suitable device, to select a pattern **308** for each card **300** from the list of available patterns. Alternatively, server **102** selects a pattern **308** and presents pattern **308** to the player. When the player selects a pattern **308** for each card **300**, the game begins. A plurality of house indicia is drawn and is compared to player indicia **304** within cards **300**. If the player indicia included in the spaces of card **300** covered by pattern **308** are matched by house indicia drawn during the game, the player may win a predetermined payout based on a total number of house indicia that were drawn in order to match pattern **308**. In one embodiment, the game continues until a predetermined number of house indicia are drawn, such as 60 indicia. In another embodiment, the game continues until enough house indicia have been drawn to enable each pattern **308** on each card **300** of every player playing the game to be matched.

[0079] FIG. **4** is a flowchart of an exemplary method **400** of playing a game of chance, such as bingo, that may be used with system **100** (shown in FIG. **1**). In one embodiment, method **400** is implemented by one or more processors of a computing device **200** (shown in FIG. **2**), such as server **102** (shown in FIG. **1**). Additionally or alternatively, method **400** may be executed by administrator computer **104**, website server **108**, terminal **150**, handheld device **192**, and/or kiosk **194** (shown in FIG. **1**).

[0080] A selection of one or more player cards **300** to be played during a game is received **402**, for example, by server **102**. In one embodiment, a player selects a number and a type of card **300** to be played, such as 4 bingo cards **300**. A wager is accepted **404** from the player for each card **300**. In addition, a selection of a winning pattern **308** for each player card **300** is received **406**, and a selection of one or more player indicia **304** for each card **300** is received **408** by server **102**. Alternatively, player indicia **304** for one or more cards **300** are randomly determined by server **102** or another device. The player selections of the number and type of cards **300** to be played, the wager, the winning patterns, and the player indicia may be selected using handheld device **192**, kiosk **194**, terminal **150**, and/or any other device, and may be communicated from the device to server **102** through a private network or the Internet **106**, for example.

[0081] When the player cards **300**, player indicia **304**, and winning patterns **308** have been selected, one or more player tickets are issued **410**. Each ticket may include any suitable number of cards **300**. In one embodiment, tickets and cards **300** are printed on paper, for example, using ticket printer **154**, and are handed to the player by an attendant. In another embodiment, tickets and cards **300** are electronic tickets and cards **300**, and are transmitted to a device used by the player, such as handheld device **192** or kiosk **194**.

[0082] The game is initiated and a plurality of house indicia are called or randomly selected **412** by server **102** or by another suitable device using randomization device **120** (shown in FIG. **1**), for example. The house indicia that have been selected are compared with player indicia **304** on each card **300** to determine **414** whether the house indicia match player indicia **304** within the selected pattern **308**. If a pattern **308** is not matched for a card **300** (i.e., if each player indicia **304** within pattern **308** has not been matched by house indicia that have been selected), the game continues unless it is determined **416** that a predetermined number of house indicia has been selected. In one embodiment, the predetermined number of house indicia is 60 such that the game ends after 60 house indicia have been selected.

[0083] In one embodiment, a first plurality of house indicia, such as 24 numbers, is initially determined (e.g., called or randomly selected) and the first plurality of house indicia are compared with player indicia **304** within the selected pattern **308** to determine if pattern **308** is matched. If no match occurs, or if the game continues after a match has occurred, additional house indicia are selected and player indicia **304** within pattern **308** are compared to the house indicia (e.g., the first plurality of house indicia and the additional selected house indicia) after each additional house indicia is selected. The game may end after a second plurality of house indicia, such as 60 numbers, is determined or selected. In one embodiment, the payout starts at a predetermined first value, and the payout is reduced after each additional house indicia is determined after the first plurality of house indicia.

[0084] If a pattern **308** is matched for a card **300**, however, the number of house indicia required to match pattern **308** is determined **418**. For example, if **26** house indicia have been called before pattern **308** is matched, the determined number of house indicia is 26. Even though at this point, a pattern **308** has been matched, the game continues until a predetermined number of house indicia are selected. Alternatively, the game may end after the first pattern **308** has been matched.

[0085] If the predetermined number of house indicia has not been selected, the game continues and new house indicia are selected **412** as described above. However, once the predetermined number of house indicia have been selected, the game ends and a payout for each card **300** is determined **420**. The payout is based on the number of house indicia that were required to be selected or called to match each pattern **308**. To determine the payout for a card, the number of house indicia selections or calls required to match a pattern **308** is compared to a paytable associated with pattern **308**. The paytable may be stored in memory **204** of server **102** or within any suitable device. Once the payout for each card **300** is determined, the player may cash out or may use any credits or payouts to play additional games.

[0086] In an alternative embodiment, a number of player indicia **304** within the selected pattern **308** that match the

house indicia is determined at step **418** after all house indicia have been selected or called. Accordingly, in such an embodiment, the payout is determined **420** based on how many player indicia **304** within the selected pattern **308** have been matched by the house indicia.

