US 20090181783A1

(19) United States

(12) Patent Application Publication

(10) Pub. No.: US 2009/0181783 A1

(43) Pub. Date: Jul. 16, 2009

SU

(54) **HIGHLY SIMULATIVE GOLF DEVICE AND THE METHOD FOR PERFORMING THE SAME**

(76) Inventor: **Chien-Hui SU**, Taichung City (TW)

Correspondence Address:
Chien-Hui Su
P. O. Box 70-121 Taichung
Taichung City 40899 (TW)

(21) Appl. No.: **12/015,498**

(22) Filed: **Jan. 16, 2008**

Publication Classification

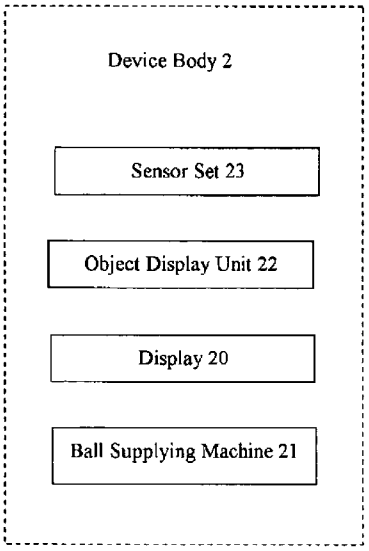
(51) **Int. Cl.**

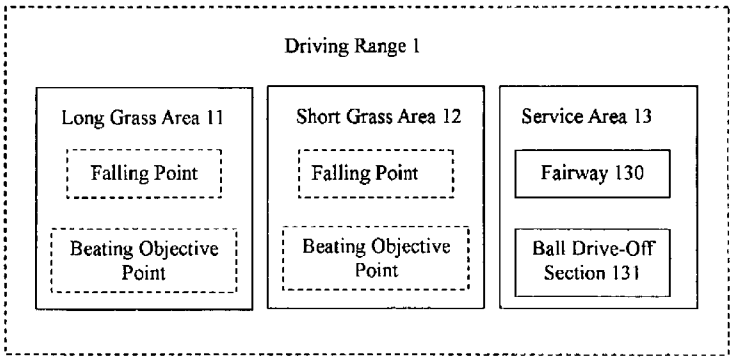
A63B 69/36	(2006.01)
A63B 24/00	(2006.01)
A63B 67/02	(2006.01)

(52) **U.S. Cl.** **473/168**; 273/461; 473/131

(57) **ABSTRACT**

A highly simulative golf device and method for performing the same is proposed. A device body of the device has an object display unit and a short grass area. The object display unit displays a beating objective point and the sensor set senses the falling point of a golf ball. Then the device body will calculate a distance difference between the beating objective point and the falling point so as to get next distance difference as a base for the following beating objective point. The method includes the following steps: a: displaying the beating objective point, b: sensing the falling point; c: calculating the distance difference; d: reset the beating objective point; e: re-sensing the falling point; the user can beat the golf ball repeatedly until the distance difference is smaller than zero or approaches to zero.





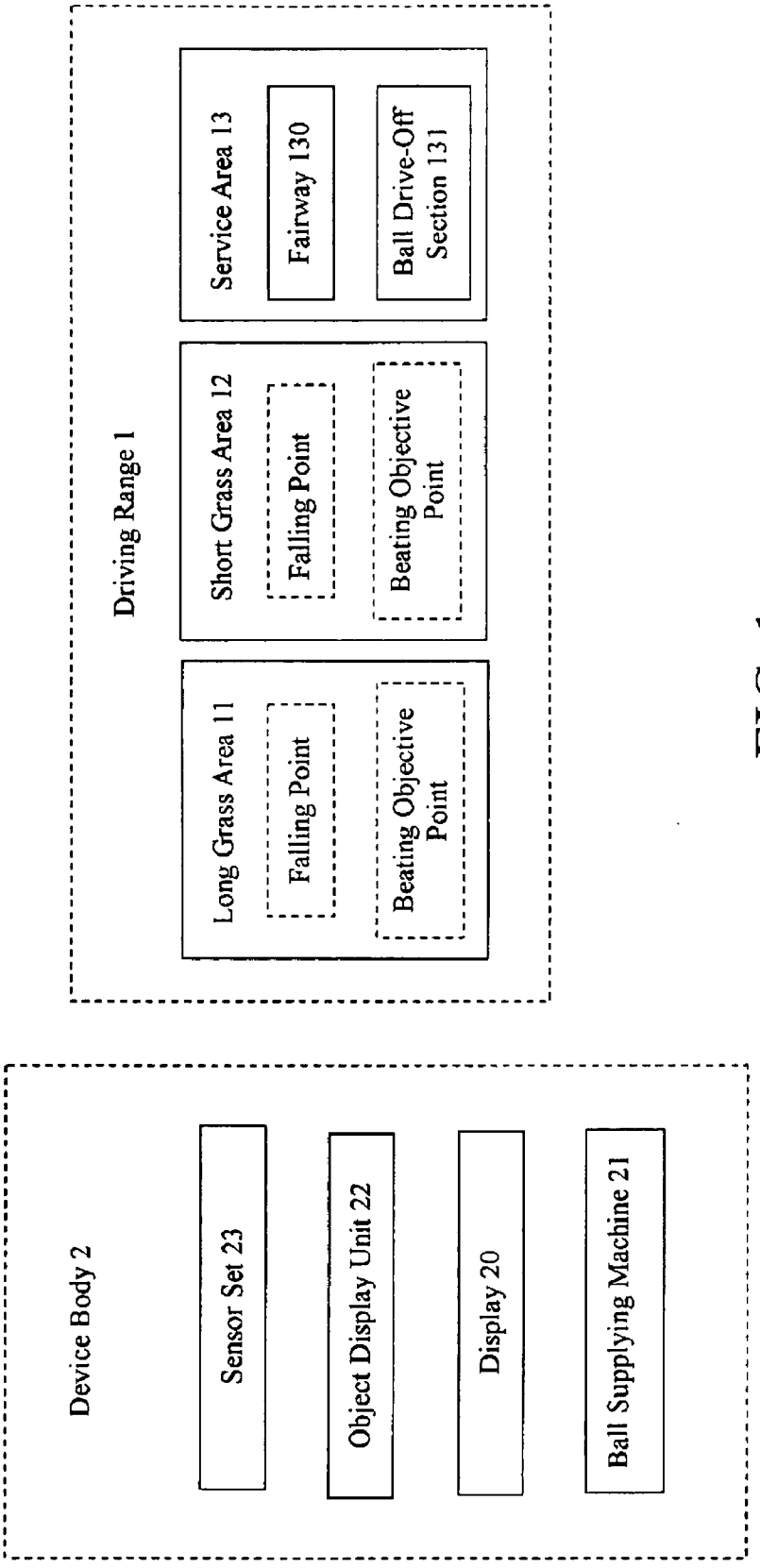

Driving Range 1
Long Grass Area 11
Falling Point
Beating Objective Point
Short Grass Area 12
Falling Point
Beating Objective Point
Service Area 13
Fairway 130
Ball Drive-Off Section 131
Device Body 2
Sensor Set 23
Object Display Unit 22
Display 20
Ball Supplying Machine 21

