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(56) Documents Cited

GB 2187320 A GB 2084371 A

(58) Field of Search

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(54) Fruit machines

(57) In a fruit machine Hi and Lo buttons (18, 20) can be operated when the reels are spun to predict how a numerical value or other attribute will change when each of the reels comes to a stop. In one embodiment the numerical values are carried on the reels themselves, but in a second embodiment the values are carried on a separate reel which is stopped in association with each of the other reels.

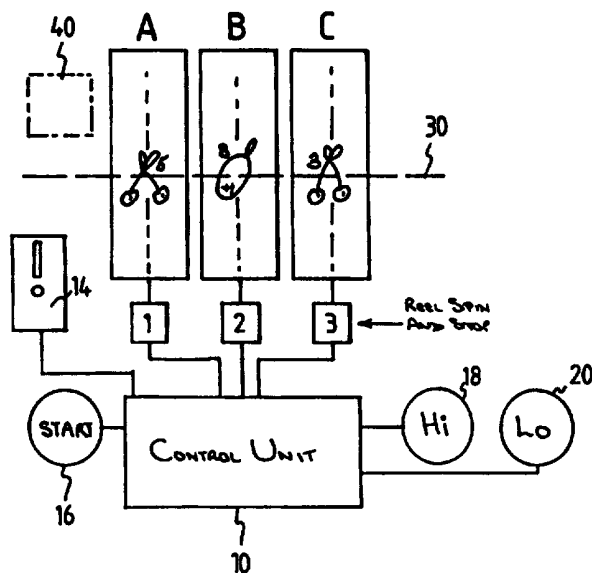


FIG 1

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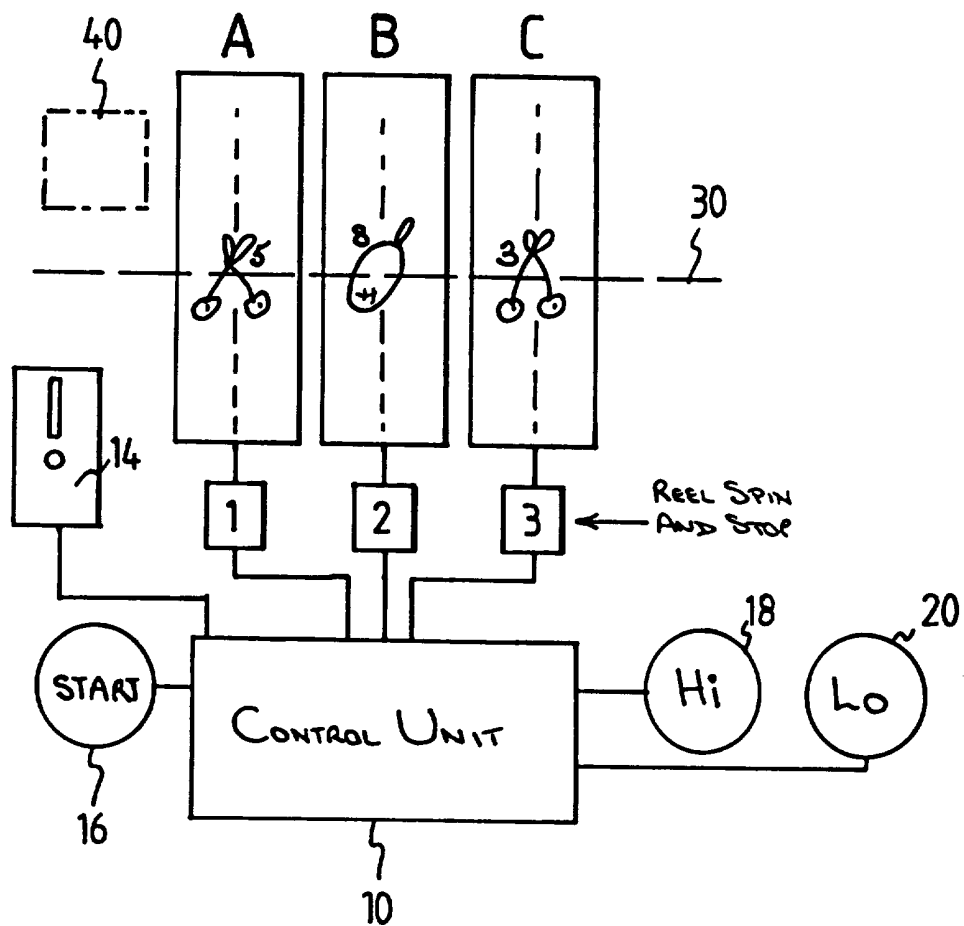