[0087] FIG. **5** is a flowchart of a method **500** of issuing a player card **300** that may be used with system **100** (shown in FIG. **1**) and/or with method **400** (shown in FIG. **4**). In one embodiment, method **500** is implemented by one or more processors of one or more computing devices **200** (shown in FIG. **2**), such as server **102** and terminal **150** (both shown in FIG. **1**). Additionally or alternatively, method **500** may be executed by any other suitable computing device **200**. In one embodiment, method **500** may be used to select a pattern **308** and/or player indicia **304** for a physical player card **300** (e.g., a player card **300** printed on paper or cardstock).

[0088] A wager is received **502** at terminal **150**, for example, from a player who desires to play bingo using physical player cards **300**. In one embodiment, a plurality of blank bingo cards **300** is located near terminal **150**, or in another suitable location within a gaming establishment. The player fills out or otherwise marks at least one of the blank bingo cards **300** with a desired winning pattern **308** to be used in a bingo game. Alternatively, the player fills out or otherwise marks at least one bingo card **300** that has been at least partially pre-filled with player indicia or other data. The player submits player cards **300** with selected patterns **308**, and player cards **300** are received **504** by an attendant at terminal **150**. Alternatively, terminal **150** may be a self-serve terminal that does not require an attendant to be present.

[0089] Player cards **300** are scanned **506** at terminal **150**, for example, using mark sense reader **152** (shown in FIG. **1**), and player cards **300** are associated **508** with the player. In one embodiment, a player rewards card is input into terminal **150** to identify the player. Data representative of player cards **300** and the player rewards card may be transmitted to server **102** to enable server **102** to associate player cards **300** with the player.

[0090] The pattern markings of each player card **300** are analyzed to identify **510** selected patterns **308** of player cards **300**. In one embodiment, the pattern markings are compared to known patterns to identify a selected pattern **308** for each card **300**. The selected patterns **308** are validated **512** to ensure that the selected patterns **308** are available to be used in the bingo game. More specifically, the selected patterns **308** are checked against, or compared to, a set of rules or requirements to determine whether the selected patterns **308** are valid to be used in the game. If the selected patterns **308** are determined to be invalid (i.e., they do not satisfy the rules or requirements), player cards **300** are discarded and the player is notified to select one or more new cards **300** or patterns **308**.

[0091] In a similar manner, if the player chose to select indicia **304** on card **300** (for example, by writing desired indicia **304** on a paper card **300** having one or more blank spaces **302**), selected indicia **304** are identified **514**. In one embodiment, the submitted player card **300** is analyzed using handwriting recognition software or other analytic software or hardware to identify selected indicia **304**. Selected indicia **304** are validated **516** to ensure that indicia **304** satisfy game requirements. More specifically, the selected indicia **304** are checked against, or compared to, a set of rules or requirements to determine whether the selected indicia **304** are valid to be used in the game. If the selected indicia **304** are determined to be invalid (i.e., they do not satisfy the rules or requirements of the game), player cards **300** are discarded and the player is notified to select one or more new cards **300** or indicia **304**.

[0092] The game requirements for selected indicia **304** may include, for example, ensuring that only numbers 1-15 are used within a "B" column of the bingo card **300**, ensuring that only number 16-30 are used within an "I" column of the bingo card **300**, and the like. The game requirements for selected patterns **308** may include, for example, ensuring that selected patterns **308** match available patterns and/or that one or more paytables are associated with selected patterns **308**. When the player cards **300** have been validated, a ticket is issued **518** for player cards **300**, for example, by printing the ticket using ticket printer **154** (shown in FIG. **1**). The ticket (and player cards **300** associated with the ticket) may then be used to play the game.

[0093] FIG. **6** is a flowchart of another method **600** of issuing a player card **300** that may be used with system **100** (shown in FIG. **1**) and/or with method **400** (shown in FIG. **4**). In one embodiment, method **400** is implemented by one or more processors of one or more computing devices **200** (shown in FIG. **2**), such as server **102**, kiosk **194**, and terminal **150** (shown in FIG. **1**). Additionally or alternatively, method **600** may be executed by any other suitable computing device **200**. In one embodiment, method **600** may be used to select a pattern **308** and/or player indicia **304** for an electronic player card **300** at terminal **150**.

[0094] A wager is received **602** at terminal **150**, for example, from a player who desires to play electronic bingo using electronic player cards **300**. One or more player cards **300** are displayed **604** to the player using a display of terminal **150**. For example, an attendant or an operator may cause terminal **150** to display a plurality of player cards **300** to the player, and the player may select one or more of the displayed player cards **300** for use with an upcoming game. Terminal **150** receives **606** the selection of player cards **300**, for example, through input of the attendant or the player at terminal **150**. In one embodiment, the player inputs selections via a touch screen display of terminal **150**.

[0095] Terminal **150** also displays **608** a list of available patterns to the user via a display. A selection of one or more patterns is received **610** by terminal **150**, for example, through input of the attendant or the player at terminal **150**. In addition, a plurality of player indicia **304** is displayed **612** for each player card **300** selected by the player. In one embodiment, the player indicia **304** is randomly generated by server **102** using RNG **124**, for example. In another embodiment, the player selects one or more player indicia **304** for player cards **300**. If any spaces **302** of a player card **300** remain blank after the player selects the player indicia **304**, the blank spaces **302** are populated with randomly determined player indicia **304** from server **102**.

