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(54) **Entertainment machines**

(57) A coin-operated entertainment machine has a main display device, such as rotatable symbol-bearing reels (9), for use in playing a main game involving the selection and display of symbols. There is a supplementary play feature which acts on occasions automatically to select and display award indications which may be play features or bonuses. This play feature may consist of a closed-loop track (19), arranged around the main display device (9), with multiple positions (20). Play progresses from position to position (20), e.g. by back illumination, to arrive at a final position (20) at which the award is indicated.

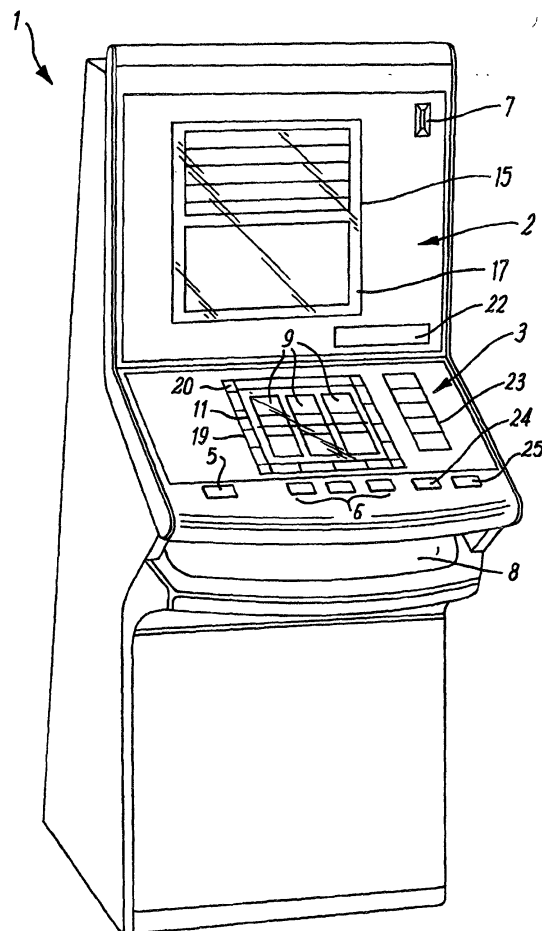


Fig 1

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Description

[0001] This invention relates to player-operable entertainment machines, particularly coin-operated entertainment machines, which may be amusement with prizes (AWP) machines, such as "fruit" or "poker" machines, of the kind having a main display device operable in play of a main game for displaying a selected combination of symbols at a win zone. As used herein the term coin is intended also to cover tokens, charge or credit cards or any other means of supplying credit or monetary value.

[0002] The main display device of a fruit machine may comprise multiple side-by-side reels, say three or four reels, which are rotatable about a common horizontal axis within a housing behind a window at the win zone. Each reel has symbols at equally spaced positions around its periphery and the reels can be brought to rest with one symbol on each reel displayed through the window on a win line.

[0003] If the displayed combination of symbols constitutes a predetermined winning combination an award may be made available to the player.

[0004] Usually, there is the possibility, on occasions, to hold one or more reels against rotation, or to nudge one or more reels after rotation through one or more steps, whereby a player can seek to influence selection of the symbols displayed on the win line.

[0005] It is also well known to provide a supplementary display or 'feature game' which can be used to enhance the entertainment value of the machine and provide additional or alternative opportunities for winning.

[0006] In particular, it is known to provide a panel having sections which can be selectively illuminated to represent movement from location to location along a trail, particularly along a wraparound trail, which may simulate the playing of a board game.

[0007] Play is transferred from the main reels to the trail of the feature game on a random or predetermined basis and illumination of the panel sections may then be effected by, or in correspondence with, a rotatable subsidiary feature reel, or otherwise, representing the spin of a reel or roll of a dice or other selection.

[0008] Awards or award possibilities may be made available to the player in dependence on the location on the trail to which play has progressed.