FIG 1

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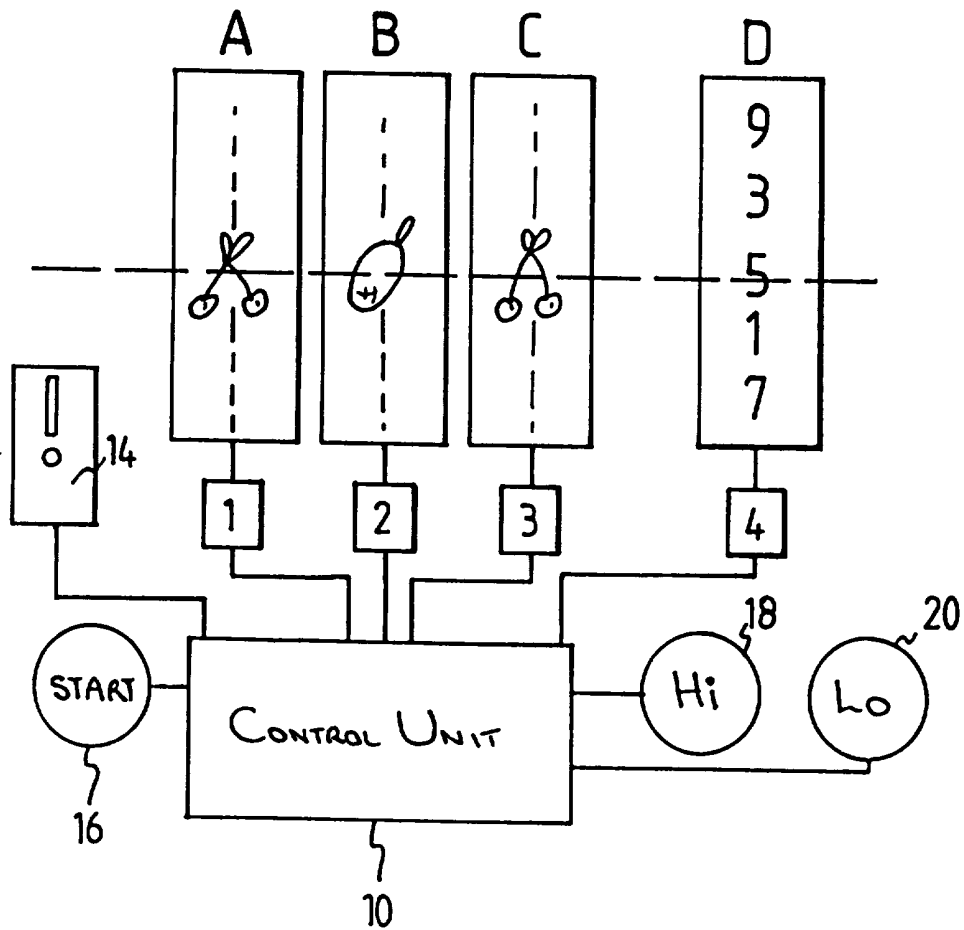


FIG 2

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FRUIT MACHINES

TECHNICAL FIELD OF THE INVENTION

This invention relates to gaming and amusement-with-prizes machines of the kind which are commonly known as "fruit machines".

BACKGROUND

Traditional fruit machines have several reels which carry various symbols (traditionally fruits) around their peripheries. The reels are spun and then stopped, usually one-by-one, and if a winning combination of symbols is displayed on a combination line a prize may be awarded. Generally, in this preliminary game, the player has no control over the positions in which the reels are stopped.

