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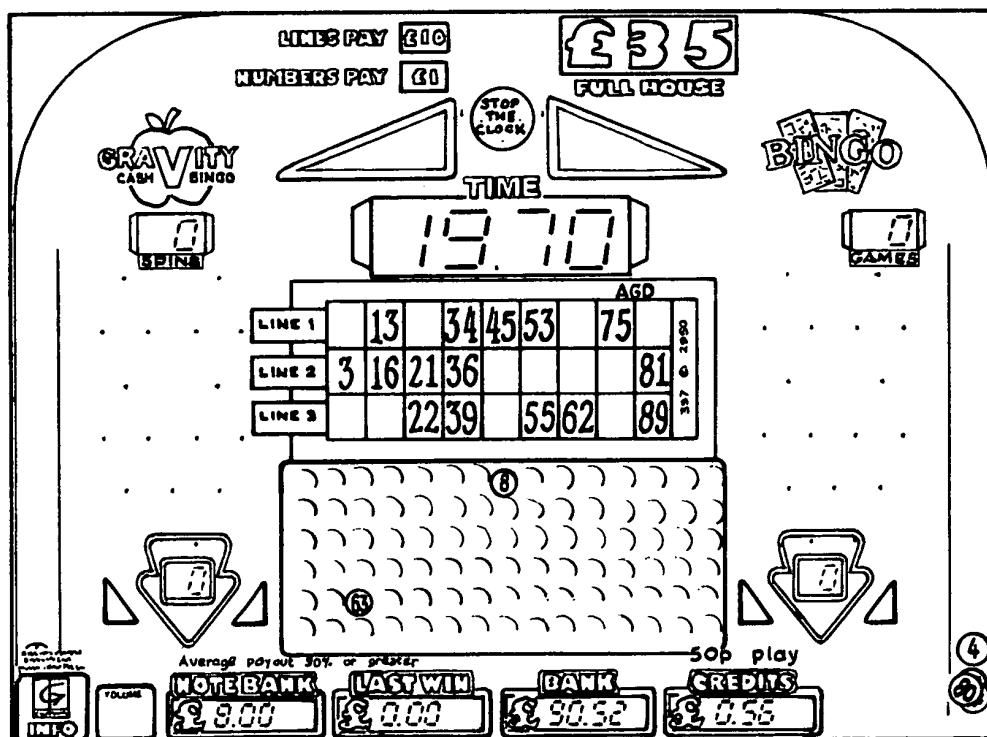
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(54) **Multi stage game amusement apparatus**

(57) A multi stage game amusement machine has a two or three stage game, wherein the first stage comprises a bagatelle type game, the second stage game is a three reel fruit machine game initiated by passage of a

projectile through a defined zone of the screen, and the third stage game is a bingo game, initiated by alignment of a group of selected symbols on the display of fruit machine reels.



**FT6.2**

## Description

**[0001]** This invention relates to amusement apparatus for the playing of a multi-stage game.

**[0002]** Amusement apparatus is well known wherein a first level game is combined with a second level or bonus game, access to the second level or bonus game being achieved by attaining some feat or a threshold score in the first level game. It is usual, but not invariable for the second level or bonus game to be similar to or thematically related to the first level game, and to offer a higher points score or prize value than the first level game.

**[0003]** An object of the invention is to provide amusement apparatus adapted to playing a multi-stage game, that is having more than two game levels or stages.

**[0004]** According to the invention, a multi-stage game amusement apparatus comprises means for playing a first stage game, which means includes means for evaluating whether an outcome meets criteria for access to a second stage game, means for playing said second stage game, said means including means for evaluating whether an outcome meets criteria for access to a third stage game, and means for playing said third stage game.

**[0005]** The games of the first, second and third and any further stages may be conceptually related, or may be of contrasting nature.

**[0006]** The games may incorporate any desired level of skill, knowledge, luck or chance.

**[0007]** In an exemplified embodiment, the games may be of contrasting nature, and for example the first stage game may be a bagatelle-based game, the second stage game a fruit-machine type game, and the third stage game a bingo derived game.