[0009] These awards may take the form of play features or bonuses which can be used by the player, such as holds or nudges. However, in order to attain these awards play must first transfer to the feature game which typically happens in only a small number of main games whereby entertainment value to the player may be limited.

[0010] It is also known to make play features or bonuses available during play of a main game on an occasional, unpredictable basis i.e. not related to any event apparent to the player. However, there may be little or no player anticipation whereby entertainment value to the player may be limited with this feature also.

[0011] An object of the present invention is to provide enhanced possibilities for player entertainment associated with the making available of player awards.

[0012] According to one aspect of the invention therefore there is provided an entertainment machine having a main display device for use in playing main games involving the selection and display of symbols, and at least one supplementary play feature involving the selection and display of indications at least some of which correspond to awards in the form of player features or bonuses, characterised in that the supplementary play feature is initiated for at least some main games to effect automatic selection and display of at least one said indication.

[0013] With this arrangement enhanced opportunities for player entertainment arise in so far as the player can obtain awards in at least some main games with a feature involving selection and display of indications but without requiring transfer to, and play of, a feature game.

[0014] Initiation of the supplementary play feature may occur on all occasions when a main game is available. Alternatively the play feature may be initiated on only some such occasions as determined on a predictable, random or pseudo random basis, e.g. on every third occasion.

[0015] Initiation of the play feature is preferably effected by or in correspondence with the occurrence of the associated main game and preferably occurs during the main game, particularly such that the play feature terminates i.e. displays the selected indication, substantially simultaneously with termination of the main game i.e. when the selected symbols are displayed. However, initiation of the play feature may also occur at a different time relative to the main game e.g. after completion of the main game.

[0016] Most preferably initiation of the play feature occurs automatically i.e. under control of the machine, although it may also be possible to provide for operation of a player control to initiate, or accept availability of the feature.

[0017] With regard to the awards, these may take any suitable form but preferably consist of one or more of:

- i. nudges: whereby the player is awarded one or more nudge steps enabling the player to change one or more selected symbols by movement stepwise through a series of such symbols;
- ii. holds: whereby the player is awarded the ability to hold one or more symbols against subsequent change;
- iii. automatic steps: whereby one or more symbols are automatically changed to give a new symbol combination e.g. by movement through one or a predetermined number of steps through a series of such symbols, or by movement to a predetermined symbol, for example such as to give a guaranteed win.
- iv. free play: whereby the player is awarded one or

more free games.

v. feature transfer: whereby play transfers to a feature, such as a supplementary feature game, or a skill feature whereby the player is given the opportunity of operating a control, such as a press-button, to arrest progression up and/or down a ladder or around a track or otherwise to seek to obtain an award or an enhanced award by arresting progression at a desired position.

[0018] Other awards or bonuses are also possible.

[0019] With regard to the said selection and display of indications, this preferably is achieved with a supplementary display device which operates to effect progression from position to position along a track having multiple positions therealong which respectively correspond to the said indications. Conveniently the positions may be provided on a light transmitting panel, said progression being effected by successive back illumination of the positions, and the selection of one said indication being effected by arresting the progression such that only the position corresponding to the said one indication is back-illuminated.

[0020] All indications may correspond to awards or if desired only some may correspond to awards.

[0021] Preferably the track is in the form of a closed loop so that progression occurs around the loop along a predetermined succession of the said positions. Other arrangements are however possible and progression may follow a random or pseudo random course from position to position.

[0022] The track may be of the form of a single elongate path or trail having the said positions end to end whereby progression can occur only along the path. Alternatively the positions may be arranged with a branching trail, or in a grid or matrix or other arrangement so as to connect, and permit progression, along a range of paths.

[0023] In a particularly preferred embodiment there is a single elongate path which is a closed loop and this may extend around the main display device.

[0024] Thus and in accordance with a second aspect of the present invention there is provided an entertainment machine having a main display device for use in playing main games involving the selection and display of symbols, and at least one supplementary play feature involving the selection and display of indications at least some of which correspond to awards in the form of player features or bonuses, characterised in that the supplementary play feature is initiated for at least some main games, and a supplementary display device is provided which operates to effect progression from position to position along a track having multiple said positions therealong which respectively correspond to the said indications, said track being in the form of a path extending at least partially around the said main display device.