In modern fruit machines, in order to increase excitement and interest the occurrence of a winning combination generally results in the commencement of a further game or an event in which the player can actively participate, commonly known as a "feature". In fact, players may find the feature to be considerably more exciting than the preliminary game since they do not generally have any active participation in the preliminary game other than to

initiate the spinning of the reels.

One well known form of feature is the Hi/Lo feature. If this option is made available, a reel is spun and the player is given an opportunity to predict whether the reel will stop at a position which will display a symbol which is higher or lower than the previously displayed symbol. If the player guesses correctly a higher prize will be awarded but if an incorrect guess is made the player will lose out. This process may be repeated several times giving the player a chance to increase the value of the prize on each occasion.

The present invention seeks to provide a fruit machine which is patentably different from any existing fruit machines.

SUMMARY OF THE INVENTION

The present invention proposes a fruit machine of the kind in which a plurality of rotatable members carrying symbols are spun and then stopped at random one after another, and if said symbols show a winning combination on a combination line a prize is awarded or a further game commences with the opportunity to win a prize, in which the player is presented with an attribute which can change from time to time, such a change being associated with the stopping of at least one of said rotatable members, and for a predetermined period before said member comes to a stop selection means can be operated to predict how said attribute will change when said member stops rotating.

To maximise the interest of the game said attribute will generally have more

than two possible states, and will usually be displayed visually. The attribute may, for example, have a value or direction which can change when the said member comes to a stop. In a preferred form of the machine said selection means can be operated to predict whether said attribute will change up or down when said member stops rotating. Preferably said attribute has a range of possible states which comprise numerical values.

In one preferred form of the machine said attribute has a range of possible states which are carried on the rotatable members in association with the symbols. In another preferred form, said attribute is presented to the players by display means which is separate from said rotatable members. In this second instance said display means preferably comprises a further rotatable member carrying a range of possible states of said attribute, said further member being spun prior to operation of said selection means and stopped in association with the stopping of said rotatable member.

The option to operate the selection means is preferably offered on at least two occasions before the respective rotatable members come to a stop. In a preferred embodiment the option to operate the selection means is offered on a respective occasion before each and every time one of said rotatable members comes to a stop. On the other hand, the option to operate the selection means need not be offered on each and every occasion when the rotatable members are spun.

BRIEF DESCRIPTION OF THE DRAWINGS

The following description and the accompanying drawings referred to therein

are included by way of non-limiting example in order to illustrate how the invention may be put into practice. In the drawings:

Figure 1 is a diagrammatic representation of a first form of fruit machine in accordance with the invention, and

Figure 2 is a second form of the fruit machine.

DETAILED DESCRIPTION OF THE DRAWINGS

Three reels A, B and C, have a series of symbols arranged around their peripheries, each symbol being associated with a number from, say, 0 to 9. The reels are rotatably mounted side-by-side on a common axis, and are arranged to be spun and stopped by respective drive mechanisms 1, 2 and 3 of known form, which may for example comprise motors and stop relays. The three drive mechanisms are all under independent control by a control unit 10, which may comprise an electromechanical timer but is more likely these days to comprise a microcontroller. A coin or token receiving mechanism 14 allows the control unit 10 to initiate a game when the appropriate coins or tokens are inserted. The control unit also receives input from a Start button 16 and separate Hi and Lo buttons 18 and 20.

When the mechanism 14 signals the control unit to commence a game the unit 10 operates the drive mechanisms 1 to 3 to spin the respective reels A, B and C. After a short delay the unit 10 signals the drive mechanism 1 to stop the first reel A, which will then display a symbol on a combination line 30. The other two reels B and C will continue to spin. For a short

predetermined interval the player can operate one of the Hi/Lo buttons 18 and 20 to predict whether the next reel, reel B, will stop on a symbol with a higher or lower number than that of reel A. This period may be accompanied by flashing of the Hi/Lo buttons to emphasise that the player must make the decision quickly and thus add to the excitement. Whether or not the player has made such a selection, at the end of the allotted period the second reel B will stop to display a further symbol on the combination line. The player is then given a further limited time in which to predict whether reel C will stop on a number which is higher or lower than that displayed by reel B, again using the Hi/Lo buttons in a similar manner.

