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(54) **GAMING METHOD WITH DUAL GAME FUNCTION, ELECTRONIC GAMING APPARATUS FOR PERFORMING THE GAMING METHOD, AND COMPUTER PROGRAM PRODUCT RECORDING A GAMING PROGRAM OF THE GAMING METHOD**
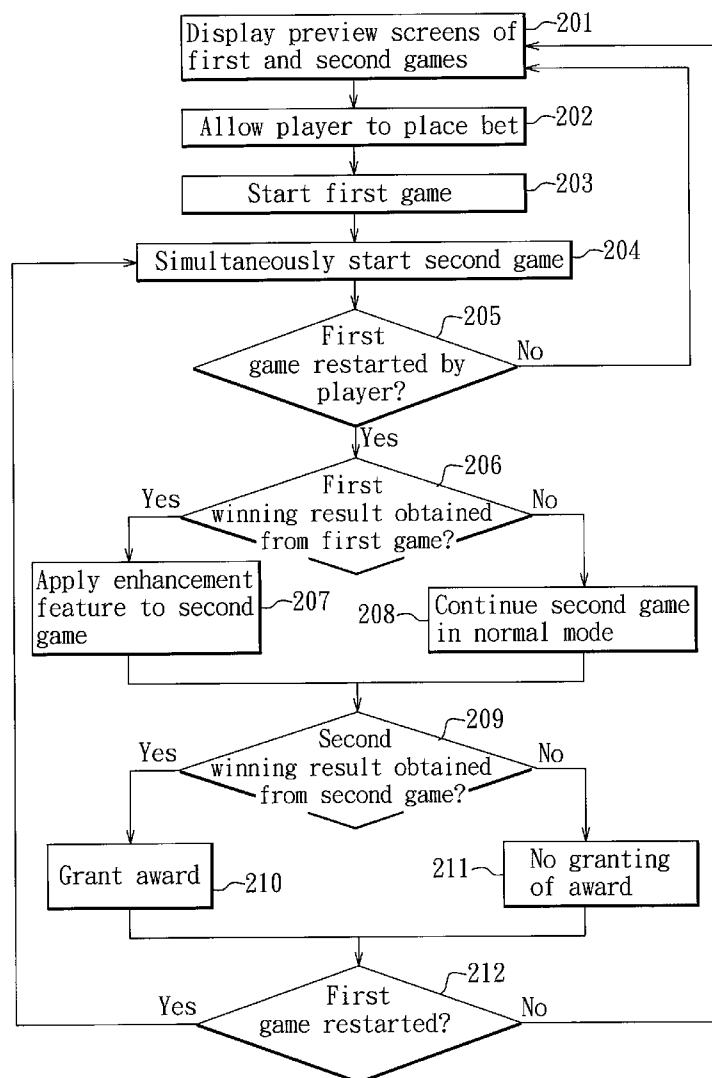
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(57) **ABSTRACT**

A gaming method provides a dual game function and is implemented using a gaming apparatus. The gaming method includes: a) simultaneously starting a first game and a second game; and b) if a predetermined first winning result is obtained at the end of playing one round of the first game, applying a corresponding enhancement feature to the second game that enhances ability of a player to play the second game. A gaming apparatus and a computer program product are also disclosed.

11

input
unit

12

processing
assembly

13

graphics
processing
assembly

14

output
assembly

FIG. 1

11

input
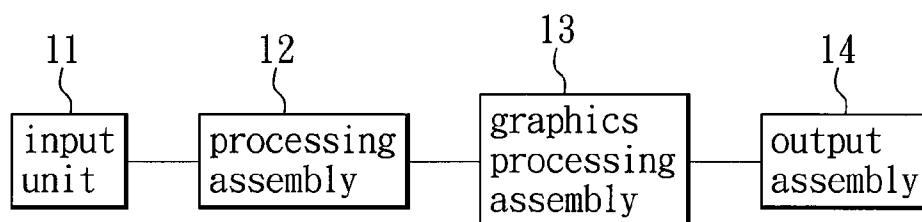unit
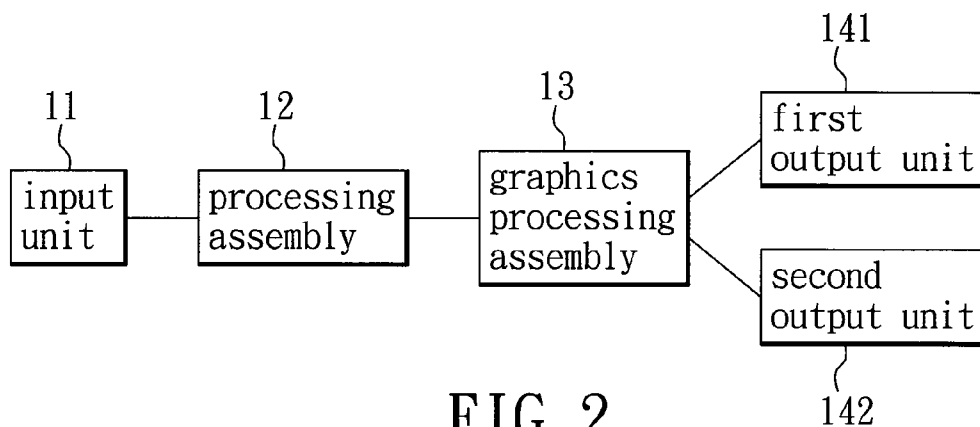
12