[0025] This second aspect of the invention may incorporate any or all of the features of the first aspect of the

invention and in particular the track preferably extends wholly, in a closed loop, around the main display device.

[0026] Most preferably the entertainment machine is an 'amusement with prizes' (AWP) machine particularly of the fruit machine or poker machine kind using actual (or simulated) rotatable reels as mentioned above.

[0027] The invention will now be described further by way of example only and with reference to the accompanying drawings in which:-

Figure 1 is a diagrammatic perspective view of one form of an entertainment machine according to the invention;

Figure 2 is a block circuit diagram of the machine; and

Figure 3 is a detailed view to a larger scale of a supplementary display device of the machine.

[0028] Referring to the drawings, Figure 1 shows a fruit machine having a floor-standing box shaped housing 1 having a front wall which includes upper and lower glass panels 2, 3, a number of operating buttons 5, 6, 24, 25, a coin slot 7 and a payout opening 8.

[0029] Within the housing 1 there are three axially aligned reels 9 having say 20 symbols at regularly spaced positions around their peripheries. The reels 9 are axially rotatable and are drivably connected to respective stepper motors 10. The reels 9 are arranged behind a window 11 defined by a printed region of the lower glass panel 3. Each reel 9 can be arrested by the respective stepper motor 10 in any of 20 stopping positions in which one symbol is in precise registration with a horizontal win line in the centre of the window 11 and two further symbols are visible above and below the win line.

[0030] The stepper motors 10 are connected to a microprocessor-based control unit 12. This unit is also connected to a coin-mechanism 13, a payout mechanism 14 and the buttons 5, 6, 24, 25.

[0031] In use, the player inserts coins into the coin mechanism 13 through the slot 7 sufficient to generate credit for one or more games. The amount of credit is shown on an LED or LCD display 22 and the machine is actuated so that a main game can now be played. The main game commences after a start button 5 has been pressed and the reels 9 spin and then come to rest so as to select a combination of symbols displayed on the win line.

[0032] The displayed symbol combination is assessed by the control unit 12 and a win indication is given in the event that the combination is of a predetermined winning nature.

[0033] The control buttons 6 can be used to perform 'hold' or 'nudge' functions, when made available to the player, so that the player can seek to influence the outcome of a game, in conventional manner.

[0034] The upper panel 2 is a transparent glass panel and within this there is a printed display region 15, which

can be back-illuminated with a bank of lamps 16, and which provides a conventional supplementary feature game.

[0035] As shown, this feature game comprises a wraparound trail 17 comprising a series of printed sections marked with decoration, information and symbols.

[0036] The lower panel 3 has a closed-loop track 19 around the window 11 defined by a series of end to end positions 20 (i.e. printed sections) marked with indications as shown in more detail in Figure 3.

[0037] These positions 20 can be selectively back-illuminated with a bank of lamps 16a. The positions can be back-illuminated successively one at a time to effect progression repeatedly around the track, and the progression can be arrested to leave the last-illuminated position selected by constant back-illumination thereof.

[0038] In use, on each occasion when a main game is played, or on some other regular or irregular occasional basis linked to the playing of main games, e.g. on every third main game, the bank of lamps 16a is actuated to effect progression around the track 19.

[0039] This progression may occur during the spinning of the reels 9 and may terminate, to cause one of the positions 20 to be selected, when the reels 9 stop. Thus, the progression may start simultaneously with the initiation of reel spinning and may stop simultaneously with the last to stop of the reels 9.

[0040] During this period, the progression may continue for a number of complete circuits around the track. Most preferably the speed of progression is slow enough to enable the player to see individually back-illuminated sections but fast enough to enable a number of circuits to be completed. It is however possible to utilise slower or faster speeds.

[0041] The back-illumination may be of variable intensity such that a lower intensity, subdued light level is used during progression, and the selected position 20 is then back-illuminated with a constant higher light intensity.

