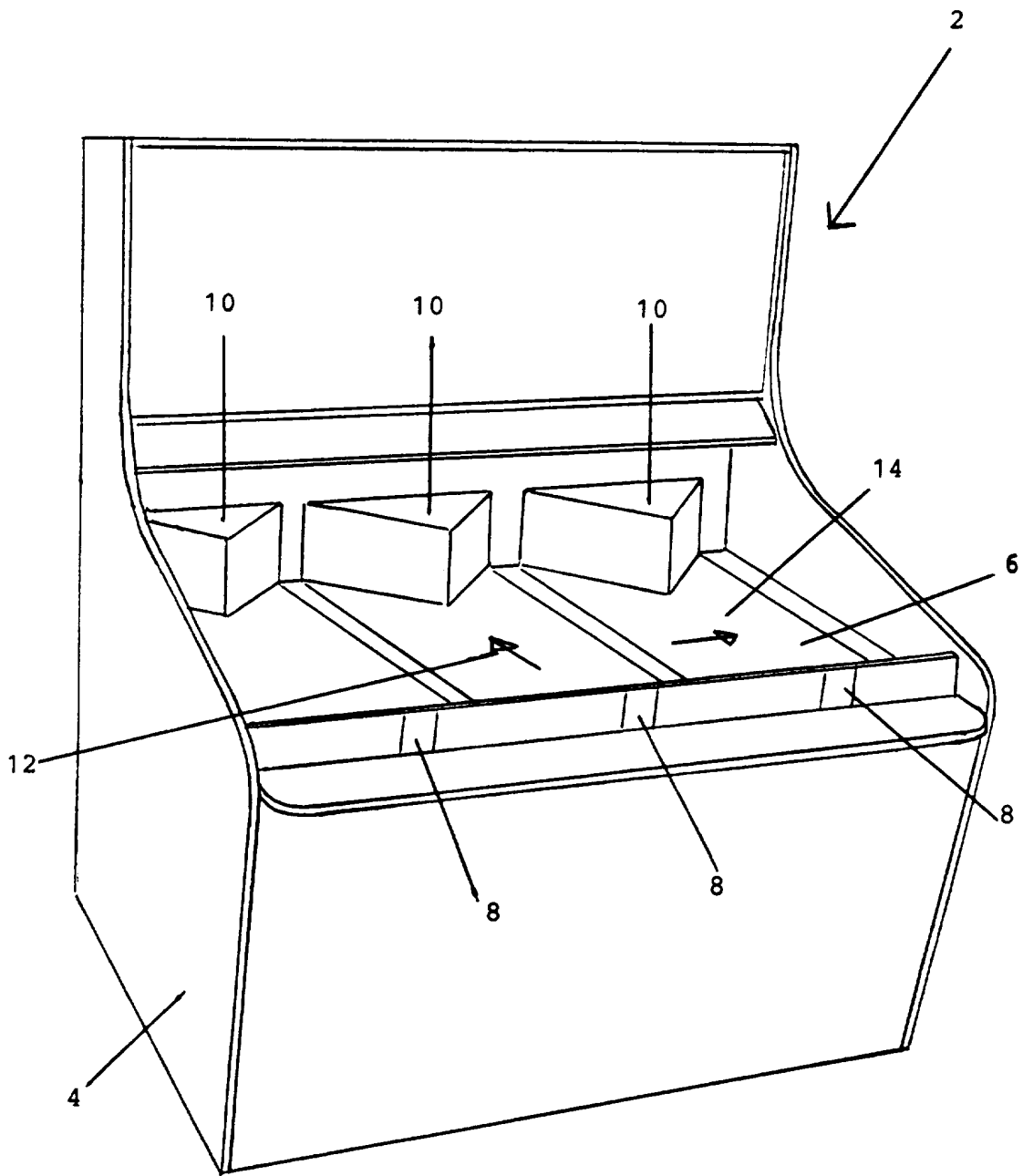


1/1



AMUSEMENT APPARATUS WHICH IS OPERATED
BY A COIN OR A TOKEN

This invention relates to amusement apparatus and, more especially, this invention relates to amusement apparatus which is operated by a coin or a token.