[0096] After player cards **300** are populated with player indicia **304**, the player is presented **614** with an option to approve or disapprove indicia **304** for each player card **300**. If the player disapproves indicia **304**, a new set of indicia **304** is displayed **612**. For example, the player may select one or more indicia **304** to be changed and may enter a new value or symbol for indicia **304** using an input mechanism, such as a touch screen, of terminal **150** or by communicating the changes to an attendant of terminal **150**. The player may alternatively select a button or another input mechanism of

terminal **150**, for example, to display a new set of randomized indicia **304** for one or more player cards **300**.

[0097] If the player approves player indicia **304**, a ticket is issued **616** for selected player cards **300** that include selected pattern **308** and player indicia **304**. The issued ticket may be printed on paper and delivered to the player, or the ticket may be electronically transmitted to a player device associated with the player, such as a kiosk **194**, or a handheld device **192**.

[0098] FIG. **7** is a flowchart of an exemplary method **700** of issuing a player card **300** that may be used with system **100** (shown in FIG. **1**) and/or with method **400** (shown in FIG. **4**). In one embodiment, method **700** is implemented by one or more processors of one or more computing devices **200** (shown in FIG. **2**), such as server **102**, kiosk **194**, and terminal **150** (shown in FIG. **1**). Additionally or alternatively, method **700** may be executed by any other suitable computing device **200**. In one embodiment, method **700** may be used to select a pattern **308** and/or player indicia **304** for an electronic player card **300** using a device associated with a player (also referred to as a "player device" or an "electronic player device"). The player device may include, without limitation, a handheld device **192**, a kiosk **194**, a personal computer, a laptop, or any other suitable device.

[0099] The player device establishes a network connection with server **102**, and the player device is authenticated **702** by server **102**, for example, using a public key infrastructure (PKI) authentication system or by another suitable authentication system. In addition, the player may be authenticated and/or associated with the player device by server **102**.

[0100] Data representative of one or more player cards **300** is received **704** from the player device. For example, the player device may connect to server **102** via one or more networks and may electronically transmit data representative of player cards **300** to server **102**. Server **102** also receives **706** data representative of a wager from the player device through one or more networks. Alternatively, the data representative of one or more player cards and/or the wager may be received from the player device, via an intermediate device such as terminal **150**, through near-field communication, through one or more SMS or MMS messages, by scanning a barcode or image displayed on the player device, or by any other suitable manner or device.

[0101] The player cards **300** and the wager received by server **102** are associated **708** with the player and the player device. For example, in one embodiment, server **102** maintains a list or a database of players and of player devices, player cards **300**, wagers, and other information associated with each player. Each player card **300** includes a selected pattern **308** and may also include one or more player indicia **304** selected by the player. The selected pattern **308** and the selected player indicia **304** may be represented as virtual markings on each player card **300** or may be represented as data associated with player card **300**.

[0102] Each player card **300** received by server **102** is analyzed to identify **710** which pattern **308** has been selected by the player. In one embodiment, the data representative of selected patterns **308** are compared to known patterns to identify selected pattern **308** for each card **300**. Selected patterns **308** are validated **712** to ensure that patterns **308** are available to be used in the bingo game in a similar manner as described above. If selected patterns **308** are determined to be invalid, player cards **300** are discarded and the player is instructed to select one or more new cards **300**.

[0103] In a similar manner, if the player chose to select one or more player indicia **304** for the submitted electronic card **300**, server **102** identifies **714** selected indicia **304**. Selected indicia **304** are validated **716** to ensure that game requirements are satisfied in a similar manner as described above. If selected indicia **304** are determined to be invalid, player cards **300** or indicia **304** are discarded and the player is instructed to select one or more new cards **300** or indicia **304**.

[0104] When patterns **308** and indicia **304** of player cards **300** have been validated, a ticket is issued **718** for player cards **300**. The ticket, and player cards **300** associated with the ticket, are transmitted **720** back to the player device for use in playing the game.

[0105] FIG. **8** is a flowchart of a method **800** of selecting player indicia and/or patterns for an electronic player card **300** that may be used with system **100** (shown in FIG. **1**) and/or with method **400** (shown in FIG. **4**). In one embodiment, method **800** is implemented by one or more processors of one or more computing devices **200** (shown in FIG. **2**), such as handheld device **192** or kiosk **194** (referred to herein as a "player device"). The player device may additionally or alternatively include, without limitation, a personal computer, a laptop, or any other suitable device. Additionally or alternatively, method **800** may be executed by any other suitable computing device **200**. In one embodiment, method **800** is executed at least partially by an application installed on the player device.

[0106] One or more player cards **300** are displayed **802** on the player device. For example, server **102** may generate a plurality of player cards **300** and may electronically transmit player cards **300** to the player device through the Internet **106** or another suitable network. An application executing on the player device receives player cards **300** and displays cards **300** to the player. The player may select one or more player cards **300** from the cards displayed, and the player device transmits selected cards **300** to server **102**. The selection of player cards **300** is received **804** by server **102**.

[0107] A list of available patterns **308** is displayed **806** on the player device based on player cards **300** selected. In one embodiment, the list of patterns **308** is based on the type of player cards **300** selected and/or the type of game being played. The list of patterns **308** may be transmitted to the player device from server **102**, for example. The player selects a pattern **308** for each player card **300** from the list of available patterns **308** and the player device transmits data representative of selected patterns **308** to server **102**.