FIG. 1

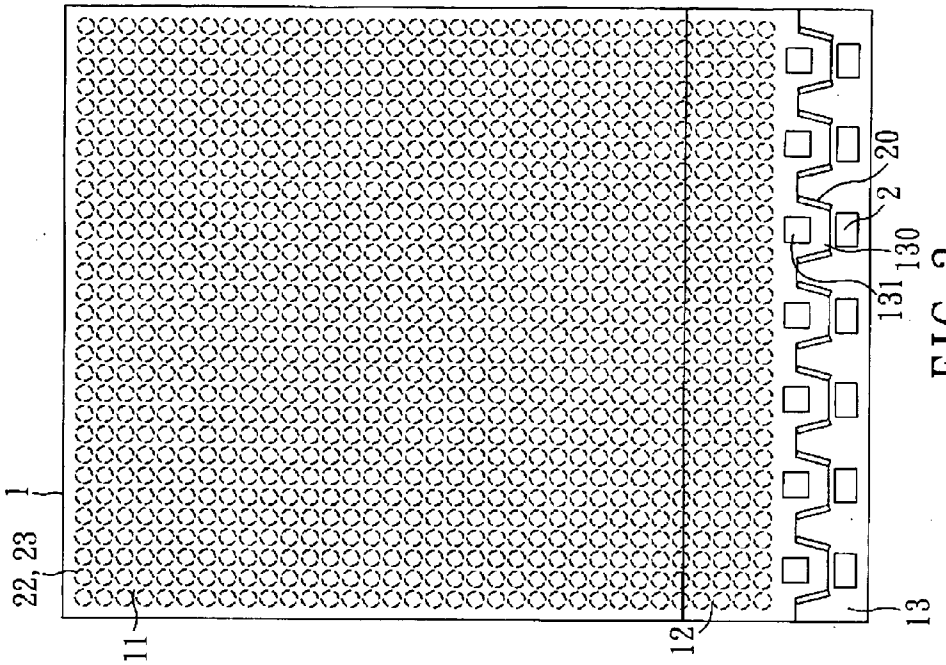


FIG. 3

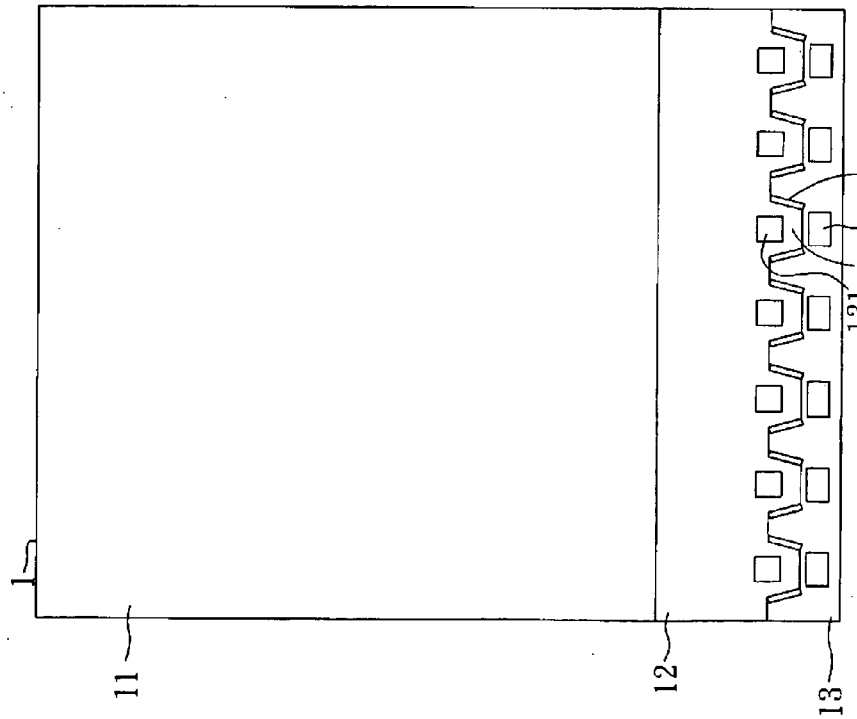


FIG. 2

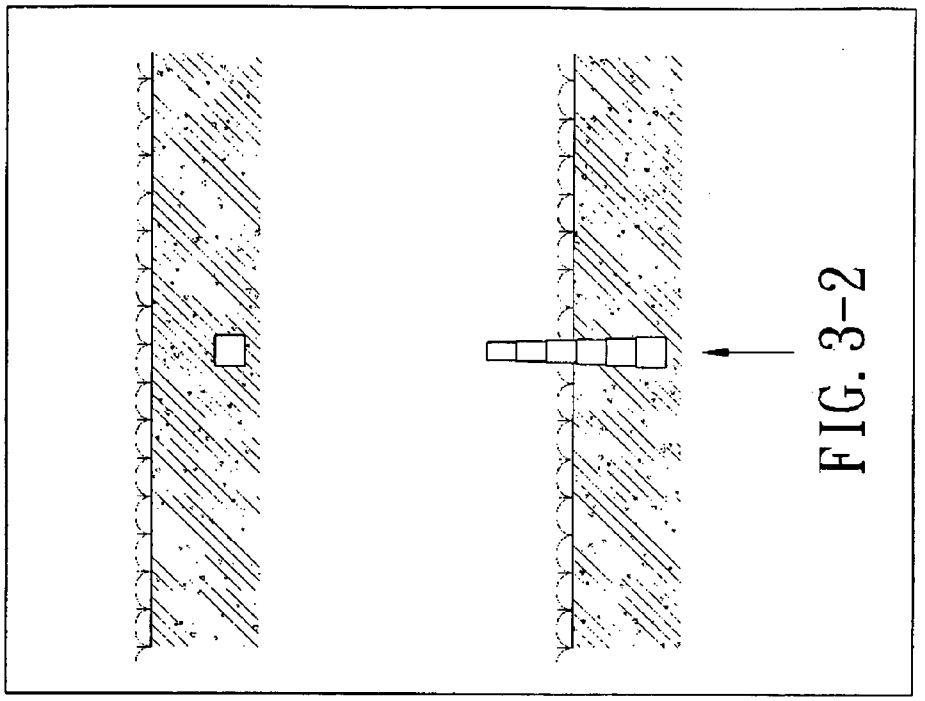


FIG. 3-2

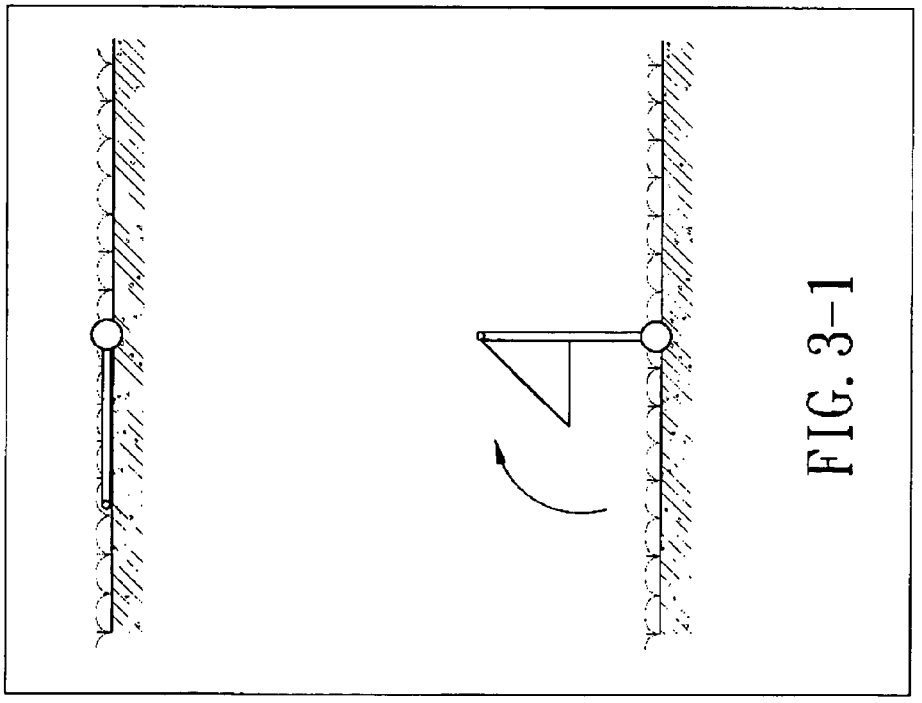


FIG. 3-1

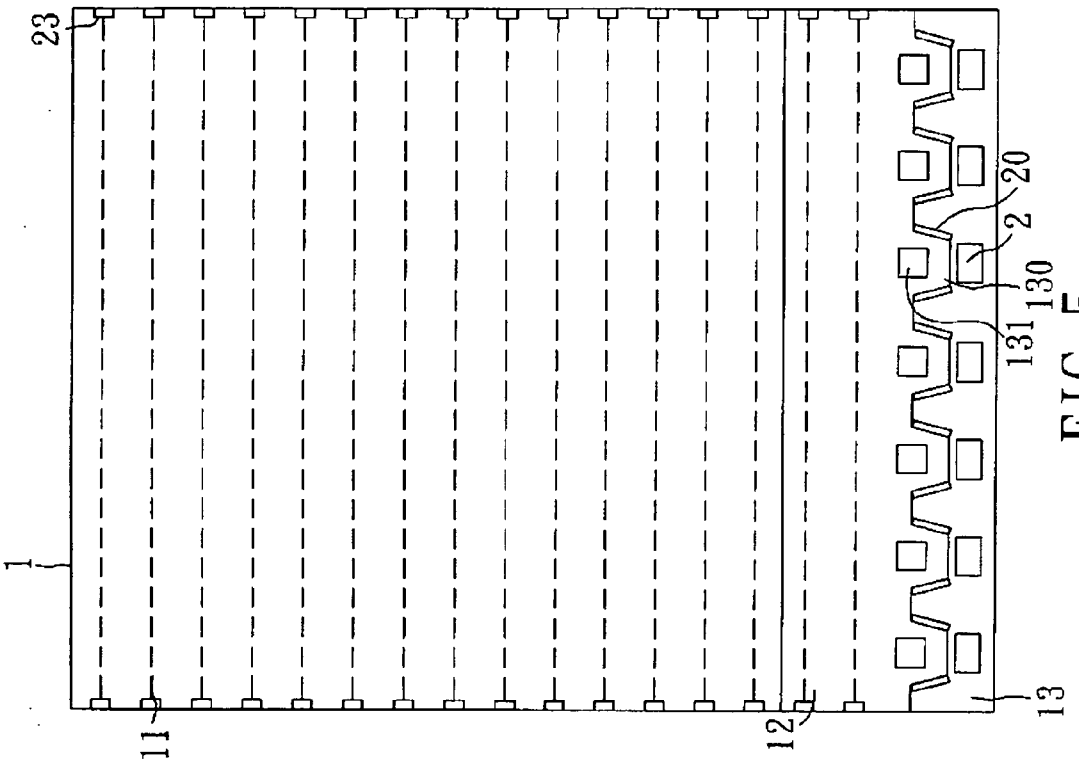


FIG. 5

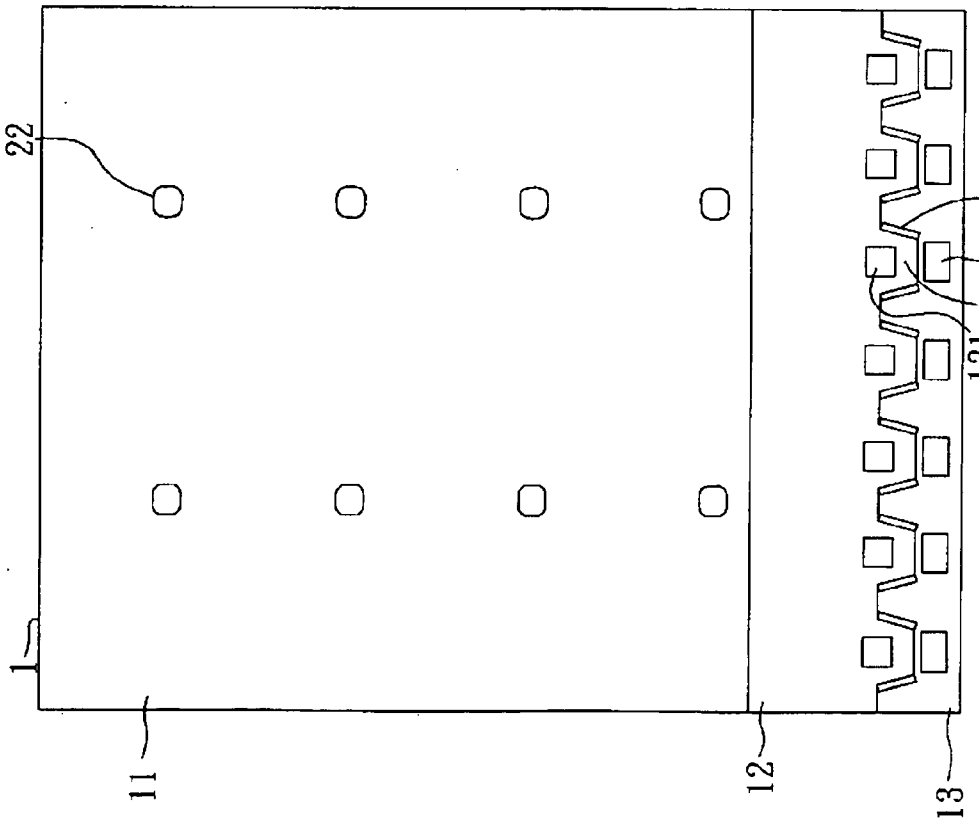


FIG. 4

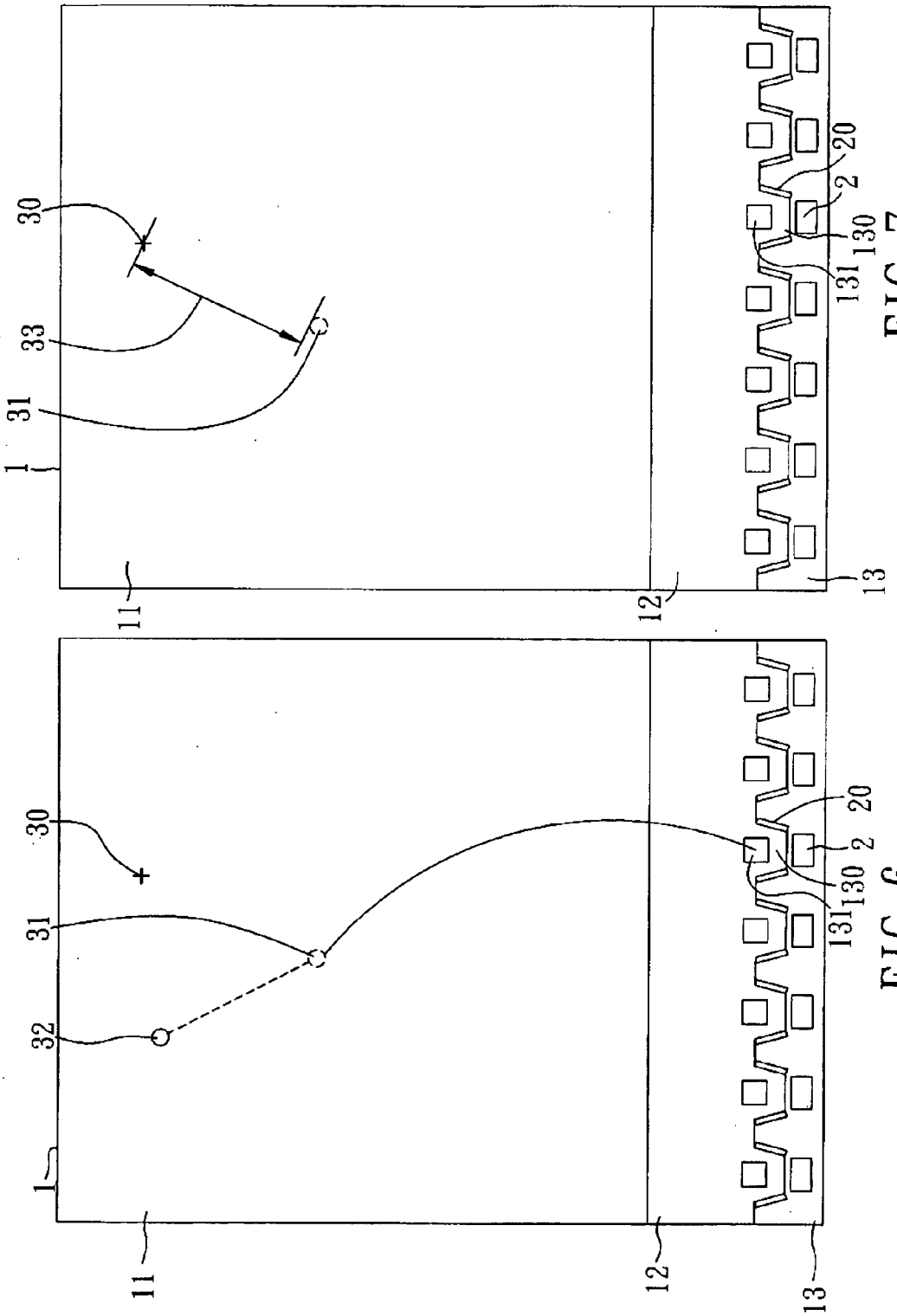


FIG. 7

FIG. 6

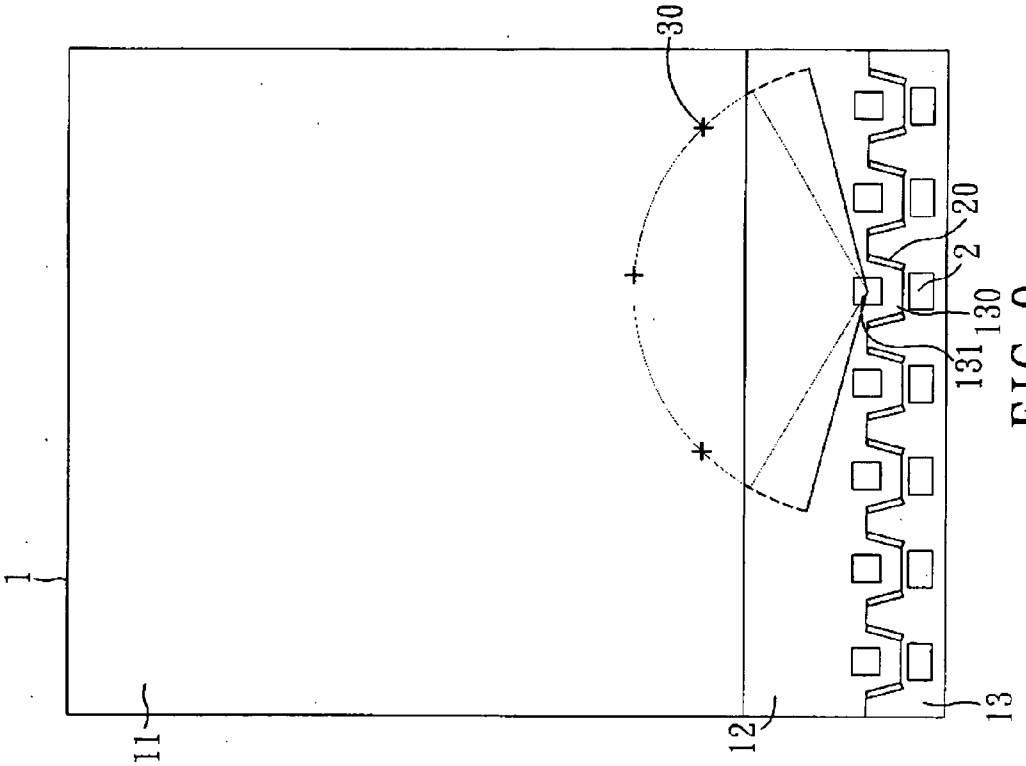


FIG. 9

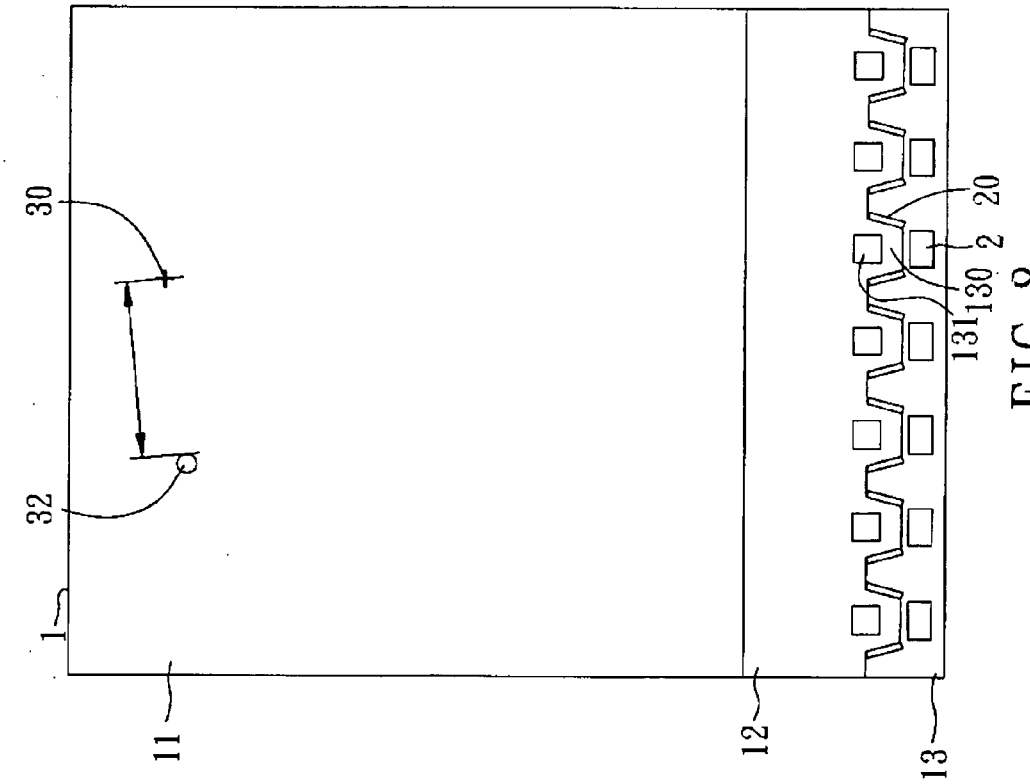


FIG. 8

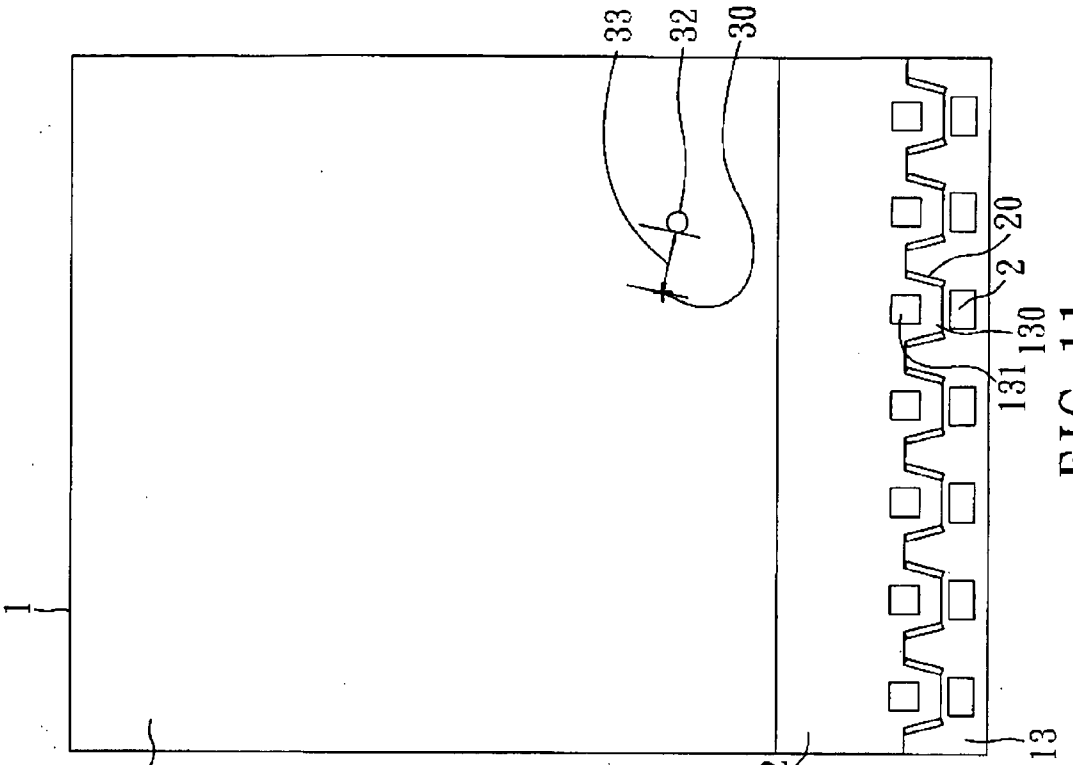


FIG. 11

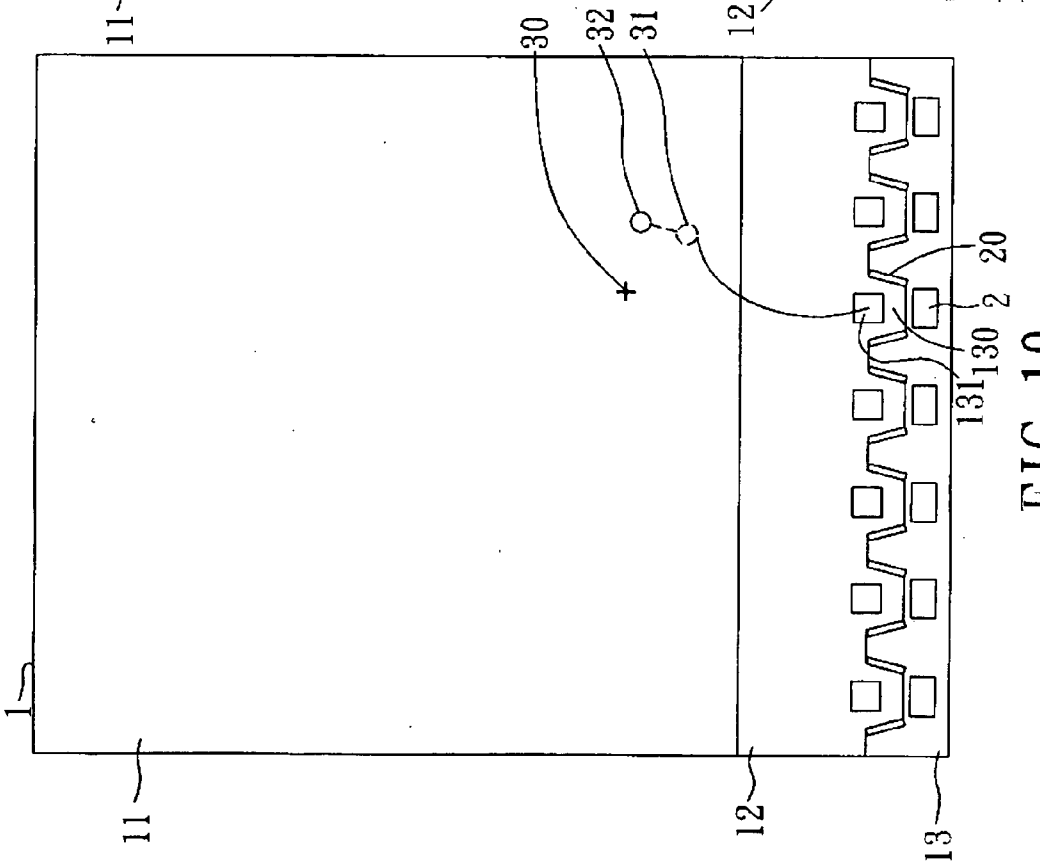


FIG. 10

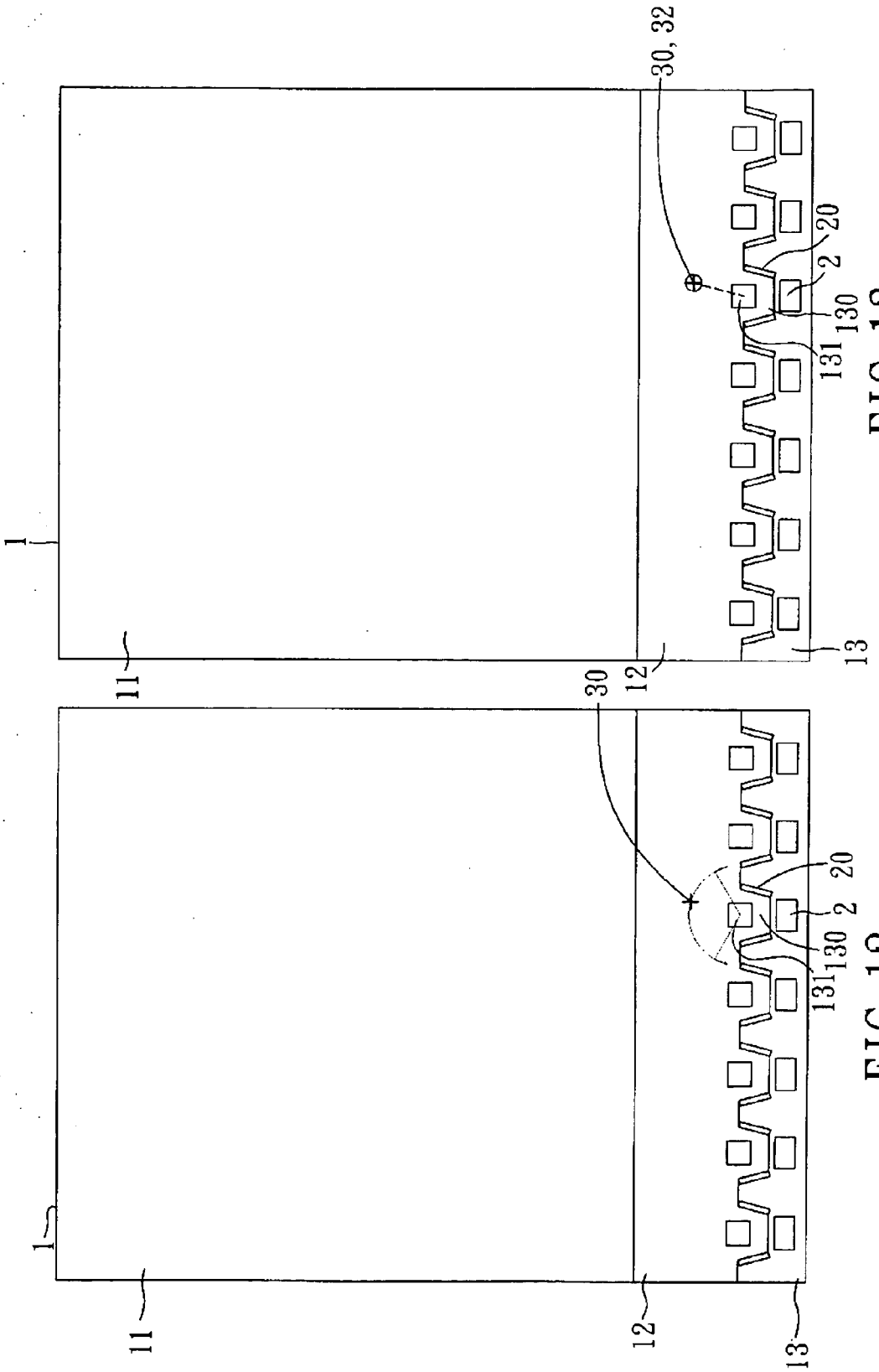


FIG. 13

FIG. 12

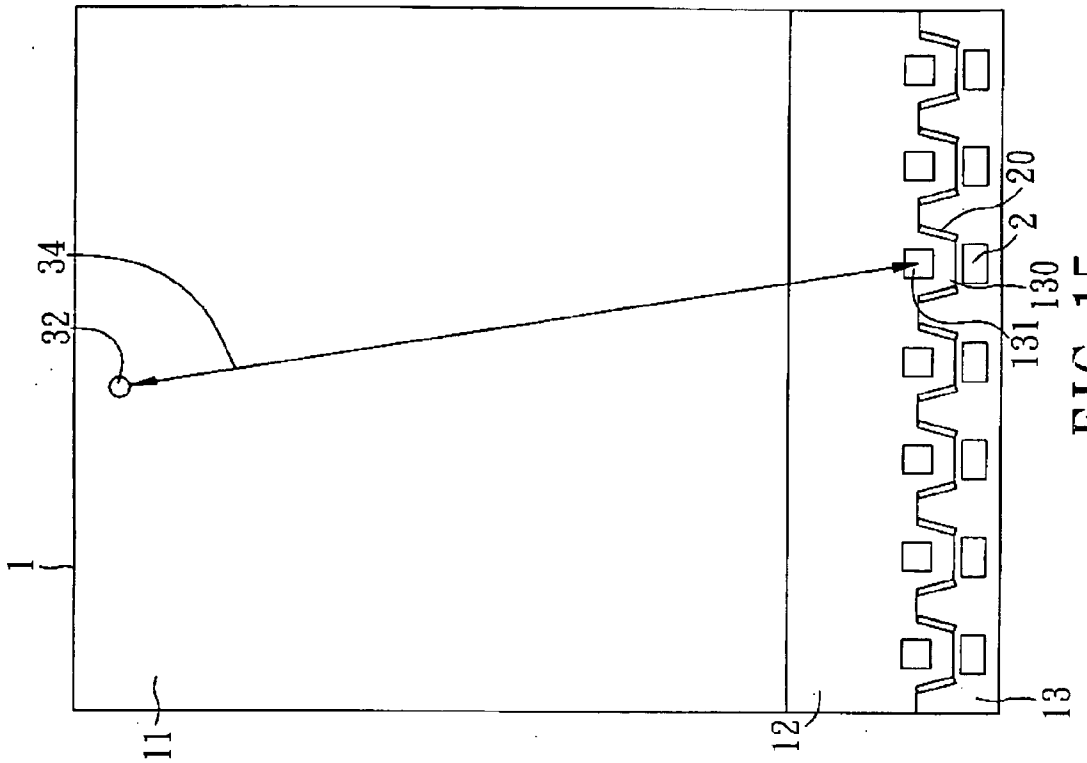


FIG. 15

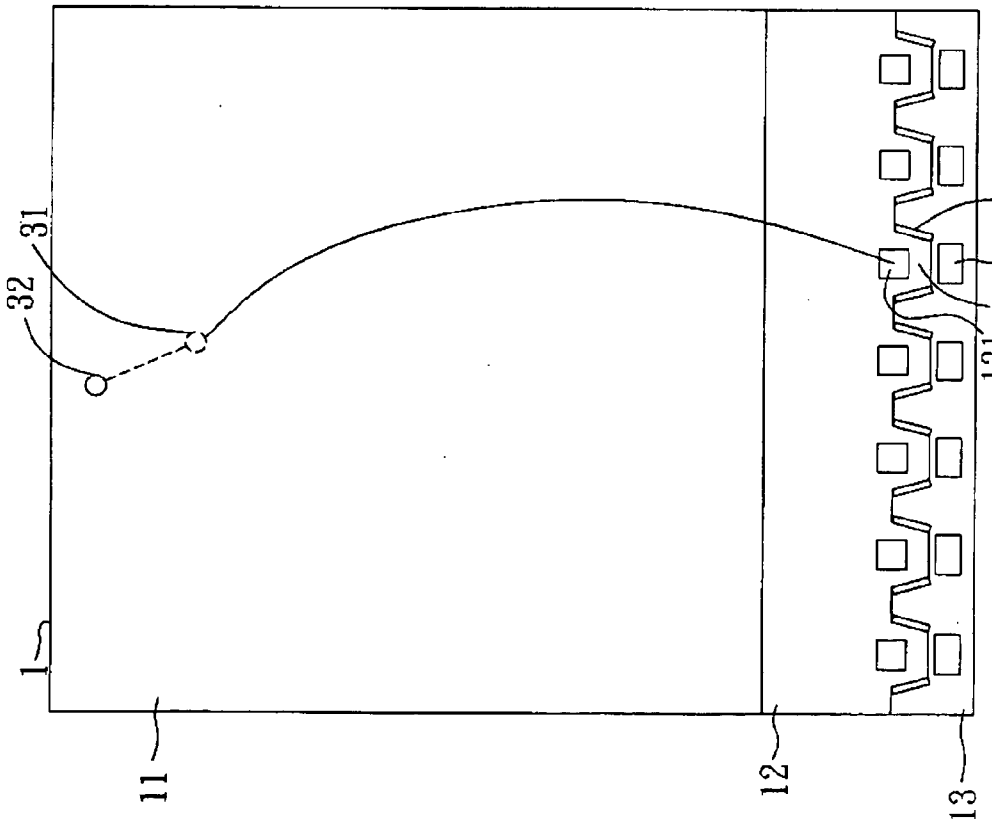


FIG. 14

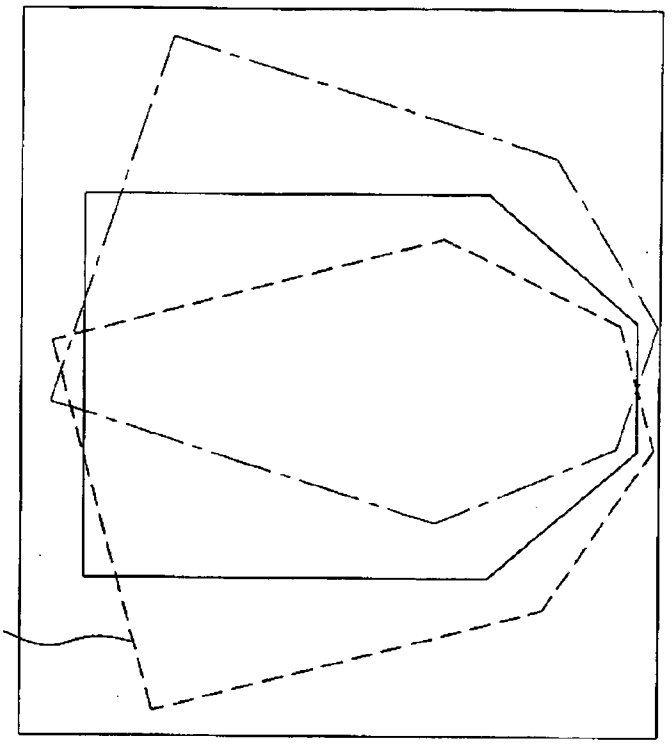


FIG. 16-2

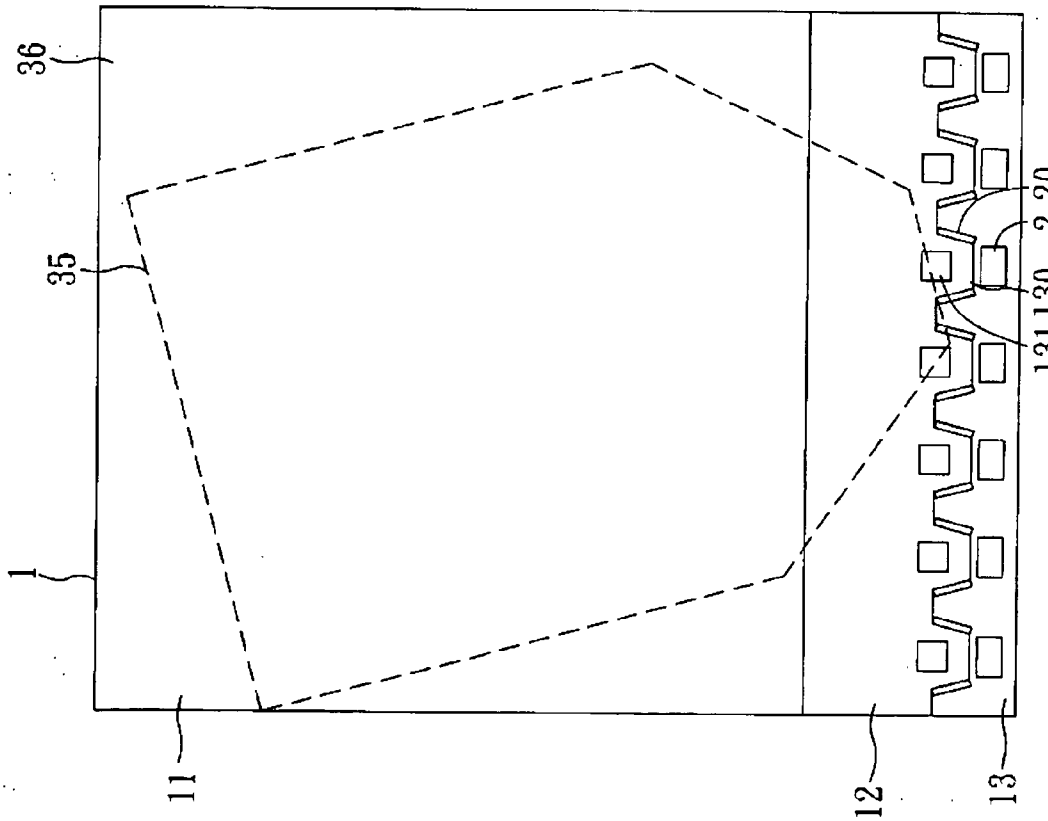


FIG. 16-1

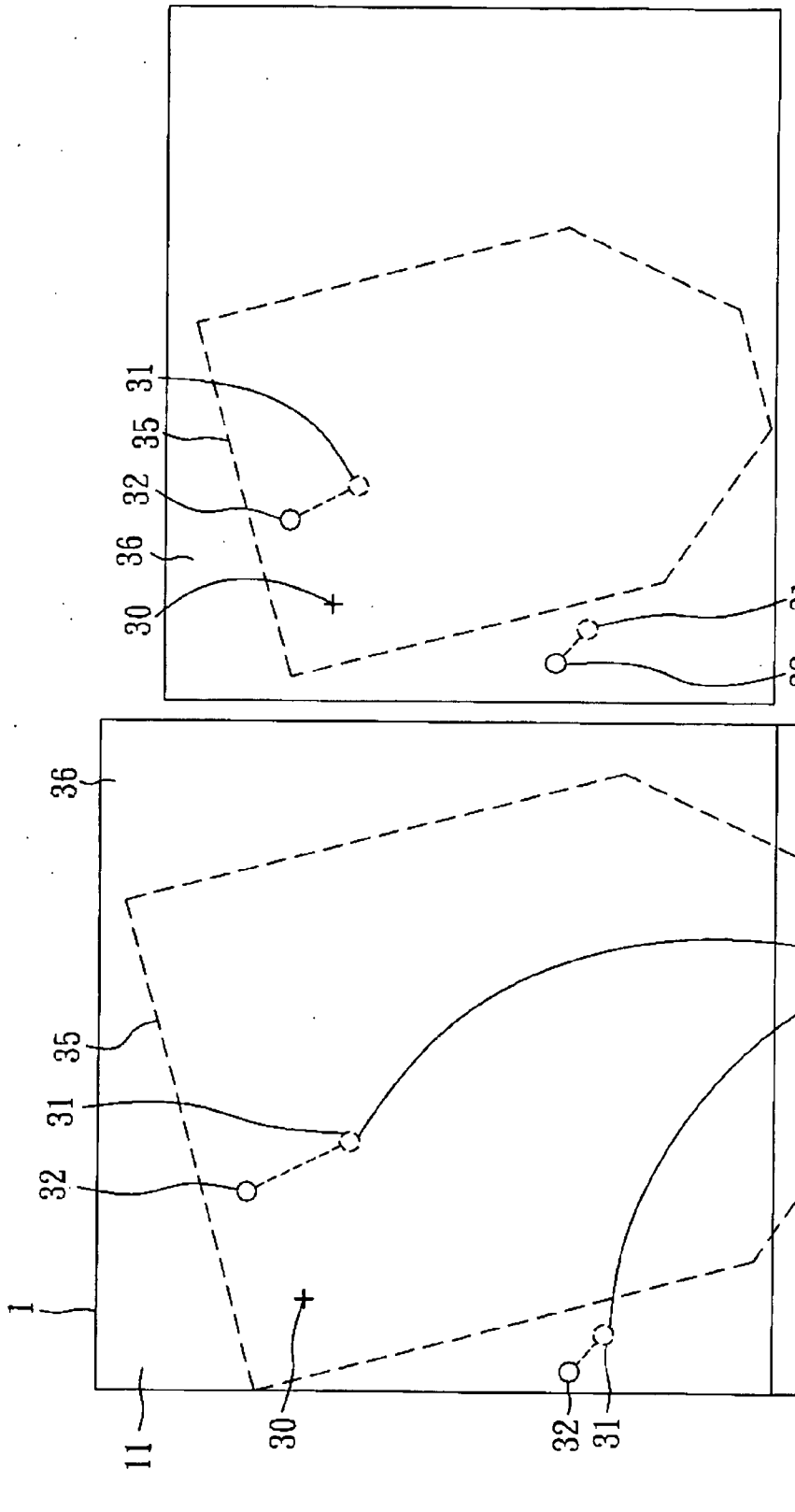


FIG. 17-1

FIG. 17-2

HIGHLY SIMULATIVE GOLF DEVICE AND THE METHOD FOR PERFORMING THE SAME

FIELD OF THE INVENTION

[0001] The present invention relates to golf, and particularly to a highly simulative golf device and the method for performing the same, wherein the user can play a golf game as a real golf game with a great interest.

BACKGROUND OF THE INVENTION