Amusement apparatus is known which is operated by a coin or a token, and which comprises a housing, a belt which moves during operation of the amusement apparatus and which forms a playing surface, at least one entrance for a coin or a token, and at least one target remote from the entrance. In the known apparatus, the belt moves in the direction of travel of the coin or the token. The belt may move either with the direction of travel of the coin or token, or against the direction of travel of the coin or token.

It is an aim of the present invention to provide a variation on the above mentioned known type of amusement apparatus, which variation enables the achievement of new dimensions to the basic game of rolling a coin or token towards a target.

Accordingly, in one non-limiting embodiment of the present invention there is provided amusement apparatus which is operated by a coin or a token and

which comprises a housing, a belt which moves during operation of the amusement apparatus and which forms a playing surface, at least one entrance for a coin or token, and at least one target or target area remote from the entrance, the amusement apparatus being such that in use a player inserts the coin or token in the entrance and the coin or token rolls towards the target or target area, and the amusement apparatus also being such that the belt travels in a direction which is at an angle to the direction of the travel of the coin or token.

Preferably, the belt travels in a direction which is at an angle of 90° to the direction of travel of the coin or token. Other angles may be employed and, generally, the belt may travel at an angle between 1° and 179° to the direction of travel of the coin or token. Prior to reaching an angle of 90° the belt will have a component of travel in the direction of travel of the coin or token. Beyond 90° the belt will have a component of travel against the direction of travel of the coin or token.

Usually, the housing will be such that the amusement apparatus is free standing. The amusement apparatus may be wall mounted if desired. The housing may be of any suitable and appropriate shape and size.

The entrance may include an inclined chute. Any suitable and appropriate type of entrance may be employed to the amusement apparatus, including all known types of entrances for coins or tokens.

The target or target area may be raised or flat. The target or target area may generally be of any design, shape and size. The target or target area may be stationary or moving.

The amusement apparatus may include at least one obstacle for reducing the chance of a player striking the target with a coin or token.

The obstacle may be a stationary obstacle or a moving obstacle. Where the obstacle is a moving obstacle, then the moving obstacle may be secured to the belt and may thus move with the belt. Alternatively the moving obstacle may move independently of the belt.

There may be a plurality of the obstacles. In this case, some of the obstacles may be stationary and some of the obstacles may be moving. Where there is a plurality of moving obstacles, then these moving obstacles may be moved in the same way or in different ways.

Preferably, there are a plurality of targets. Thus, for example there may be three of the targets.

Any suitable and appropriate number of targets may be employed.

The amusement apparatus may be such that there are a plurality of the entrances. Thus, for example there may be three of the entrances. Any suitable and appropriate number of entrances may be employed.

The amusement apparatus will usually include drive means for driving the belt. The drive means will usually include an electric motor.

The amusement apparatus may include monitor means for monitoring the progress of the coin or token across the belt towards the target.

The monitor means may be an infrared monitor means. Any suitable and appropriate type of monitor means may be employed.

The amusement apparatus may be one in which the target includes sensor means for sensing the presence of a coin or a token at, on or near the target or target area.

The sensor means may be an infra-red opto-sensor a metal proximity detector, or electrical contacts to be bridged by the coin or token. Other sensor means may also be employed.

The amusement apparatus may include reward giving means. Any suitable and appropriate type of reward giving means may be employed including known reward

giving means employed in known coin operated amusement machines. A reward may be given for striking the target and/or for getting close to the target. Awards which are graduated in magnitude in dependence upon the closeness of a coin or token to the target may be given.

If desired, the amusement apparatus may be one which does not give a reward. In this case, the amusement apparatus will be played for amusement only.

The amusement apparatus may include control means for causing the belt to stop and start during the rolling of the coin or token and/or to vary in speed and/or to vary in angle of travel.

The control means is preferably an electronic control means. The control means may include a programable memory. The memory can then be pre-programmed to cause the stopping and starting and/or the speed variation and/or the variation in the angle of travel.