[0042] The indications on the positions 20 correspond to bonus awards. When one such position has been selected the corresponding bonus award is implemented.

[0043] As shown in Figure 3, these bonus awards consist of the following:

- i. Nudges: the player is awarded a specified number of nudges. The player can then use controls 6 to step the reels 9. As the nudges are consumed, back-illumination jumps correspondingly from higher to lower nudge positions 20.
- ii. Skill Nudges: panels corresponding to different numbers of nudges are rapidly illuminated successively as higher and lower numbers. The player can press control 24 to arrest the illumination and select a number of nudges. The nudge positions 20 may be used as the panels, or a separate ladder 23 may be used.
- iii. Free Spin: the LCD display 22 is incremented to

give a free game.

iv. Reel Steppa: all reels 9 automatically step together. The player can hold any reel with buttons 6 before pressing the start button 5 to cause the remaining reels to step. The stepping may continue until a win is automatically obtained or for a predetermined number of steps or until stopped by the player.

v. Super Hold: the reels 9 automatically step up or down by one position.

vi. Win Spin: the reels 9 automatically move to a guaranteed win.

vii. Start Feature: Play transfers to the feature game 15, and the reels 9 may move to positions at which feature game entry symbols are displayed. A special 'super' feature may also be initiated.

viii. Skill Stop: back-illumination continues or re-starts around the track 19 and the player can use the control 25 to stop the progression.

ix. Symbols (cherry, Red 7, etc): if the selected symbol matches two like symbols selected on two of the reels 9, the third reel 9 is automatically spun to complete a winning combination of three such symbols. This may be confined to the usual central win line or to other combinations of win lines where each reel displays three symbols in the window 11 (e.g. such as to complete a feature game entry).

[0044] Other bonuses are also possible.

[0045] With this arrangement, the player is provided with enhanced entertainment value. Bonus awards can be made available in a particularly interesting manner, without requiring transfer to the feature game.

[0046] It is of course to be understood that the invention is not intended to be restricted to the details of the above embodiment which are described by way of example only.

Claims

1. An entertainment machine having a main display device for use in playing main games involving the selection and display of symbols, and at least one supplementary play feature involving the selection and display of indications at least some of which correspond to awards in the form of player features or bonuses, **characterised in that** the supplementary play feature is initiated for at least some main games to effect automatic selection and display of at least one said indication.
2. A machine according to claim 1 **characterised in that** initiation of the supplementary play feature occurs only on some occasions when a main game is available.
3. A machine according to claim 2 **characterised in**

that initiation of the supplementary play feature is effected in correspondence with the occurrence of the associated main game.

4. A machine according to claim 3 **characterised in that** the supplementary play feature terminates to display the selected indication (20) substantially simultaneously with termination of the main game to display the selected symbols. 5
10
5. A machine according to any one of claims 1 to 4 **characterised in that** the said awards- consist of one or more of: nudges whereby the player can change one or more selected symbols by movement stepwise through a series of such symbols; holds whereby the player can hold one or more symbols against subsequent change; automatic steps whereby one or more symbols are automatically changed to give a new symbol combination; free play whereby the player is awarded one or more free games; feature transfer whereby play transfers to a feature. 15
20
6. A machine according to any one of claims 1 to 5 **characterised by** the provision of a supplementary display device which operates to effect progression from position to position along a track (19) having multiple positions (20) therealong which correspond to the said indications. 25
30
7. A machine according to claim 6 **characterised in that** the positions (20) are provided on a light transmitting panel (3) which positions can be back illuminated. 35
8. An entertainment machine having a main display device for use in playing main games involving the selection and display of symbols, and at least one supplementary play feature involving the selection and display of indications at least some of which correspond to awards in the form of player features or bonuses, **characterised in that** the supplementary play feature is initiated for at least some main games, and a supplementary display device is provided which operates to effect progression from position to position (20) along a track (19) having multiple said positions (20) therealong which respectively correspond to the said indications, said track being in the form of a path extending at least partially around the said main display device (9). 40
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9. A machine according to any one of claims 6 to 8 **characterised in that** the track (19) comprises a single elongate path which is a closed loop. 55
10. A machine according to claim 8 or 9 **characterised in that** the track (19) extends around the main display device (9).