[0002] Golf has become a popular exercise and more and more people engage this exercise. However in general, the golf courses are at far places because the golf courses need very large area and they are not suitable to be installed at downtowns or in cities. As a result, people need take much time to go to golf course, however this is inconvenient and time consumed. Thus golf driving ranges are developed for training golf and people need not travel for long distances to go to the golf courses.

[0003] However the prior art golf driving ranges only provide the users to beat balls. The user trains the technology of estimating the distance necessary for driving a golf ball, but in practical golf exercise, not only estimating the distance, the direction of beating a golf ball and the preciseness are also very important. Furthermore, the driving range can not simulate the effect as a real golf course, that is, in practical playing, the golf ball is driven step by step by using a golf rod to beat a golf ball many times. However no specific object is identified in the driving range, and thus the technology can not be improved effectively. Furthermore, each time, only the ball beating training is performed so that the user will feel tired for the game.

[0004] A prior art patent about the training of golf is shown in U.S. Pat. No. 6,322,455, in that a preset objective area is provided and the falling point of a golf ball is displayed. By the matching of a video camera and the display, the falling point of the golf ball is displayed to the user. The user can refer to the relation of the falling point and the beating objective point so as to correct the pose thereof.

[0005] However in above mentioned displaying of the objective area and falling point, no information about the distance difference is provided. Moreover, each time, the ball is beaten toward the same objective area. The prior art of low efficiency and low interesting are also existed. Furthermore, the driving range cannot effectively simulate practical golf course and thus the user is easy to feel tired to the game.

[0006] Therefore, it is necessary to improve the above mentioned defects in the prior art.

SUMMARY OF THE INVENTION

[0007] The main object of the present invention is to provide a highly simulative golf device and the method of the same, in that the golf ball is pushed with a desired direction and can be driven step by step or by push rod. Therefore, the present invention provides a high simulation to the golf exercise.

[0008] To achieve above object, the present invention provides a highly simulative golf device, which can be installed to a fair territory of a golf course which has a long grass area, a short grass area and a service area. The short grass area is between the long grass area and service area. The service area has a plurality of fairways.