[0108] Server **102** receives **808** the data representative of the selected patterns from the player device and causes indicia **304** for player cards **300** to be displayed **810** on the player device. In one embodiment, server **102** selects indicia **304** to populate each player card **300** with, and transmits data representative of indicia **304** to each player card **300**. Alternatively, server **102** may select only a portion, or none, of indicia **304** to be used with each player card **300** and the remaining indicia **304** are selected by the player.

[0109] Method **800** determines **812** whether the player approves indicia **304** selected by server **102**. If the player does not approve indicia **304** selected by server **102**, a selection is received **814** from the player. The selection may include a request for server **102** to generate a new set of player indicia **304**, and/or the selection may include one or more indicia **304** selected by the player. For example, the user may use one or more buttons to select a location on a player card **300** and a number or other indicia **304** to be used for the selected loca-

tion on player card **300**. Selected indicia **304** are displayed **810** on the player device in a similar manner as described above.

[0110] If the player approves the indicia, a ticket is issued **816** by server **102** and is associated with the player cards **300** described herein. The ticket is transmitted **818** to the player device for use in playing the game.

[0111] FIG. **9** illustrates a pay table **900** that may be used with the systems and methods described herein during play of a game of chance, such as bingo. Pay table **900** lists the payouts, or prizes **902**, that may be awarded to a player depending on a number of house indicia, or ball calls **904**, that were required for the player card pattern **308** or patterns **308** to be matched. For example, if a player card pattern **308** was matched on the 23^{rd} ball call, the player would win a prize of $500.

[0112] During play of the game of chance, the player selects a pattern **308** and/or the player indicia **304** within pattern **308** as described above. In the example pay table **900** illustrated in FIG. **9**, the player selects a pattern **308** of 8 numbers and optionally selects the 8 numbers in pattern **308** (or a subset of the numbers if desired, with server **102** or another device selecting the remaining numbers). The player selects the number of games to be played with the selected pattern **308**, or the number of games to be played with card **300** or ticket generated with pattern **308**. Accordingly, it should be recognized that the same player indicia **304**, pattern **308**, card **300**, and/or ticket may be used for a plurality of games.

[0113] The player also selects a wager amount to be wagered on each game. It should be recognized that any suitable amount may be wagered, including wagers in non-whole dollar increments. If a player wagers a non-whole dollar amount, such as $1.55, pay table **900** may be modified to award prizes that are predetermined multiples of the wagered amount.

[0114] One or more cards **300** are generated with the selected pattern **308** and/or the selected player indicia **304**, and cards **300** are presented to the player as described above. For example, the player may receive a paper or cardboard ticket, an electronic ticket, or any other suitable ticket including the generated cards **300**.

[0115] Gameplay, i.e., the play of the game of chance, is commenced by server **102**, for example. Server **102** and/or randomization device **120** initially selects a first plurality of house indicia, such as 14 numbers from a pool of 75 numbers in this example. The house indicia are communicated to the player and/or the player device (described above) as one or more ball calls. Server **102** determines whether each player indicia **304** within the selected pattern **308** matches the house indicia selected by server **102**. If each player indicia **304** within the selected pattern **308** matches house indicia called by server **102**, the player wins the prize in pay table **900** associated with the number of house indicia called.

[0116] Server **102** and/or randomization device **120** select additional numbers or other house indicia through individual ball calls until a second plurality of house indicia have been selected, such as 55 indicia in this example. After each individual house indicia is selected, server **102** determines whether player indicia **304** within the selected pattern **308** match the called house indicia. If a match occurs, the player wins the prize shown in pay table **900** associated with the number of house indicia called. Even if one winner is identified early in the selection of house indicia, play of the game continues until the final house indicia is called (e.g., the 55^{th} indicia in this example) and each matching pattern **308** wins a prize. Accordingly, a plurality of players may win a prize during the gameplay described herein.

[0117] If no winners have been identified by the time the final house indicia is called (i.e., no patterns **308** have been matched by the called house indicia), server **102** and/or randomization device **120** continues selecting or "calling" house indicia until at least one winner is identified. While pay table **900** is shown as having a plurality of predetermined prize amounts for a given wager ($1 in the example shown), it should be recognized that pay table **900** may be set up to award a progressive or pari-mutuel prize in addition to, or in place of, the predetermined prize amounts.

[0118] In one embodiment, pay table **900** and the game of chance may be played using a player device having a randomization device **120**, such as RNG **124**, integrated within the player device or coupled to the player device. RNG **124** of the player device randomly selects the house indicia used during the game. In such an embodiment, the player may play the game of chance against the house rather than against other players. Accordingly, if the player is playing against the house, the player is playing an odds-based game in which a prize is awarded strictly based on the pattern or patterns matched by the player irrespective of any pattern matches or gameplay of other players. For example, the player does not compete against other players for the payout.

[0119] FIG. **10** illustrates another pay table **1000** that may be used with the systems and methods described herein during play of a game of chance, such as bingo. Pay table **1000** lists the prizes, or payouts **1002**, that may be awarded to a player depending on a number of house indicia, or ball calls **1004**, that were required for the player card pattern or patterns to be matched. For example, if a player card pattern was matched on the 23^{rd} ball call, the player would win a prize of $5000.