**[0008]** The machine may include a display screen which is operative to display different screens in turn, such as a single combined screen for the first and second stage games, and a different screen for the third game. The screens may display features which exhibit the results of determinations made by one or more processors in the machine, which determine outcomes, including any input by the player through manual controls allowing for example 'nudge' or 'hold' features in the second stage fruit machine game, or gentle or firm pressure for imparting different degrees of impetus to projectiles in the first stage bagatelle game.

**[0009]** In the first stage game, the processor may determine the trajectories of projectiles, which may for example be depicted as gold coins, and project a simulation of the trajectories, as perhaps modified by rebounds from obstructions, onto the screen.

**[0010]** The first screen display may feature one or more first zones, which if entered by the trajectory of a projectile causes credit to be added to a fund, and one or more second zones, which if entered by the trajectory if a projectile will give access to the second stage game.

**[0011]** This may be shown as a feature of the first

screen and comprise a simulated display of a three-reel fruit machine. The operation of the fruit machine may be simulated by causing symbols to scroll past the windows and be seen to be brought to rest. The result of the game is determined according to the normal rules of fruit machine games, and prizes may be paid out in accordance with such rules, including a jackpot payout for a selected unlikely outcome. Further, non-standard, symbols may be included, and an alignment of these may determine access to the third stage game.

**[0012]** The third stage game may be a bingo-type game, and be accompanied by a further screen display representing a bingo card with three lines of nine spaces, randomly numbered, and a matrix display which shows numbers selected as the game progresses. Customary bingo rules may be applied with a prize for each line filled, and a larger prize for a 'full house'. This game may be limited by time, or by number of selections.

**[0013]** The accompanying drawings are half-tone illustrations respectively of a first/second stage screen display, and a third stage screen display, of a display screen of an amusement machine according to the invention.

**[0014]** In the first display (Figure 1), the control processor of the machine computes and plots random trajectories of projectiles, depicted as gold coins, and shows the projectiles following these trajectories. For example, five or more projectiles may be 'fired' for each play of the machine from the vertical tracks at each side of the screen. If the trajectory of the projectile passes through either arrow marked "spin", to each side near the bottom of the screen, access will be granted to the second stage game, and the simulated three reel fruit machine display will be operated. The projectiles pass through a field of pins or other obstructions, and bounce or are deflected realistically. If the simulated coin falls across the arrow (centre top) marked "add to pot" then the player's credit will be advanced by one unit.

**[0015]** The screen also features various windows which display various amounts, such as remaining credit, and also information concerning the prizes awarded by the fruit machine simulation. Two triangular features to the right and left of the "add to pot" arrow divert 'projectiles' from the fruit machine windows.

**[0016]** Play is initiated by insertion of appropriate coins, and pressing the screen area marked 'Autostart' (lower right corner). This is embodied as a touch-screen feature.

**[0017]** The three-reel fruit machine display applies normal fruit machine rules, for example based on alignments of the '7' symbol here, but access to the third stage game is determined by the occurrence of alignments of a non-standard symbol, in this case the "Electrocoin" symbol. If three of these are aligned, then the bingo screen (Figure 2) appears. The operation of this is either limited by time, or number of draws, and prizes are determined by normal bingo rules. The selected numbers may be indicated by numbered coin symbols which are fired and follow trajectories as in the first stage game.

**[0018]** On completion of the third stage bingo game, the screen reverts to the Figure 1 display, for resumption of the first stage game.

**[0019]** The controller of the machine is embodied as a micro processor, which is programmed to provide means for operating a first screen display, means for logging payments made to the machine by the player, deducting an appropriate amount from the credit total with each play actuation, and for crediting prize money to the total; also means for generating a series of randomly determined trajectories and displaying them on the screen together with representations of projectiles in the guise of gold coins. The trajectory generating means is also capable for computing rebounds or deflections by any notional obstruction on the screen.

**[0020]** The device also includes means for determining whether a trajectory crosses either the 'spin' arrows or the "Add to Pot" arrow, and initiating operation of the simulated fruit machine display, or causing addition of an appropriate amount, such as one cash unit (e.g. 1 Op) to the credit total.

**[0021]** Further, the device includes means for simulating the operation of the fruit machine display, and for determining the outcomes after the display has been brought to rest, in terms of alignments of selected symbols to determine prizes to be credited, or for giving access to the third stage game.