If desired, the amusement apparatus may include game level selection means for selecting the degree of difficulty of games played with the amusement apparatus. Thus, for example, operation of the game level selection means could cause the belt to move with varying degrees of difficulty and/or to cause the appearance of varying numbers of obstacles. The game

level selection means could be available only to authorised management personnel, and the game level selection means could then be altered if too many people were winning on the amusement apparatus. Alternatively, the game level selection means could be available to players for enabling players to vary for themselves the degree of difficulty of playing games with the amusement apparatus.

The amusement apparatus will usually include collection means for collecting and removing coins or tokens that have served their function on the belt.

The collection means may deposit collected coins or tokens into a payout device which may be activated when a player requires change in the correct coin/token denomination to play the amusement apparatus. Alternatively, the payout device may be activated in order to pay an award to a successful player. The collection means may alternatively deposit collected coins or tokens into an internal secure container, or a removable cash box.

An embodiment of the invention will now be described solely by way of example and with reference to the accompanying drawing which is a perspective view of amusement apparatus which is operated by a coin or a token.

Referring to the drawing there is shown amusement apparatus 2 which is operated by a coin or token. The amusement apparatus 2 comprises a housing 4 and a belt 6 which moves during operation of the amusement apparatus 2 and which forms a playing surface.

The amusement apparatus 2 has three entrances 8 for coins or tokens. The amusement apparatus 2 also has three target areas 10. As shown in the drawing, the target areas 10 are remote from the entrances 8. The drawing shows the target areas 10 schematically and they would normally include several targets to be aimed at.

The amusement apparatus 2 is such that in use, a player inserts a coin or token in one of the entrances. The coin or token then rolls towards the target area 10 in line with the chosen entrance 8. The coin or token rolls in the direction indicated by the arrow 12. The belt 6 moves in the direction indicated by the arrow 14. It will thus be seen that the belt 6 travels in a direction which is at an angle of 90° to the direction of travel of the coin or token.

As can be seen from the drawing, the housing 4 is such that the amusement apparatus 2 is free standing. The target areas 10 are stationary target areas but they may be movable targets if desired. Drive means

(not shown) for driving the belt 6 is housed within the housing 4.

The amusement apparatus 2 may be such that various game themes are employed and, if desired, various methods of rewarding players.

The amusement apparatus 2 is especially beneficial in that the belt 6 moves at right angles to the path of travel of the coins or tokens. This enables the possibility of new game dimensions to be achieved that have hitherto been unattainable with known types of amusement apparatus in which a belt moves in the direction of the coin or token, either with the coin or token or against the coin or token.

It is to be appreciated that the embodiment of the invention described above with reference to the accompanying drawing has been given by way of example only and that modifications may be effected. Thus, for example, the amusement apparatus 2 of the present invention may be such that players may use their skill and judgement to roll a coin or token towards a target or area of targets which may or may not be moving. At the same time, the players may be required to ensure that the coin or token in play misses one or more obstacles that may move with the belt across the path of the coin or token. The obstacle or obstacles may be fixed to the belt with the intention of knocking

the coin or token down and therefore removing the coin or the token from play. The obstacle or obstacles may be introduced into the path of the coin or token by other means than by fixing to the belt. If desired, some obstacles may be fixed to the belt and some obstacles may not be fixed to the belt.

Monitor means may be employed for monitoring the progress of coins or tokens across the width of the belt. The monitor means may be beams of infrared light or other suitable means. Players may accrue points towards some form of reward for relative progress achieved towards the target, if the target is not hit.

The belt that forms the moving playing field of the amusement apparatus may be under electronic control to the extent that its movement may be started and stopped as desired, its speed of travel may be adjusted under control, and the direction of travel may be controlled. The control over the belt enables a wide variety of games to be incorporated into a basic design concept for a single machine.

The amusement apparatus may be constructed in such a way that it is designed for only one player to use at a time. Alternatively, two or more players may play together. In a multi-player form, the amusement

apparatus may have a separate belt for each player, or one single belt may be employed for all the players.