[0120] During play of the game of chance, the player selects a pattern **308** and/or the player indicia **304** within pattern **308** as described above. In the example pay table **1000** illustrated in FIG. **10**, the player selects a pattern **308** of 8 numbers and optionally selects the 8 numbers in pattern **308** (or a subset of the numbers if desired, with server **102** or another device selecting the remaining numbers). The player selects the number of games to be played with the selected pattern **308**, or the number of games to be played with card **300** or ticket generated with pattern **308**. Accordingly, it should be recognized that the same player indicia **304**, pattern **308**, card **300**, and/or ticket may be used for a plurality of games.

[0121] The player also selects a wager amount to be wagered on each game. It should be recognized that any suitable amount may be wagered, including wagers in non-whole dollar increments. If a player wagers a non-whole dollar amount, such as $1.55, pay table **1000** may be modified to award prizes that are predetermined multiples of the wagered amount.

[0122] One or more cards **300** are generated with the selected pattern **308** and/or the selected player indicia **304**, and cards **300** are presented to the player as described above. For example, the player may receive a paper or cardboard ticket, an electronic ticket, or any other suitable ticket including the generated cards **300**.

[0123] Gameplay is commenced by server **102**, for example. Server **102** and/or randomization device **120** ini-

tially selects a first plurality of house indicia, such as 20 numbers from a pool of 75 numbers in this example. The house indicia are communicated to the player and/or the player device (described above) as one or more ball calls. Server **102** determines whether each player indicia **304** within the selected pattern **308** matches the house indicia selected by server **102**. If each player indicia **304** within the selected pattern **308** matches house indicia called by server **102**, the player wins the prize in pay table **1000** associated with the number of house indicia called.

[0124] Server **102** and/or randomization device **120** select additional numbers or other house indicia through individual ball calls until a second plurality of house indicia have been selected, such as 28 indicia in this example. After each individual house indicia is selected, server **102** determines whether player indicia **304** within the selected pattern **308** match the called house indicia. If a match occurs, the player wins the prize shown in pay table **1000** associated with the number of house indicia called. Even if one winner is identified early in the selection of house indicia, play of the game continues until the final house indicia is called (e.g., the 28^{th} indicia in this example) and each matching pattern **308** wins a prize. Accordingly, a plurality of players may win a prize during the gameplay described herein. Alternatively, server **102** ends the game at the ball call in which the first winner has been identified.

[0125] If no winners have been identified by the time the final house indicia is called (i.e., no patterns **308** have been matched by the called house indicia), server **102** ends the game without awarding a prize. While pay table **1000** is shown as having a plurality of predetermined prize amounts for a given wager ($1 in the example shown), it should be recognized that pay table **1000** may be set up to award a progressive or pari-mutuel prize in addition to, or in place of, the predetermined prize amounts.

[0126] In one embodiment, pay table **1000** and the game of chance may be played using a player device having a randomization device **120**, such as RNG **124**, integrated within the player device or coupled to the player device. In such an embodiment, the player may play the game of chance against the house rather than against other players, as described above.

[0127] FIG. **11** illustrates yet another pay table **1100** that may be used with the systems and methods described herein during play of a game of chance, such as bingo. Pay table **1100** lists the prizes, or payouts **1102**, that may be awarded to a player depending on a number of player indicia **304** that are matched (also referred to as a "catch" **1104**) within a selected pattern **308** by a plurality of house indicia called during the game.

[0128] During play of the game of chance, the player selects a pattern **308** and/or the player indicia **304** within pattern **308** as described above. In the example pay table **1100** illustrated in FIG. **11**, the player selects a pattern **308** of 8 numbers and optionally selects the 8 numbers in pattern **308** (or a subset of the numbers if desired, with server **102** or another device selecting the remaining numbers). The player selects the number of games to be played with the selected pattern **308**, or the number of games to be played with card **300** or ticket generated with pattern **308**. In a similar manner as described above, it should be recognized that the same player indicia **304**, pattern **308**, card **300**, and/or ticket may be used for a plurality of games.

[0129] The player also selects a wager amount to be wagered on each game. It should be recognized that any suitable amount may be wagered, including wagers in non-whole dollar increments. If a player wagers a non-whole dollar amount, such as $1.55, pay table **1100** may be modified to award prizes that are predetermined multiples of the wagered amount.

[0130] One or more cards **300** are generated with the selected pattern **308** and/or the selected player indicia **304**, and cards **300** are presented to the player as described above. For example, the player may receive a paper or cardboard ticket, an electronic ticket, or any other suitable ticket including the generated cards **300**.

[0131] Gameplay is commenced by server **102**, for example. Server **102** and/or randomization device **120** selects a plurality of house indicia, such as 24 numbers from a pool of 75 numbers in this example. The house indicia are communicated to the player and/or the player device (described above) as one or more ball calls. Server **102** determines whether each player indicia **304** within the selected pattern **308** matches the house indicia selected by server **102**. The player wins a prize identified in pay table **1100** based on the number of player indicia **304** that match the called house indicia. For example, if 5 player indicia **304** are matched by the called house indicia, the player would win $2.