processing
assembly

13

graphics
processing
assembly

141

first
output unit

second
output unit

142

FIG. 2

FIG. 3

FIG. 4

Display preview screens of ⌐201
first and second games

Allow player to place bet ⌐202

Start first game ⌐203

Simultaneously start second game ⌐204

First ⌐205
game restarted by   No
player?

Yes

First ⌐206
Yes   winning result obtained   No
from first game?

Apply enhancement
feature to second ⌐207   208⌐ Continue second game
game   in normal mode

Second ⌐209
Yes   winning result obtained   No
from second game?

Grant award ⌐210   211⌐ No granting
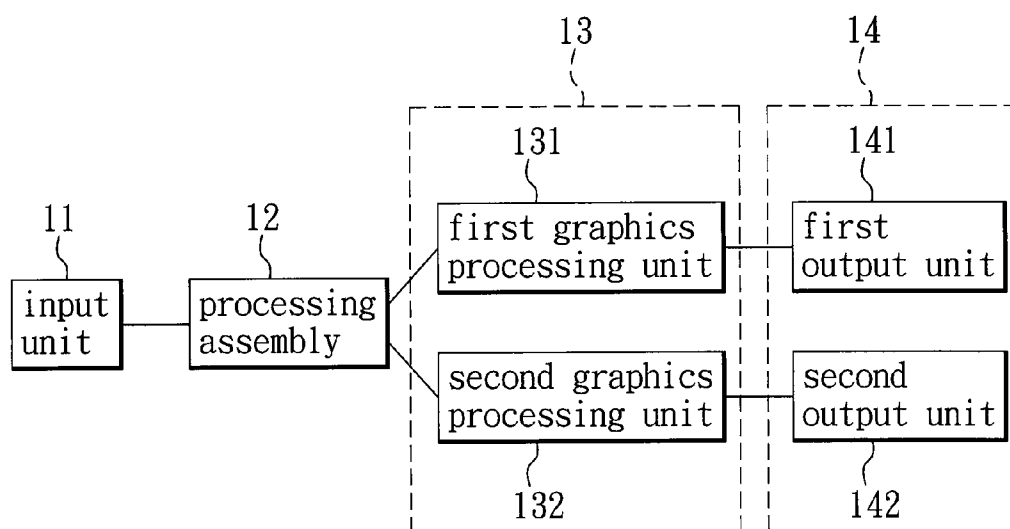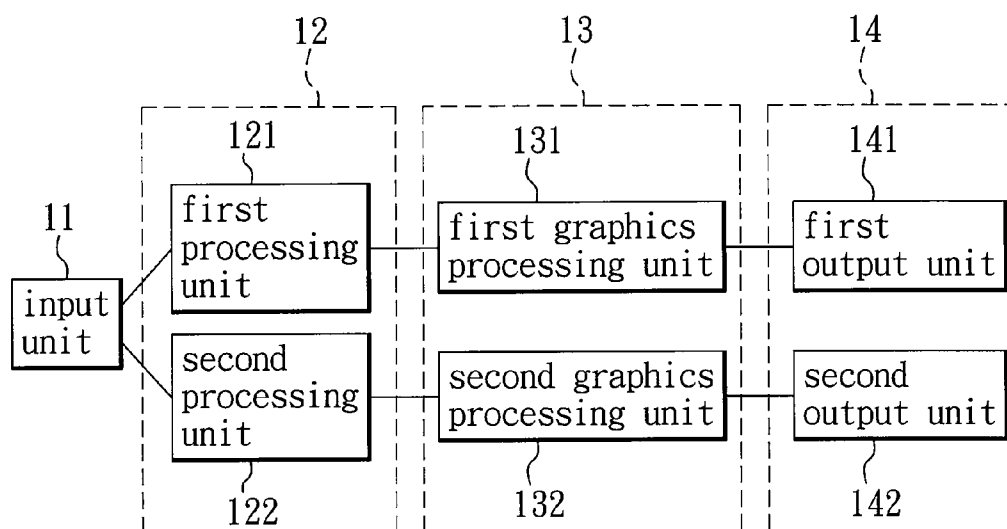of award
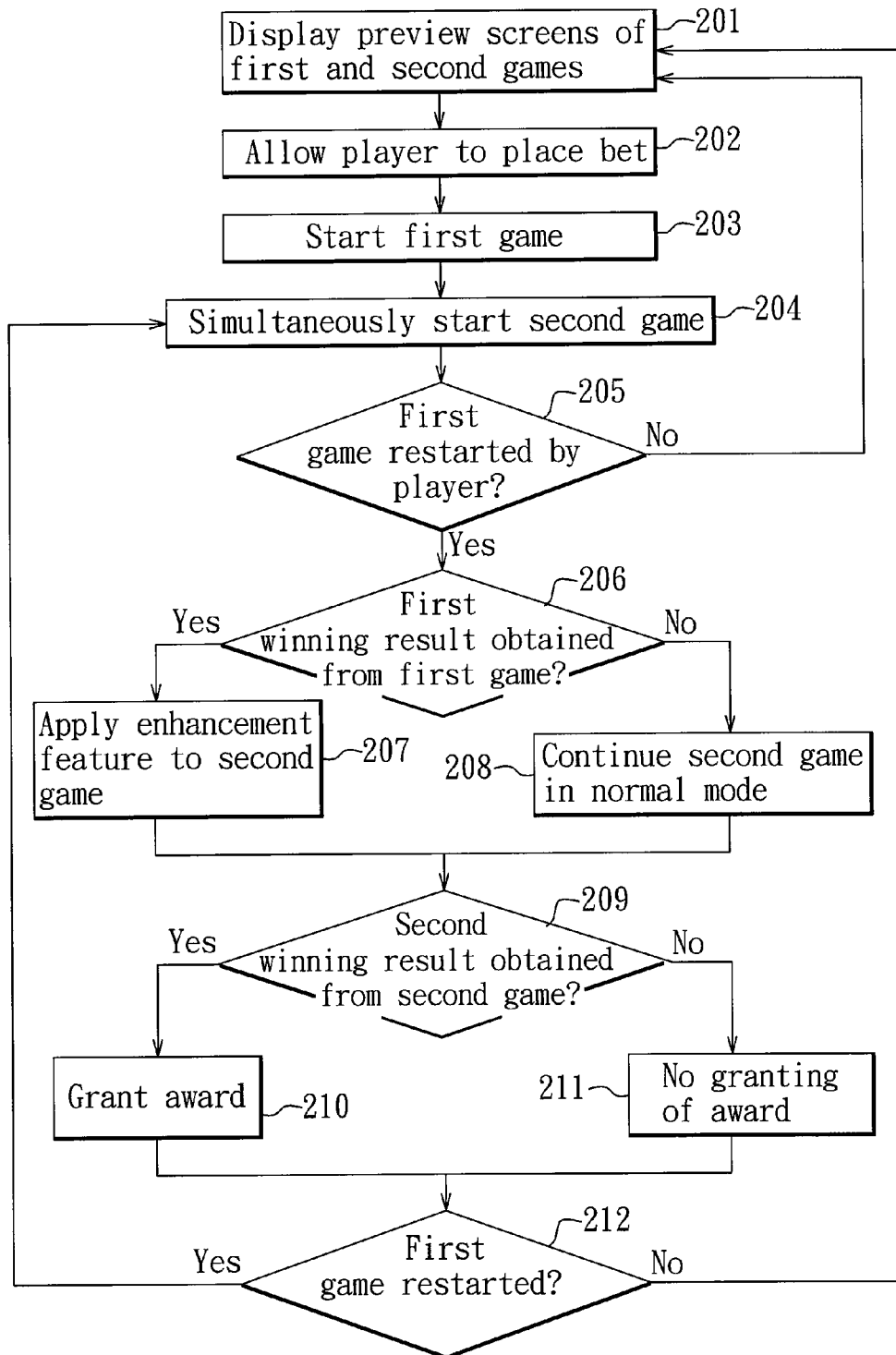
First ⌐212
Yes   game restarted?   No

FIG. 5

FIG. 6

GAMING METHOD WITH DUAL GAME FUNCTION, ELECTRONIC GAMING APPARATUS FOR PERFORMING THE GAMING METHOD, AND COMPUTER PROGRAM PRODUCT RECORDING A GAMING PROGRAM OF THE GAMING METHOD

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims priority of Taiwanese Application No. 095133828, filed on Sep. 13, 2006.