The amusement apparatus may have collection means for collecting and removing coins and tokens that have served their function on the belt. The collection means may deposit the collected coins or tokens into a payout device that may be activated when players require change in the correct coin or token denomination to play the amusement apparatus. Alternatively, the payout device may be activated in order to pay an award to a successful player. If desired, the collection means may alternatively deposit the collected coins or tokens into an internal secure storage area or a cash box.

The amusement apparatus may payout any suitable and appropriate type of reward. Thus, for example, the amusement apparatus may pay out redemption tickets or the award of a free game. If desired, the amusement apparatus may be such that it does not pay out a reward so that the machine is played for amusement only. Rewards in the form of free games may be provided if desired.

CLAIMS

1. Amusement apparatus which is operated by a coin or token and which comprises a housing, a belt which moves during operation of the amusement apparatus and which forms a playing surface, at least one entrance for a coin or a token, and at least one target or target area remote from the entrance, the amusement apparatus being such that in use a player inserts the coin or token in the entrance and the coin or token rolls towards the target or target area, and the amusement apparatus also being such that the belt travels in a direction which is at an angle to the direction of travel of the coin or token.

2. Amusement apparatus according to claim 1 in which the belt travels in a direction which is at an angle of 90° to the direction of travel of the coin or token.

3. Amusement apparatus according to claim 1 or claim 2 in which the housing is such that the amusement apparatus is free standing.

4. Amusement apparatus according to any one of the preceding claims in which the entrance comprises an inclined chute.
5. Amusement apparatus according to any one of the preceding claims in which the target or target area is raised or flat.
6. Amusement apparatus according to claim 5 in which the target area includes a plurality of individual targets for the coin or token to be aimed at.
7. Amusement apparatus according to any one of the preceding claims in which the target or target area is stationary or moving.
8. Amusement apparatus according to any one of the preceding claims and including at least one obstacle for reducing the chance of a player striking the target or target area with the coin or token.
9. Amusement apparatus according to claim 8 in which the obstacle is a stationary obstacle.
10. Amusement apparatus according to claim 8 in which the obstacle is a moving obstacle.

11. Amusement apparatus according to claim 10 in which the moving obstacle is secured to the belt and thus moves with the belt.

12. Amusement apparatus according to claim 10 in which the moving obstacle moves independently to the belt.

13. Amusement apparatus according to any one of claims 8 to 12 in which there is a plurality of the obstacles.

14. Amusement apparatus according to any one of the preceding claims in which there is a plurality of the targets or target areas.

15. Amusement apparatus according to any one of the preceding claims in which there is a plurality of the entrances.

16. Amusement apparatus according to any one of the preceding claims and including drive means for driving the belt.

17. Amusement apparatus according to claim 16 in which the drive means includes an electric motor.
18. Amusement apparatus according to any one of the preceding claims and including monitor means for monitoring the progress of the coin or token across the belt towards the target.
19. Amusement apparatus according to claim 18 in which the monitor means is an infrared monitor means.
20. Amusement apparatus according to any one of the preceding claims and in which the target includes sensor means for sensing the presence of a coin or token in or on the target, or within a predetermined distance from the target.
21. Amusement apparatus according to claim 20 in which the sensor means is an infra-red opto sensor, a metal proximity detector, or electrical contacts to be bridged by the coin or token.
22. Amusement apparatus according to any one of the preceding claims and including reward giving means.

23. Amusement apparatus according to any one of the preceding claims and including control means for causing the belt to stop and start during the rolling of the coin or token and/or to vary in speed and/or to vary in angle of travel.

24. Amusement apparatus according to claim 23 in which the control means is an electronic control means.

25. Amusement apparatus according to any one of the preceding claims and including collection means for collecting and removing coins or tokens that have served their function on the belt.

26. Amusement apparatus which is operated by a coin or token, substantially as herein described with reference to the accompanying drawing.



Application No: GB 9507770.7
Claims searched: 1-26

Examiner: Alan Blunt
Date of search: 23 May 1995

Patents Act 1977
Search Report under Section 17

Databases searched:

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

UK CI (Ed.N): A6H (HEE)

Int CI (Ed.6): A63F ; G07F 17/32, 17/38, 17/38

Other:

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
A	GB2192802A Crompton Machine	1
X	GB1490829 Tomy	1-26

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.