[0132] It should be recognized that a plurality of players may win a prize during the gameplay described herein. For example, each player may win a prize based on the number of player indicia matched by the called house indicia. If multiple players match all 8 player indicia such that the progressive prize is won, the progressive prize may be split between the winning players. In one embodiment, a fixed prize amount (or fixed multiple of the wagered amount) may be provided instead of, or in addition to, the progressive prize identified in pay table **1100**.

[0133] Accordingly, as described herein, the players may win a prize based on a partial pattern match. In other words, the players may win a prize even if all the player indicia **304** within the selected patterns **308** are not matched by the called house indicia. Rather, the players may each win a prize based on the number of player indicia **304** within each selected pattern **308** that are matched by the house indicia.

[0134] In one embodiment, pay table **1100** and the game of chance may be played using a player device having a randomization device **120**, such as RNG **124**, integrated within the player device or coupled to the player device. In such an embodiment, the player may play the game of chance against the house rather than against other players, as described above.

[0135] FIG. **12**A illustrates a player card **1200** that only includes player indicia **304** displayed within a selected pattern **308**. FIG. **12**B illustrates player card **1200** in which the spaces **1202** of card **1200** outside of the selected pattern **308** are at least partially filled with a predetermined filler object. FIGS. **12**A and **12**B may be used with any of the systems and methods described herein.

[0136] When a player selects a pattern **308** and/or player indicia **304** for the selected pattern **308** as described above, a player card **1200** (and a ticket including player card **1200**) is issued by server **102**, for example. As described above, player card **1200** and the ticket may be printed on paper, cardboard, or another suitable material, or may be electronically generated and displayed on a player device. Player card **1200** is generated with the selected player indicia **304** displayed

within the selected pattern **308** (e.g., an X pattern **308** in FIGS. **12**A and **12**B). Spaces **1202** of player card **1200** that are outside of the selected pattern **308** are left blank (as illustrated in FIG. **12**A) or are at least partially filled with a predetermined filler object **1204** (as illustrated in FIG. **12**B).

[0137] Filler object **1204** displayed in the otherwise blank spaces **1202** of player card **1200** (illustrated in FIG. **12**B) may include, for example, a logo, text, an image, a shading or a filling of space **1202** with one or more colors or patterns, and/or any other suitable object that is distinguishable from player indicia **304**. If player card **1200** is an electronic player card **1200**, filler object **1204** may additionally or alternatively include a video, an animated image, and/or may include one of the foregoing objects that is displayed during a first period of time and that is not displayed during a second period of time. It should be recognized that filler object **1204** may completely or partially fill space **1202**. In addition, the same filler object **1204** may be displayed in each space **1202**, or different filler objects **1204** may be displayed in spaces **1202** as desired.

[0138] Unless otherwise specified, each method described herein is not limited to the order in which the steps of each method are described or introduced. Rather, the steps may be rearranged in any suitable order and/or may be combined with steps of other methods as desired.

[0139] This written description uses examples to describe embodiments of the disclosure, including the best mode, and also to enable any person skilled in the art to practice the embodiments, including making and using any devices or systems and performing any incorporated methods. The patentable scope of the disclosure is defined by the claims, and may include other examples that occur to those skilled in the art. Such other examples are intended to be within the scope of the claims if they have structural elements that do not differ from the literal language of the claims, or if they include equivalent structural elements with insubstantial differences from the literal language of the claims.

What is claimed is:

1. A method of playing a game of chance, said method comprising:

providing a player card to be used with the game, wherein the player card includes a predetermined number of spaces for displaying player indicia;

enabling, by a processor, a player to select one of a plurality of available patterns for the player card, wherein a plurality of the spaces is included within each of the available patterns;

enabling, by the processor, the player to select a plurality of player indicia for the selected pattern, wherein each player indicia of the selected plurality of player indicia is displayed within one of the plurality of spaces included within the selected pattern;

randomly selecting a plurality of house indicia;

determining, by the processor, whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern; and

determining, by the processor, a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

2. The method of claim **1**, wherein the game continues after a determination that the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

3. The method of claim **2**, wherein the game continues until a predetermined number of house indicia is selected.

4. The method of claim **2**, wherein a plurality of players are enabled to play the game, each player having at least one player card with a pattern to be matched by the selected house indicia, and wherein the game continues until each pattern of each player card is matched by the selected house indicia.

5. The method of claim **1**, wherein randomly selecting a plurality of house indicia comprises selecting a first plurality of house indicia, and wherein determining whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern comprises determining whether the first plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

6. The method of claim **5**, wherein additional house indicia are selected after the first plurality of house indicia have been selected, and wherein the processor determines whether the first plurality of house indicia and the additional house indicia match the selected plurality of player indicia for the selected pattern after each additional house indicia is selected.

7. The method of claim **6**, wherein the payout starts at a first value, and the payout is reduced each time an additional house indicia is selected.

8. The method of claim **6**, wherein additional house indicia are selected until a second plurality of house indicia have been selected, and wherein the game ends when the second plurality of house indicia have been selected.

9. The method of claim **1**, wherein a server initially selects a first plurality of player indicia for use with the player card, and wherein the plurality of player indicia selected by the player is a second plurality of player indicia that replaces at least a portion of the first plurality of player indicia.