[0009] The clamping end has the function of operation and process. The device body has a display which is installed to different fairway for being used by users. With a touch function, the display can be set the beating objective point, a fair territory, an out-of-bound area, etc., and display the falling point as references to users. The device body further has a sensor set and an object display unit. The object display unit display an object by projection way or by buried way, or by an indication way. In daytime, the object display unit can provide an indicator by waving or protruding. The sensor set may be one of a vibration sensor, a magnetic sensor, or a light grid sensor as an indication for sensing a falling point. The falling point may be a point that the golf ball contacts the ground or a stop point. A distance difference between the beating objective point and the falling point is calculated as a following falling point. Therefore, the user beats the golf ball repeatedly until the distance difference is small to be within the green of the short grass area. Then the user drives the golf ball by push rod until the distance difference is zero or smaller than zero.

[0010] The method of the present invention comprises the following steps: a. displaying beating objective point; in that object display units are used to display a beating objective point so that the user beats a golf ball toward the beating objective point; b. sensing a falling point: in that when the golf ball is beaten out, sensor sets are used to sense a falling point; c. calculating a distance difference: in that a distance difference between the beating objective point and the falling point is calculated; d. resetting a beating objective point: in that a next beating objective point is defined with an initial points of ball drive-off section and a length of the distance difference so that the user beats the golf ball toward the next beating objective point: and e. re-sensing the falling point: returning the step c, a distance difference is re-measured; the process being repeated until the distance difference is zero or approaches to zero.

[0011] Since the depth of the fair territory is smaller than a practical golf course, to causes the driving range can provide the same effect as in a real golf course, the following steps are performed before step a, f. calculating a total ball-beating distance: the user beats the golf ball freely, the sensor set measures the beating distance between the falling point and the ball drive-off section each time and all the ball beating distances are accumulated; when the accumulated beating distance is equal or over a preset value, then the step a is performed. Namely, the use beats the golf ball to simulate a practical experience from initially beating a ball to the process that the golf ball near the green. Moreover, the user can train the technology of initial driving-off of a golf ball.