**[0022]** The device also comprises means for operating a second screen display, and means for changing over the displays, to exhibit a simulated bingo card, and a matrix for displaying selected numbers, as they are selected, means for generating a random selection of numbers to be displayed in the simulated card, and further means for determining winnings in accordance with customary bingo rules, and crediting any such prize money to the credit total.

**[0023]** The machine also includes means for holding coins, means for accepting payment of coins, and for enabling dispensing of coins to the value of any remaining credit at the end of play. The term "coins" also includes tokens, and where applicable, bank notes.

**[0024]** The player inserts wins in order to play the basic first stage game. For example, a 50p deposit will allow a single game with five coins falling down the screen. The second stage game is a bonus game from the basic bagatelle type game, which does not require any additional cash deposit. The bingo game is a supplementary bonus game via the fruit machine game, again not requiring an additional cash deposit.

**[0025]** The outcome chances are preferably set at levels whereby the machine operator makes a reasonable return, but the likelihood of access to the further bonus games, and of a win from such games, is sufficiently high to maintain players' interest.

**[0026]** The games described are substantially games of luck rather than skill or knowledge, but it is not excluded that games requiring skill or knowledge might be included in all or any of the stages.

## Claims

1. A multi-stage game amusement apparatus comprising first stage game playing apparatus for playing a first stage game, evaluating means for evaluating whether an outcome meets criteria for access to a second stage game, means for playing said second stage game, said means including an evaluator for evaluating whether an outcome meets criteria for access to a third stage game, and means for playing said third stage game.
2. Apparatus according to claim 1, wherein the apparatus comprises a display screen which is operative to display different screen displays in turn, namely a first single combined screen display for the first and second stage games, and a second screen display for the third game.
3. Apparatus according to claim 2, wherein the first screen display features one or more first zones, and one or more second zones.
4. Apparatus according to claim 1, 2 or 3 wherein the apparatus includes one or more processors which determine the outcomes of games.
5. Apparatus according to claim 4 wherein the processor associated with the first stage game comprises means to determine the trajectories of projectiles, and project a simulation of the trajectories on the screen display.
6. Apparatus according to any preceding claim, wherein the first stage game is a three-reel fruit machine game, and the third stage game is a bingo type game.
7. Apparatus according to any preceding claim, wherein the apparatus is controlled by a micro-processor which provides means for operating the first screen display means for logging payments made to the machine by a player, for deducting an appropriate amount from the credit total with each play actuation, and for crediting prize money to the total, and means for generating a series of randomly determined trajectories and for displaying them on the screen together with representations of projectiles, and for computing rebounds or deflections by obstructions displayed on the screen.
8. Apparatus according to claim 7, wherein there are also means for determining whether a trajectory crosses defined areas to initiate operation of a simulated fruit machine display or add an amount to the credit total.
9. Apparatus according to claim 7, wherein there are also means for operating a second screen display

and means for changing over the displays to exhibit a simulated bingo card and a matrix for displaying related numbers as they are selected, means for generating a random selection of numbers to be displayed on the simulated card, and further means to determine winnings in accordance with customary bingo rules, and for crediting any such prizes to the credit total.

10. Apparatus according to claim 9, also including means for holding coins, means for accepting payment of coins, and for enabling dispensing of coins to the value of any remaining credit at the end of play.