10. The method of claim **1**, wherein a server initially selects each player indicia to be used with the player card, and wherein the plurality of player indicia selected by the player replaces the server selected player indicia included within the selected pattern.

11. The method of claim **1**, wherein the plurality of player indicia included within the selected pattern is a first plurality of player indicia and a second plurality of player indicia is included within the first plurality of player indicia, and wherein the processor determines a payout based on a determination that the plurality of house indicia matches the second plurality of player indicia.

12. The method of claim **1**, further comprising generating the player card such that the plurality of spaces within the selected pattern are the only spaces of the player card in which player indicia are displayed.

13. The method of claim **12**, further comprising displaying at least one filler object within each of the spaces of the player card that are not included within the selected pattern.

14. The method of claim **1**, wherein enabling, by a processor, a player to select one of a plurality of available patterns for the player card includes enabling the player to create a pattern to be included in the plurality of available patterns.

15. The method of claim **1**, wherein the game ends after a determination that the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

16. The method of claim **1**, wherein the processor determines at least a portion of the payout to include a progressive prize.

17. The method of claim **1**, wherein the game is played on a player device that includes a random number generator for

randomly selecting the plurality of house indicia, and wherein the player does not compete against other players for the payout.

18. A method of playing a game of bingo, said method comprising:

providing a player card to be used with the game, wherein the player card includes a predetermined number of spaces for displaying indicia;

displaying, on an electronic player device, a plurality of available patterns to be used with the player card, wherein a plurality of the spaces is included within each of the available patterns;

enabling a player to select one of the available patterns for the player card using the electronic player device;

displaying a plurality of player indicia on the electronic player device;

enabling the player to select the plurality of player indicia for the selected pattern using the electronic player device, wherein each player indicia of the selected plurality of player indicia is displayed on the electronic player device within one of the spaces included within the selected pattern;

randomly selecting a plurality of house indicia;

determining, by the processor, whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern; and

determining, by the processor, a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

19. The method of claim **18**, further comprising receiving, by the processor, data representative of the selected pattern and the selected plurality of player indicia from the electronic player device.

20. The method of claim **18**, further comprising authenticating the electronic player device by the processor.

21. The method of claim **18**, wherein the game continues after a determination that the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

22. The method of claim **21**, wherein the game continues until a predetermined number of house indicia is selected.

23. The method of claim **21**, wherein a plurality of players are enabled to play the game, each player having at least one player card with a pattern to be matched by the selected house indicia, and wherein the game continues until each pattern of each player card is matched by the selected house indicia.

24. The method of claim **18**, wherein randomly selecting a plurality of house indicia comprises selecting a first plurality of house indicia, and wherein determining whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern comprises determining whether the first plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

25. The method of claim **24**, wherein additional house indicia are selected after the first plurality of house indicia have been selected, and wherein the processor determines whether the first plurality of house indicia and the additional house indicia match the selected plurality of player indicia for the selected pattern after each additional house indicia is selected.

26. The method of claim **24**, wherein the payout starts at a first value, and the payout is reduced each time an additional house indicia is selected.

27. The method of claim **24**, wherein additional house indicia are selected until a second plurality of house indicia have been selected, and wherein the game ends when the second plurality of house indicia have been selected.

28. The method of claim **18**, wherein a server initially selects a first plurality of player indicia for use with the player card, and wherein the plurality of player indicia selected by the player is a second plurality of player indicia that replaces at least a portion of the first plurality of player indicia.

29. The method of claim **18**, wherein a server initially selects each player indicia to be used with the player card, and wherein the plurality of player indicia selected by the player replaces the server selected player indicia included within the selected pattern.

30. The method of claim **18**, further comprising:

issuing a ticket with the player card having the selected pattern and the selected plurality of player indicia; and

transmitting the ticket to the electronic player device.

31. A method of playing a game of bingo, said method comprising:

displaying, on a terminal, a player card to be used with the game, wherein the player card includes a predetermined number of spaces for displaying indicia;

identifying, by a processor, a plurality of available patterns to be used with the player card, wherein a plurality of the spaces is included within each of the available patterns;

displaying the plurality of available patterns on the terminal;

enabling a player to select one of the available patterns for the player card using the terminal;

displaying a plurality of player indicia on the terminal;

enabling the player to select the plurality of player indicia for the selected pattern, wherein each player indicia of the selected plurality of player indicia is displayed within one of the plurality of spaces included within the selected pattern;

randomly selecting a plurality of house indicia;

determining, by the processor, whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern; and

determining, by the processor, a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

32. The method of claim **31**, wherein the game continues after a determination that the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

33. The method of claim **32**, wherein the game continues until a predetermined number of house indicia is selected.

34. The method of claim **32**, wherein a plurality of players are enabled to play the game, each player having at least one player card with a pattern to be matched by the selected house indicia, and wherein the game continues until each pattern of each player card is matched by the selected house indicia.

35. The method of claim **31**, wherein randomly selecting a plurality of house indicia comprises selecting a first plurality of house indicia, and wherein determining whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern comprises determining whether the first plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

36. The method of claim **35**, wherein additional house indicia are selected after the first plurality of house indicia

have been selected, and wherein the processor determines whether the first plurality of house indicia and the additional house indicia match the selected plurality of player indicia for the selected pattern after each additional house indicia is selected.