[0012] Thus it is known from above description, it is known that the present invention provides a high simulation effect in a driving range with a finite area. The user can train the process from initial driving-off of a golf ball to the process of push rod. By the setting of the distance difference and beating objective point, the variations in training and the effect of training can be improved so as to increase the interest in training.

[0013] The various objects and advantages of the present invention will be more readily understood from the following detailed description when read in conjunction with the appended drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. **1** is a block diagram showing the main unit of the present invention.

[0015] FIG. **2** is a plane view about the driving range of the present invention.

[0016] FIG. **3** is a schematic view showing the installation of the sensor sets and the object display units according to the present invention.

[0017] FIG. **3-1** is a schematic view showing waving operation is used as an indication of the object display unit of the present invention.

[0018] FIG. **3-2** is a schematic view showing a protruding unit is used as an indication of the object display unit of the present invention.

[0019] FIG. **4** is a schematic view showing the installation of the object display unit in another embodiment of the present invention.

[0020] FIG. **5** is a schematic view showing the sensor set of the present invention in another embodiment of the present invention.

[0021] FIGS. **6** to **15** are schematic views showing the training process of the present invention.

[0022] FIG. **16-1** is a schematic view showing a fair territory in the driving range of the present invention.

[0023] FIG. **16-2** is a schematic view showing the setting of the fair territory in the display according to the present invention.

[0024] FIG. **17-1** is a schematic view about the beating objective point and falling point of the driving range according to the present invention.

[0025] FIG. **17-2** is a schematic view about the beating objective point and the falling point on the display according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0026] In order that those skilled in the art can further understand the present invention, a description will be provided in the following in details. However, these descriptions and the appended drawings are only used to cause those skilled in the art to understand the objects, features, and characteristics of the present invention, but not to be used to confine the scope and spirit of the present invention defined in the appended claims.

[0027] Referring to FIGS. **1** to **5**, the high simulating golf device and the method of the same is illustrated.

[0028] Firstly, see FIGS. **1** and **2**, a golf driving range **1** has a long grass area **11**, a short grass area **12**, and a service area **13**. The long grass area **11** provides an effect as a golf course but not including the green. The short grass area **12** serves as a green of a golf course. The service area **13** serves for beating the golf ball. The service area **13** is directly adjacent to the short grass area **12**. The short grass area **12** is between the long grass area **11** and the service area **13**. The service area **13** has a plurality of fairways **130**. Each fairway **130** has a respective ball drive-off section **131** which can be used by a user.

[0029] In the present invention, a device body **2** is installed in the driving range **1**. The device body **2** has a function of operations. The device body **2** is connected to at least one display **20**. The display **20** has an input function for operation and setting. Also, the display **20** can display the falling point of a ball as a reference to users. The device body **2** has a ball supplying machine **21** with golf balls having identification signals and for setting corresponding fairway **130** for the golf ball. Thereby the identification signals of the golf ball can be used to identify the golf ball with other golf ball in other fairway **130**. The identification signal can be stored in an RFID (Radio Frequency Identification) or by other ways.

[0030] The device body **2** of the present invention further includes an object display unit **22** and a sensor set **23**. The object display unit **22** is for example that shown in FIG. **3**, which is an embedding unit, or as that shown in FIG. **4**, which is a projection type. The sensor set **23** is as those shown in FIG. **3**, is a vibration sensor set or a magnetic sensor set or as those shown in FIG. **5**, is a light grid set. The sensor set **23** can identify the golf ball from different fairway **130** by the identification signal.

[0031] With referring to FIG. **3**, the object display unit **22** is a buried type unit. There are a plurality of object display units **22** installed in the long grass area **11** and short grass area **12**. The device body **2** can display beating objects of different colors for identify different fairway **130** by controlling the object display unit **22**. The sensor set **23** can be installed with the object display unit **22**. There are a plurality of sensor sets **23** installed on the long grass area **11** and short grass area **12**. The vibration short grass area **12** senses an object by the falling or rolling force of the golf ball so as to determine the falling point of a golf ball. Or the vibration short grass area **12** senses an object by using the shielding of the magnetic lines by a golf ball so as to determine the falling point of a golf ball. The device body **2** receives the messages of the falling points which can be set as a point of a golf ball contacting the ground or a point that the ball stops thereon. Besides, as shown in FIGS. **3-1**, and **3-2**. by the indicators, the object display units **22** can be buried in various places. In FIG. **3-1**, the indicator operates as a waving flag and in FIG. **3-2**, the indicator is as a protruding object which is suitable for daytime.

[0032] Referring to FIG. **4**, the object display unit **22** is a projector. Namely, at an upper or a lateral side of the driving range **1** is installed with light projectors or others or by laser projection. The device body **2** can control the object display unit **22** to indicate the object of the beaten ball in the driving range **1**. Similarly, different colors are used to identify the fairways **130**.

[0033] Referring to FIG. **5**, the sensor set **23** is a light grid sensor set **23**. A plurality of light grids are installed at two lateral sides of the driving range **1**. When a golf ball passes through the driving range **1**, according to the shielding time period and orientation of the golf ball, the falling point of the golf ball is calculated. The device body **2** will receive the message of the falling point of the golf ball.

[0034] The effect and principle of the object display unit **22** and sensor set **23** are known in the prior art and they can be displayed to the users by the display **20** of each fairway **130**. These are known in the prior art and thus the detail will not be further described herein. However all other ways capable of indicating the object of the beating ball and sensing the falling point of the golf ball are within the scopes of the present invention.

[0035] Referring to FIGS. **6** to **13**, in use of the device body **2** of the present invention, the device body **2** can calculate the beating object displayed on the object display unit **22** and get a distance difference between the failing points sensed by the sensor set **23** so as to provide various highly efficiency simulations in training of the golf. In the following, the contents of FIGS. **6** to **13** will be described herein.

[0036] With referring to FIG. **6**, initially, the user sets the training way through the display **20**. For example, only one person plays or multiple persons plays in turns. In this embodiment, a single person in playing is used for descrip-

tion. At first, the device body **2** set a beating objective point **30** in the long grass area **11** of the driving range **1** through the object display unit **22** of the device body **2** so that the user can drive off the golf ball in the ball drive-off section **131** of the service area **13** to the beating objective point **30**. Then the sensor set **23** of the device body **2** will sense the falling point. The falling point may be the point **31** of the golf ball contacting the ground or the point **32** that the golf ball stops based on the necessity of the user, which are set before playing.

[0037] Referring to FIG. **7**, the point **31** of the golf ball contacting the ground is used as a beating objective point, and the sensor set **23** of the device body **2** senses the point **31** and then calculate the distance difference between the falling point and the beating objective point **30**. Then the following steps are performed.

[0038] Referring to FIG. **8**, the points **32** that the golf ball stops is used as the falling point. The sensor set **23** of the device body **2** senses the point **32** and then calculate the distance difference between the falling point and the beating objective point **30**. Then the following steps are performed. For convenience, in this embodiment, the stop point **32** is used as an example.

[0039] Referring to FIG. **9**, in the device body **2**, the following beating objective point **30** is based on the distance difference **33** of previous beating. In setting, the ball drive-off section **131** is used as an initial point, the distance difference **33** is as a length. In the display **20**, the user selects a point in a round arc with a center of the ball drive-off section **131** and a radius of the distance difference **33** as the next beating objective point **30**. Or the point is set randomly in the arc as the next beating objective point **30**.

[0040] With referring to FIG. **10**, after next beating objective point **30** is set, the user beats a ball toward the beating objective point **30**. Then a new falling point generates. In this embodiment, the stop point **32** is used as the falling point.

[0041] With referring to FIG. **11**, the device body **2** will calculate a new distance difference **33** of the current falling point and the beating objective point **30** for next use.

[0042] Above calculation of the distance difference **33** for setting the beating objective point **30** is repeated until the distance difference **33** is small then a range of the green in the short grass area **12** so as to have the effect of simulating the playing of golf.

[0043] With referring to FIG. **12**, when the distance difference **33** is smaller than the range of the green of the short grass area **12**, the beating objective point **30** will be within the short grass area **12**, then the user can push the golf ball in the ball drive-off section **131** so that the golf ball moves in the short grass area **12** for training the technology of push rod and having highly simulating effect.

[0044] With referring to FIG. **13**, when the setting of the beating objective point **30** and the calculation of the distance difference **33** are performed once or many times, if the distance difference **33** is equal to zero or approaches to zero, it represents that the golf ball has fallen into a hole. Thus the next training can be renewed. The number of beating the rod or related data can be presented on the display **20**. Then the user can pick up the golf ball near the ball drive-off section **131** in the short grass area **12** for reuse or the golf ball is returned to avoid many golf balls to be placed upon the short grass area **12**.

[0045] From above description, it is known that the present invention can provide a highly simulating way for golf, which also considers about the beating force, distance, direction and orientation and other effects.

[0046] Other embodiment about the operation of the present invention will be described herein. Generally, the driving range **1** is smaller than a practical golf course. To have a driving range **1** near a practical golf course, before beating the golf ball, the user can set a total beating distance in the device body **2** through the display **20**. At first, the device body **2** will not indicate the beating objective point **30** through the object display unit **22**, while as shown in FIGS. **14** and **15**, the user beat the ball with a great force, the falling point is predicted through the sensor set **23** and calculates the beating distance **34** between the falling point and the ball drive-off section **131**. The beating distances **34** are accumulated to a preset value. The device body **2** orders the object display unit **22** to indicate the beating objective point **30** to simulate the process from initially driving off the ball to the status that the golf ball near the green. Meanwhile, the user can train the technology of driving off a ball.