Should the player have made a correct prediction on each occasion, the machine may indicate a win and award a prize, or the machine may enter a second phase in which the player is allowed to participate in a feature of known form so that the player is given a further opportunity to win a prize or increase the size of a prize awarded at the end of the first phase.

The size of any prize awarded at the end of the first phase of play may be greater if, in addition to correctly predicting the stopping of the reels, the reels have stopped with a winning combination of symbols, e.g. if all three symbols displayed on the combination line are the same.

It will be appreciated that many other variations are possible. For example, the number of reels can be increased to four or more if desired, with the player being given the opportunity to predict the position at which the next reel will stop in each case. Instead of increasing the number of reels the number of available predictions could be increased by adding a window 40 or similar means, which displays an initial number before the first reel A

stops. The player is then given a limited period in which to predict whether reel A will stop at a position which is higher or lower than the number displayed in the window 40, and so on as before. In another variation, the reels A to C need not carry numbers, but the number displayed in the window 40 could change each time a reel stops so that the player is required to predict whether the number will change to a higher or lower value.

In a modified form of the fruit machine shown in Fig. 2, numbers are carried on a fourth reel D which is provided with its own respective drive mechanism 4. The drive mechanism is again operated by the control unit 10. When the mechanism 14 signals the control unit 10 to commence a game the reels A, B and C are again spun together with the reel D. After a short delay, reel A stops to display a symbol on the combination line 30. At the same time, the reel D is stopped to display a numerical value on the combination line 30 or in some other pre-defined position. For a short interval the player can operate one of the Hi/Lo buttons 18 and 20 to predict whether the reel D will display a higher or lower number when it next stops. Whether or not the player makes such a selection, at the end of the allotted period reel D starts to spin again and, after a short period of spinning, reels B and D will stop to display a further symbol and a number respectively. The player is then given a further limited time in which to operate the Hi/Lo buttons to predict whether reel D will next display a number which is higher or lower than that currently displayed. Reel D then spins again and stops with reel C.

It will be appreciated that reel A, B or C need not necessarily stop at precisely the same time as the reel D. One could precede the other.

Should the player have made a correct prediction each time reel D stops, the

machine may indicate a win and award a prize or provide an opportunity to win or increase the value of any prize. The size of any prize awarded may be greater if, in addition to correctly predicting the stopping of reel D, the reels A to C have stopped with a winning combination. Again, the number of reels which carry the symbols may vary.

In each form of the machine, if the player fails to make a prediction by pressing a Hi or Lo button within the allotted time he/she may still have the opportunity of winning a relatively small prize if the reels stop with a winning combination of symbols. In other words, the machine can still be used in the conventional way. It will also be appreciated that the option to make a Hi/Lo selection need not be offered in each and every game. It could be offered in selected games only. Likewise, the option need not be offered after both of reels A and B stop, so that the player could be given just one opportunity to predict a Hi/Lo value in a game.

Other means of displaying relative values or directions could be employed instead of using numbers, such as a cursor line which moves to various positions on a scale as each reel stops or a light which gets brighter or darker. The changes which the player is required to predict need not necessarily be visual. For example, a tone could be emitted which becomes higher or lower in pitch when a reel stops.

The player is thus able to actively participate in a phase of the game which hitherto has involved little or no decision making by the player. In addition, the time taken to play a game is significantly shorter than conventional machines which offer the Hi/Lo feature. The prediction facility can be offered as an addition to most of the existing features currently offered by fruit

machines.

Whilst the above description lays emphasis on those areas which, in combination, are believed to be new, protection is claimed for any inventive combination of the features disclosed herein.