BACKGROUND OF THE INVENTION

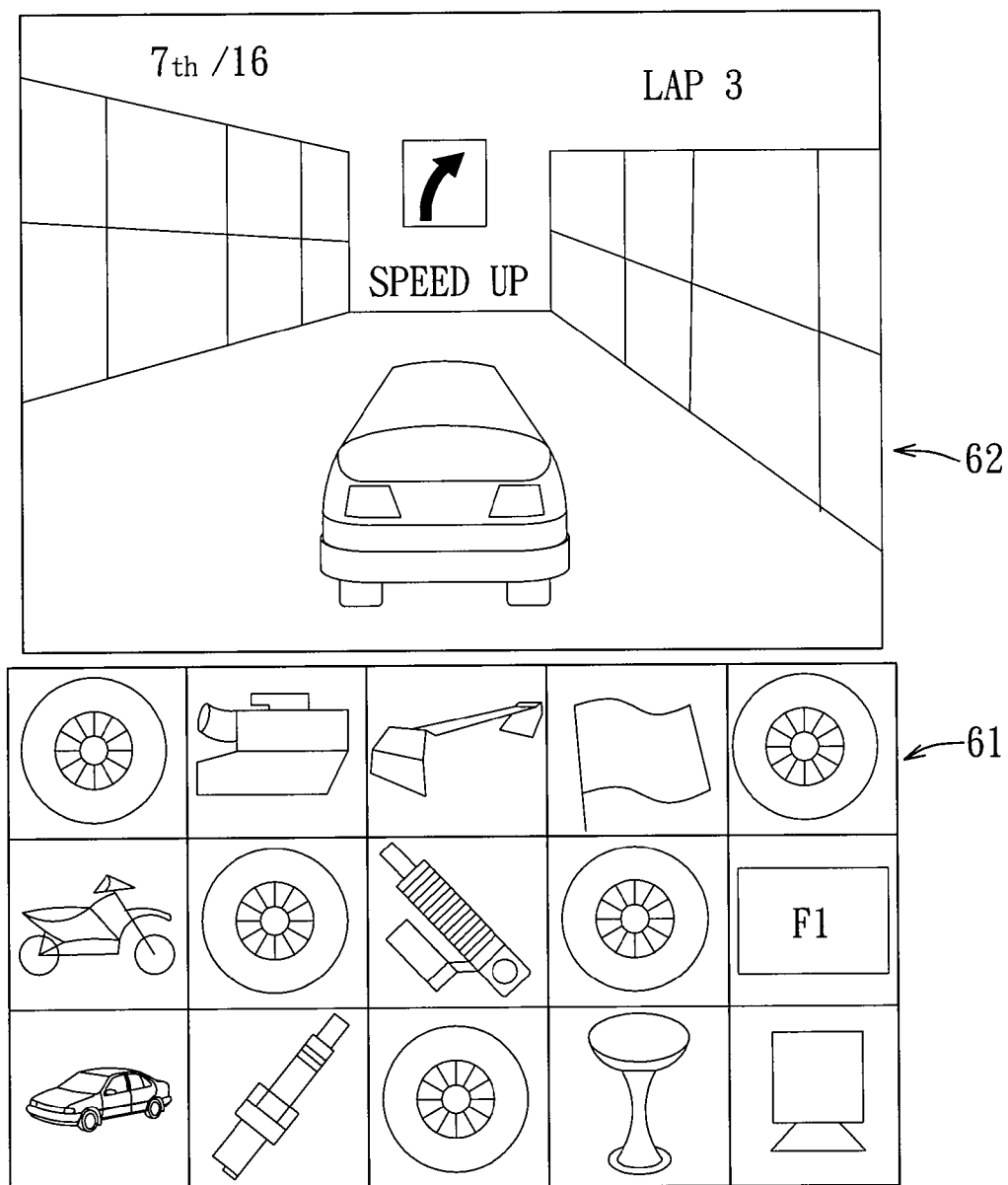[0002] 1. Field of the Invention

[0003] The present invention relates to a gaming method with a dual game function, an electronic gaming apparatus for performing the gaming method, and a computer program product recording a gaming program of the gaming method.