[0047] Referring to FIGS. **16** and **17**, the operation of the display **20** will be described herein.

[0048] See FIG. **16**, a schematic view about the driving range **1** is illustrated. In FIG. **16-2**, a schematic view about the display **20** is illustrated. The display **20** causes that the user can select a desired fair territory **35** and the direction thereof. The area out of the fair territory **35** is an out-of-bound area **36**. When the fair territory **35** is selected by the user, a corresponding area in the driving range **1** is the fair territory **35**, and other area is an out-of-bound area **36**. The device body **2** will determine whether a golf ball is out of the fair territory **35** by using the sensor set **23** based on the setting of the fair territory **35** and out-of-bound area **36**.

[0049] Referring to FIG. **17**, a schematic view about a practical driving range **1** is illustrated. In FIG. **17-2**, a schematic view about the corresponding frame on the display **20** is shown. After a fair territory **35** in the display **20** is determined, a beating objective point **30** can be set by touching or other way. Then the device body **2** receives a set information on the display **20**. Then by the object display unit **22**, the beating objective point **30** is indicated in the display **20** so that the user beats the golf ball toward the beating objective point **30**. The distance difference **33** is calculated repeatedly. Then the display **20** displays the falling point including the point **31** that the golf ball contacts the ground and the stop point **32** each time the golf ball is beaten. If the falling point is out of the out-of-bound area **36**, the heating is fail and one more heating is punished. Then the golf ball is beaten again with the same beating objective point **30** so as to be more similar to a real golf game.

[0050] Referring to FIGS. **5** to **17**, the method for simulating the golf game according to the present invention will be described herein.

[0051] a. Displaying beating objective point **30**: See FIG. **6**, a beating objective point **30** in a driving range **1** is displayed and indicated by using the object display unit **22** of the device body **2**. The user beats the golf ball on the ball drive-off section **131** of the service area **13** towards the beating objective point **30**. As shown in FIGS. **16-1** and **16-2**, the beating objective point **30** is set by a display **20**. The direction and coverage of the fair territory **35** can be set at the same time. The area out of the fair territory **35** is an out-of-bound area **36**.

[0052] b. Sensing a real failing point: referring to FIG. **6**, the device body **2** measures a falling point through the sensor set **23**, the falling point may be a point **31** that the golf ball contacts the ground or a stop point **32**. With the identification signal of the golf ball, the sensor set **23** will identify the golf balls at different fairways **130**. The display **20** displays the falling points. Referring to FIGS. **17-1**, and **17-2**, if the falling point is within the driving range **1** and in the out-of-bound area **36** set in the display **20**, it is considered that the beating is fail and a further beating is added as a punishment. The user beats the golf ball again with the same beating objective point **30**.

[0053] c. Calculating the distance difference **33**: as shown in FIGS. **7** and **8**, the falling point is set as the point **31** that the golf ball contacts the ground or the stop point **32** for calculating the distance difference **33** between the beating objective point **30** and the falling point. In FIG. **7**, the point **31** that the golf ball contacts the ground is as a falling point, and in FIG. **8**, the stop point **32** is as the falling point. In this embodiment, the stop point **32** is as the falling point for description.

[0054] d. Resetting the beating objective point **30**: as shown in FIG. **9**, the ball drive-off section **131** is as an initial point and the distance difference **33** is as a length. The next beating objective point **30** is defined. The user selects a point in a round arc with a center of the ball drive-off section **131** and a radius of the distance difference **33** as the next beating objective point **30**. Or the point is set randomly in the arc as the next beating objective point **30**. As shown in FIG. **10**, the user beats the golf ball to the beating objective point **30** again.

[0055] e. Re-sensing a real falling point: returning to step c, the distance difference **33** between the current falling point and the beating objective point **30** is re-measured, and the next the beating objective point **30** is set repeatedly. The distance difference **33** is used for the next beating objective point **30** until the distance difference **33** is smaller than the length of the green in the short grass area **12**. Thus, as shown in FIG. **12**, the beating objective point **30** is set in the green of the short grass area **12**. The user can push the ball to the beating objective point **30**. The setting of the beating objective point **30** and calculating of the distance difference **33** are repeated until as shown in FIG. **13**, when the distance difference **33** is equal to zero or approach to zero, it is considered that the golf ball has entered into the hole.

[0056] Because the depth of the driving range **1** is smaller than that of a practical golf course, to have a training effect near a practical one, the following step can be added before step a:

[0057] f. Calculating total beating distance: as shown in FIG. **14**, firstly no beating objective point **30** is indicated, the beating distances **34** are accumulated to a preset value. The user can set the total beating distance **34** to a preset value and then it is considered that it is near the range of the green. Then the device body **2** indicates the beating objective point **30** through the display **20**.

[0058] The present invention is thus described, it will be obvious that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the present invention, and all such modifications as would be obvious to one skilled in the art are intended to be included within the scope of the following claims.

What is claimed is:

1. A highly simulative golf device comprising a device body; an object display unit and a sensor set; the object display unit indicating a beating objective point and the sensor set sensing a falling point; the device body calculating a distance difference between the beating objective point and the falling point.

2. The highly simulative golf device as claimed in claim **1**, wherein the device body has a short grass area as a green; the ball drive-off section of the driving range is as an initial point; the distance difference is used for setting a next beating objective point; then a further beating objective point and distance difference are set and calculated; if the distance difference is smaller than a range of a green; a golf ball is pushed toward the green of the short grass area.

3. The highly simulative golf device as claimed in claim **1**, wherein in the device body, the ball drive-off section of the driving range is as an initial point and a previous distance difference is used in the setting of next beating objective point; and the beating objective point is selected from in a round arc with a center of the ball drive-off section.

4. The highly simulative golf device as claimed in claim **1**, wherein in the device body, the ball drive-off section of the driving range is as an initial point and the distance difference is used to set a next beating objective point.

5. The highly simulative golf device as claimed in claim **1**, wherein the device body includes a display; the display sets a fair territory corresponding to a practical fair territory; and the device body sets a mode of multiple person playing through the display.

6. The highly simulative golf device as claimed in claim **1**, wherein the device body includes a display; the display sets a fair territory corresponding to a practical fair territory; an area out of the device body is set as an out-of-bound area; and a direction is adjustable in the fair territory.

7. The highly simulative golf device as claimed in claim **1**, wherein the device body has a display; and the display serves for setting a beating objective point and displaying a falling point.

8. The highly simulative golf device as claimed in claim **1**, wherein the device body uses a ball drive-off section of the driving range as an initial point; the device body accumulates a beating distance between a falling point and the ball drive-off section until the total beating distance attains a preset value, the object display unit will display the beating objective point.

9. The highly simulative golf device as claimed in claim **1**, wherein the device body includes a golf ball setting with an identification signal; and the sensor set identify the golf ball with a corresponding fair territory; and the object display unit uses different colors for identifying beating objective points for the user in different fairway.

10. The highly simulative golf device as claimed in claim **1**, wherein the device body includes a ball supplying machine and golf balls installed with identification signals; the ball supplying machine sets the identification signal to the golf ball for identifying the fairway of the golf ball.

11. The highly simulative golf device as claimed in claim **1**, wherein the falling point is a point that the golf ball contacts the ground or a stop point that the golf ball stops.

12. The highly simulative golf device as claimed in claim **1**, wherein the object display unit indicates with a waving way or another way with a protruding operation.

13. The highly simulative golf game method, comprising the steps of:

a. displaying beating objective point, in that object display units are used to display a beating objective point so that the user beats a golf ball toward the beating objective point;

b. sensing falling point: in that when the golf ball is beaten out, sensor sets are used to sense a falling point of the beaten golf ball;

c. calculating a distance difference: in that a distance difference between the beating objective point and the falling point is calculated;

d. resetting a beating objective point: in that a next beating objective point is defined with an initial points of ball drive-off section and a length of the distance difference so that the user beats the golf ball toward the next beating objective point; and

e. re-sensing the falling point: returning the step c, a distance difference is re-measured; the process being repeated until the distance difference is zero or approaches to zero.

14. The method as claimed in claim **13**, wherein in step c, if the distance difference is smaller than a range of a green of a preset short grass area, then in step d, the golf ball is pushed in the green of the short grass area.

15. The method as claimed in claim **13**, wherein in step a, a display is used to set a mode of multiple persons playing the golf game; and the beating objective point can be set by the user himself or herself; and in step b, the display displays the beating objective point.

16. The method as claimed in claim **13**, wherein in steps a and d, a display is used to display a fair territory and an out-of-bound area out of the fair territory; in the fair territory, a direction is adjustable.

17. The method as claimed in claim **13**, wherein the following steps are performed before step a,

f. calculating a total ball-beating distance: the user beats the golf ball freely, the sensor set measures the beating distance between the falling point and the ball drive-off section each time and all the ball beating distances are accumulated; when the accumulated beating distance is equal or over a preset value, then the step a is performed.

18. The method as claimed in claim **13**, wherein in steps a and d, the golf balls are identified with identification signals, in step c, the golf balls with the respective fairways are identified by the identification signals, and in steps a and d, the beating objective point of different fairway is identified by different color.

19. The method as claimed in claim **13**, wherein in step d, the beating objective point is selected from a round arc with a center of the ball drive-off section.

20. The method as claimed in claim **13**, wherein in the step b, the falling point is selected from a point that the golf ball contacts the ground or a stop point that the golf ball stops at the point.

* * * * *