* * * * *

CLAIMS

1. A fruit machine of the kind in which a plurality of rotatable members carrying symbols are spun and then stopped at random one after another, and if said symbols show a winning combination on a combination line a prize is awarded or a further game commences with the opportunity to win a prize, in which the player is presented with an attribute which can change from time to time, such a change being associated with the stopping of at least one of said rotatable members, and for a predetermined period before said member comes to a stop selection means can be operated to predict how said attribute will change when said member stops rotating.
2. A fruit machine according to Claim 1, in which said attribute has more than two possible states.
3. A fruit machine according to Claim 1 or 2, in which said attribute is displayed visually.
4. A fruit machine according to any preceding claim, in which said selection means can be operated to predict whether said attribute will change up or down when said member stops rotating.
5. A fruit machine according to any preceding claim, in which said attribute has a range of possible states which comprise numerical values.
6. A fruit machine according to any preceding claim, in which said

attribute has a range of possible states which are carried on the rotatable members in association with the symbols.

7. A fruit machine according to any of Claims 1 to 5, in which said attribute is presented to the players by display means which is separate from said rotatable members.

8. A fruit machine according to Claim 7, in which said display means comprises a further rotatable member carrying a range of possible states of said attribute, said further member being spun prior to operation of said selection means and stopped in association with the stopping of said rotatable member.

9. A fruit machine according to any preceding claim, in which the option to operate the selection means is offered on at least two occasions before the respective rotatable members come to a stop.

10. A fruit machine according to any preceding claim, in which the option to operate the selection means is offered on a respective occasion before each and every time one of said rotatable members comes to a stop.

11. A fruit machine according to any preceding claim, in which the option to operate the selection means is not offered on each and every occasion when the rotatable members are spun.

12. A fruit machine substantially as described with reference to Figures 1 or 2 of the drawings.

* * * * *

Amendments to the claims have been filed as follows

1. A fruit machine of the kind in which a plurality of rotatable members carrying symbols are spun and then stopped at random one after another, and if said symbols show a winning combination on a combination line a prize is awarded or a further game commences with the opportunity to win a prize, in which the player is presented with an attribute which can change from time to time, such a change being associated with the stopping of at least one of the rotatable members which can contribute to the winning combination, and for a predetermined period before said member comes to a stop, while said member is still spinning, selection means can be operated to predict how said attribute will change when said member stops rotating.
2. A fruit machine according to Claim 1, in which said attribute has more than two possible states.
3. A fruit machine according to Claim 1 or 2, in which said attribute is displayed visually.
4. A fruit machine according to any preceding claim, in which said selection means can be operated to predict whether said attribute will change up or down when said member stops rotating.
5. A fruit machine according to any preceding claim, in which said attribute has a range of possible states which comprise numerical values.
6. A fruit machine according to any preceding claim, in which said

attribute has a range of possible states which are carried on the rotatable members in association with the symbols.

7. A fruit machine according to any of Claims 1 to 5, in which said attribute is presented to the players by display means which is separate from said rotatable members.

8. A fruit machine according to Claim 7, in which said display means comprises a further rotatable member carrying a range of possible states of said attribute, said further member being spun prior to operation of said selection means and stopped in association with the stopping of said rotatable member.

9. A fruit machine according to any preceding claim, in which the option to operate the selection means is offered on at least two occasions before the respective rotatable members come to a stop.

10. A fruit machine according to any preceding claim, in which the option to operate the selection means is offered on a respective occasion before each and every time one of said rotatable members comes to a stop.

11. A fruit machine according to any preceding claim, in which the option to operate the selection means is not offered on each and every occasion when the rotatable members are spun.

12. A fruit machine substantially as described with reference to Figures 1 or 2 of the drawings.

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Claims searched: All

Examiner: Mr. G. Nicholls
Date of search: 6 December 1996

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): G4V (VAA)

Int Cl (Ed.6): G07F 17/34

Other: ONLINE : WPI, EDOC

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	GB 2187320 A (DIRE) Whole document, especially Abstract	1 to 3, 5, 10
X	GB 2084371 A (BALLY) Whole document	1 to 5, 7, 8, 11

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.