11. A machine according to any one of claims 1 to 10 which is a coin-operated amusement with prizes machine having actual or simulated rotatable reels (9) as the main display device.

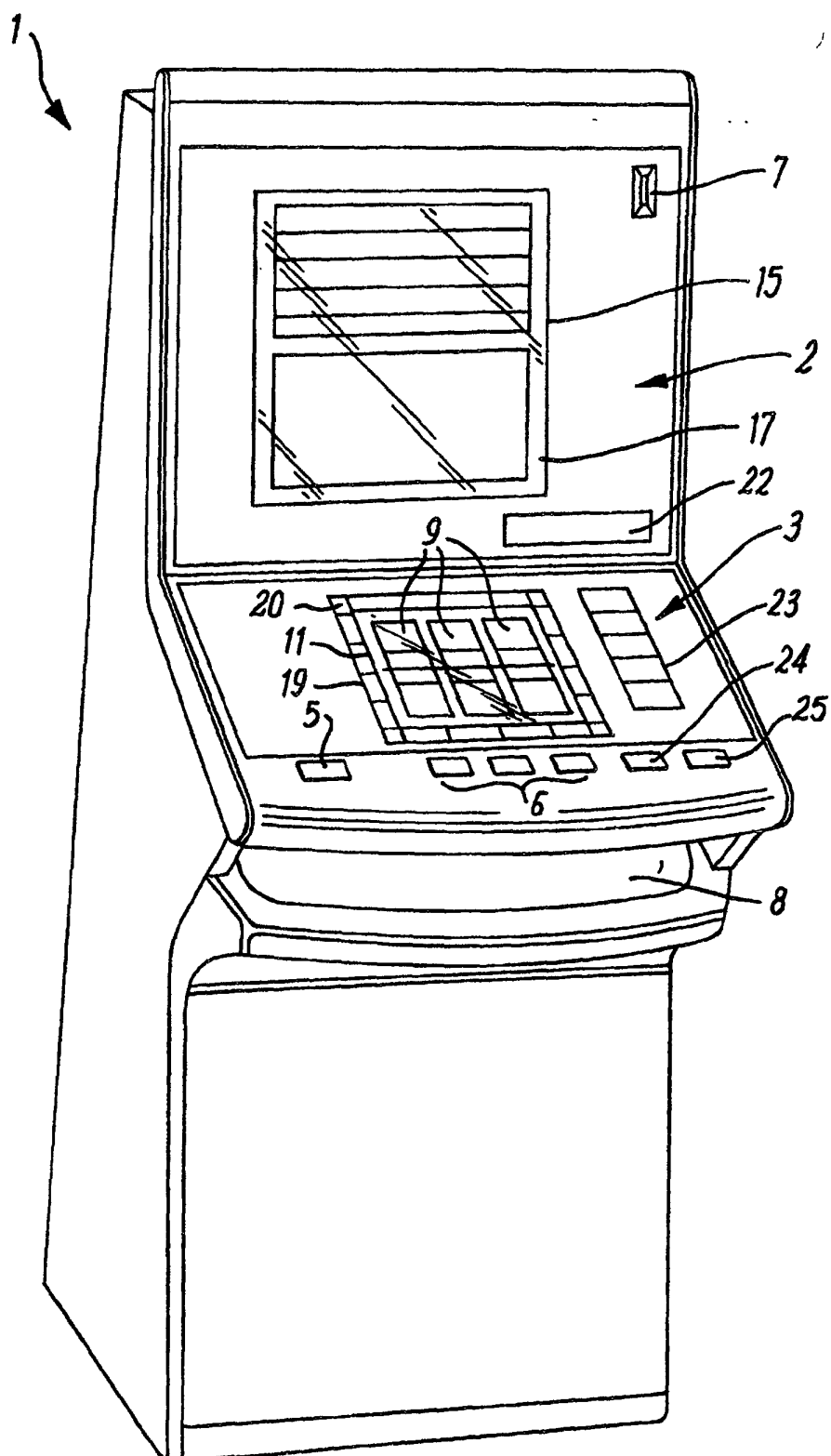


FIG. 1

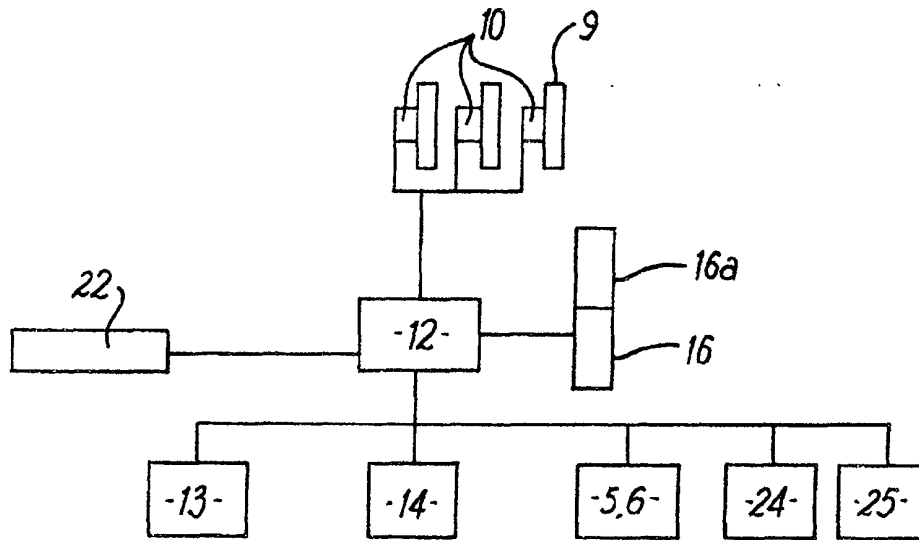


Fig. 2

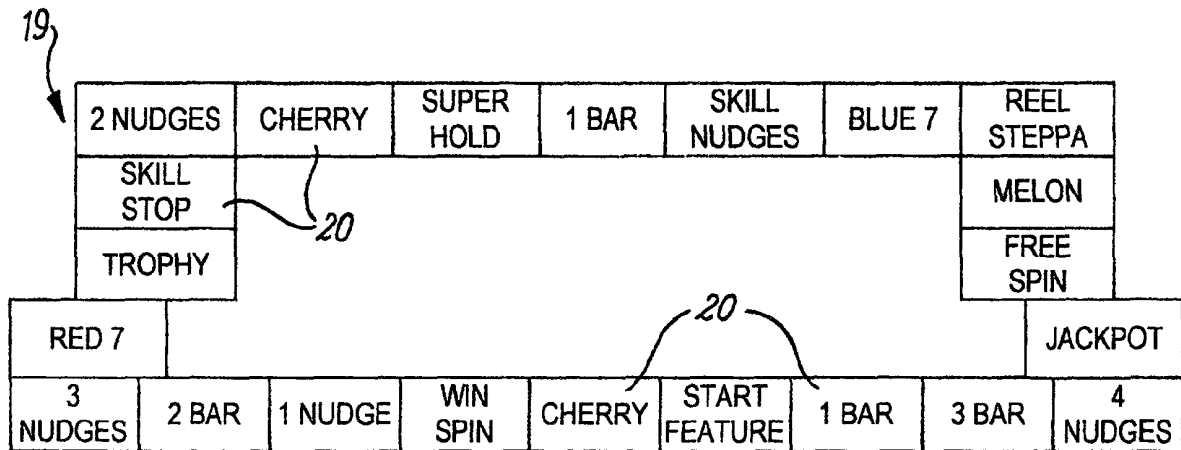


Fig. 3