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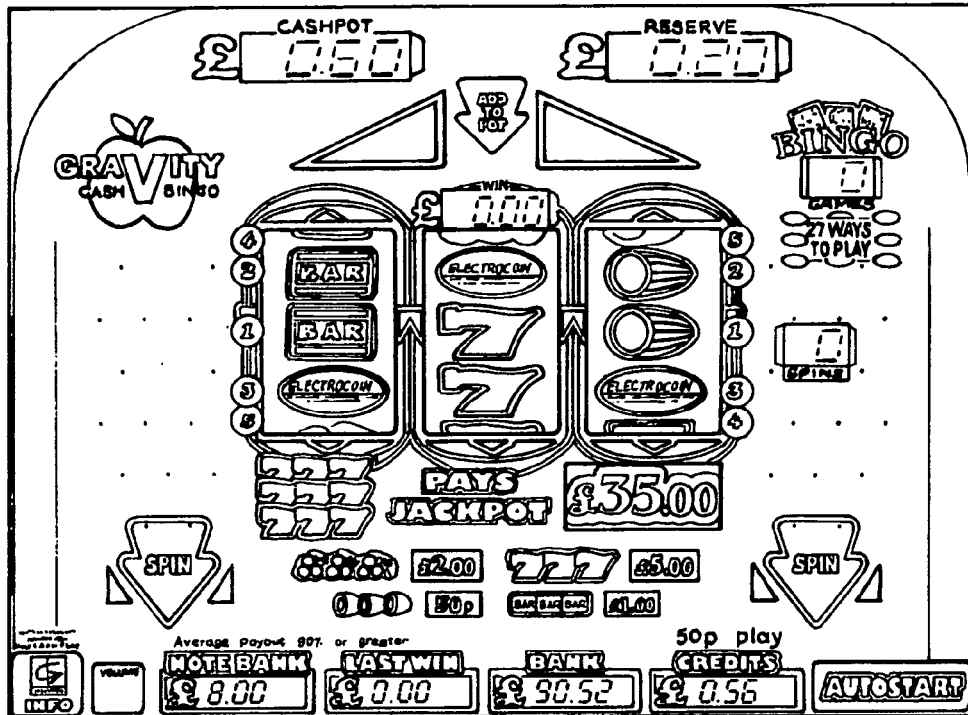
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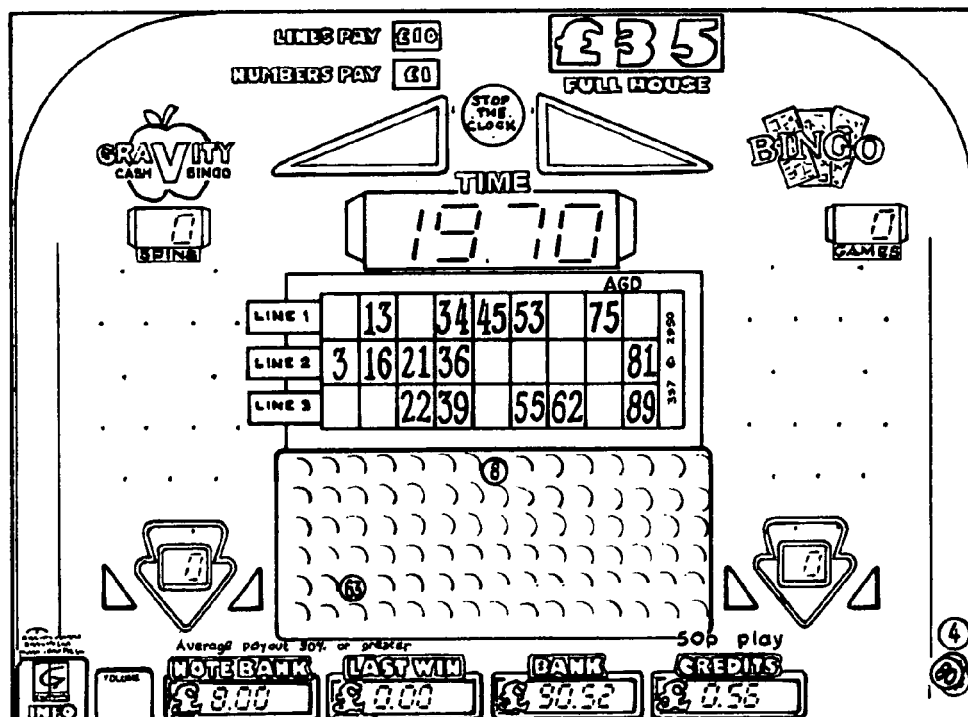
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**FIG. 1**



**FIG. 2**



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 08 25 0394

| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                 |                                                         |                                         |
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| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                 |                                                         |                                         |
| Place of search<br><b>Munich</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                 | Date of completion of the search<br><b>28 July 2008</b> | Examiner<br><b>Peller, Ingrid</b>       |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>.....<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                                                 |                                                         |                                         |

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EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 08 25 0394

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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