37. The method of claim **36**, wherein the payout starts at a first value, and the payout is reduced each time an additional house indicia is selected.

38. The method of claim **36**, wherein additional house indicia are selected until a second plurality of house indicia have been selected, and wherein the game ends when the second plurality of house indicia have been selected.

39. The method of claim **31**, wherein a server initially selects a first plurality of player indicia for use with the player card, and wherein the plurality of player indicia selected by the player is a second plurality of player indicia that replaces at least a portion of the first plurality of player indicia.

40. The method of claim **31**, wherein a server initially selects each player indicia to be used with the player card, and wherein the plurality of player indicia selected by the player replaces the server selected player indicia included within the selected pattern.

41. A method of playing a game of bingo, said method comprising:

scanning, using a scanning device, a physical player card that includes a predetermined number of spaces for displaying indicia, wherein the player card includes at least one pattern marking indicative of a player selected pattern shaped to enclose at least a plurality of the spaces, and at least one indicia marking indicative of at least one player indicia selected by the player;

identifying, using a processor, a selected pattern based on the at least one pattern marking;

identifying, using the processor, a selected plurality of player indicia based on the at least one indicia marking;

randomly selecting a plurality of house indicia;

determining, by the processor, whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern; and

determining, by the processor, a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

42. The method of claim **41**, wherein the game continues after a determination that the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

43. The method of claim **42**, wherein the game continues until a predetermined number of house indicia is selected.

44. The method of claim **42**, wherein a plurality of players are enabled to play the game, each player having at least one player card with a pattern to be matched by the selected house indicia, and wherein the game continues until each pattern of each player card is matched by the selected house indicia.

45. The method of claim **41**, wherein randomly selecting a plurality of house indicia comprises selecting a first plurality of house indicia, and wherein determining whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern comprises determining whether the first plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

46. The method of claim **45**, wherein additional house indicia are selected after the first plurality of house indicia have been selected, and wherein the processor determines whether the first plurality of house indicia and the additional house indicia match the selected plurality of player indicia for the selected pattern after each additional house indicia is selected.

47. The method of claim **46**, wherein the payout starts at a first value, and the payout is reduced each time an additional house indicia is selected.

48. The method of claim **46**, wherein additional house indicia are selected until a second plurality of house indicia have been selected, and wherein the game ends when the second plurality of house indicia have been selected.

49. The method of claim **41**, wherein a server initially selects a first plurality of player indicia for use with the player card, and wherein the plurality of player indicia selected by the player is a second plurality of player indicia that replaces at least a portion of the first plurality of player indicia.

50. The method of claim **41**, wherein a server initially selects each player indicia to be used with the player card, and wherein the plurality of player indicia selected by the player replaces the server selected player indicia included within the selected pattern.

51. A system comprising:

a randomization device configured to randomly select house indicia;

a selection device configured to:

receive a player card to be used with a game of chance, wherein the player card includes a predetermined number of spaces for displaying indicia;

receive a plurality of available patterns to be used with the player card, wherein a plurality of the spaces is included within each of the available patterns;

enable a player to select one of the available patterns for the player card; and

enable the player to select a plurality of player indicia for the selected pattern, wherein each player indicia of the selected plurality of player indicia is displayed within one of the plurality of spaces included within the selected pattern; and

a server coupled to said randomization device and to said selection device, said server comprising a processor programmed to:

select a plurality of house indicia using said randomization device;

determine whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern; and

determine a payout based upon the determination whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

52. The system of claim **51**, wherein said server is configured to continue the game after a determination that the plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

53. The system of claim **52**, wherein said server is configured to continue the game until a predetermined number of house indicia is selected.

54. The system of claim **52**, wherein a plurality of players are enabled to play the game, each player having at least one player card with a pattern to be matched by the selected house indicia, and wherein said server is configured to continue the game until each pattern of each player card is matched by the selected house indicia.

55. The system of claim **51**, wherein said server is configured to:

select a plurality of house indicia by selecting a first plurality of house indicia; and

determine whether the plurality of house indicia matches the selected plurality of player indicia for the selected pattern by determining whether the first plurality of house indicia matches the selected plurality of player indicia for the selected pattern.

56. The system of claim **55**, wherein said server is configured to:

select additional house indicia after the first plurality of house indicia have been selected; and

determine whether the first plurality of house indicia and the additional house indicia match the selected plurality of player indicia for the selected pattern after each additional house indicia is selected.

57. The system of claim **56**, wherein said server is configured to:

start the payout at a first value; and

reduce the payout each time an additional house indicia is selected.

58. The system of claim **56**, wherein said server is configured to select additional house indicia until a second plurality of house indicia have been selected, and to end the game when the second plurality of house indicia have been selected.

59. The system of claim **51**, wherein said server initially selects a first plurality of player indicia for use with the player card, and wherein the plurality of player indicia selected by the player is a second plurality of player indicia that replaces at least a portion of the first plurality of player indicia.

60. The system of claim **51**, wherein said server initially selects each player indicia to be used with the player card, and wherein the plurality of player indicia selected by the player replaces the server selected player indicia included within the selected pattern.

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