[0004] 2. Description of the Related Art

[0005] Some conventional games provide a main game and a bonus game. However, the link between the main and bonus games is very weak. Typically, the main and bonus games are no more than two games unnaturally combined into one, in which the bonus game is played when a predetermined winning condition, which is wholly unrelated to the bonus game, is satisfied during play of the main game.

[0006] There is a need, therefore, for a gaming method and apparatus that provide for a dual game function in which the two games are closely associated with one another, so that players are able to have a more exciting and enjoyable gaming experience.

SUMMARY OF THE INVENTION

[0007] Therefore, the object of the present invention is to provide a gaming method with a dual game function, in which first and second games of the gaming method are closely associated with one another. The present invention also provides an electronic gaming apparatus for performing the gaming method, and a computer program product recording a gaming program of the gaming method.

[0008] According to one aspect, the gaming method of this invention provides a dual game function and is implemented using a gaming apparatus. The gaming method comprises: a) simultaneously starting a first game and a second game; and b) if a predetermined first winning result is obtained at the end of playing one round of the first game, applying a corresponding enhancement feature to the second game that enhances ability of a player to play the second game.

[0009] According to another aspect of this invention, the gaming apparatus comprises: an input unit allowing input by a player; an output assembly for performing display; and a processing assembly coupled to the input unit and the output assembly, and configured to perform steps of the gaming method of this invention.

[0010] According to yet another aspect of this invention, a computer program product comprises a computer-readable storage medium that records a gaming program for causing a computer to execute steps of the gaming method of this invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiment with reference to the accompanying drawings, of which:

[0012] FIG. 1 is a schematic circuit block diagram of a preferred embodiment of an electronic gaming apparatus providing a dual game function according to the present invention;

[0013] FIG. 2 is a schematic circuit block diagram of a first modified example of the preferred embodiment;

[0014] FIG. 3 is a schematic circuit block diagram of a second modified example of the preferred embodiment;

[0015] FIG. 4 is a schematic circuit block diagram of a third modified example of the preferred embodiment;

[0016] FIG. 5 is a flowchart of a gaming method according to a preferred embodiment of the present invention; and

[0017] FIG. 6 is a schematic view of exemplary gaming screens displayed during play of the dual game of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0018] Referring to FIG. 1, the preferred embodiment of a gaming apparatus providing a dual game function according to the present invention is shown to comprise an input unit 11, a processing assembly 12, a graphics processing assembly 13, and an output assembly 14.

[0019] The input unit 11 allows input by a player, and is operable to generate control signals in response to player manipulation for controlling a first game and a second game, i.e., the two games involved in the "dual game function" provided by the gaming apparatus. The input unit 11 may include buttons (not shown), a lever (not shown), etc.

[0020] The processing assembly 12 is coupled to the input unit 11, and is configured to perform steps of a gaming method. The present invention also provides a computer program product comprising a computer-readable storage medium that records a gaming program for causing a computer to execute the steps of a gaming method. As an example, the gaming program may cause the processing assembly 12 to execute the steps of the gaming method. Further, the computer-readable storage medium may be a part of the processing assembly 12, or may be separate from but accessible by the processing assembly 12.

[0021] The graphics processing assembly 13 is coupled to the processing assembly 12 and the output assembly 14, and performs graphics rendering of gaming screens of the first and second games on the output assembly 14. It is to be noted that the graphics processing assembly 13 is optional and may be omitted from the configuration of the gaming apparatus, in which case it is the processing assembly 12 that performs operations associated with graphics rendering.

[0022] The output assembly 14 is coupled to the graphics processing assembly 13 as described above, and performs display of the gaming screens rendered by the graphics processing assembly 13. If the graphics processing assembly 13 is not included as part of the gaming apparatus as described above, the output assembly 14 is coupled to the

processing assembly **12**, and the gaming screens are rendered on the output assembly **14** by the processing assembly **12**.

[0023] In the preferred embodiment, the output assembly **14** is a display sufficiently sized to allow simultaneous display of the gaming screens of the first and second games. As an example, the output assembly **14** may be a rectangular display with its length vertically placed such that the gaming screens of the first and second games are displayed on the output assembly **14** in a manner of vertically arranged split windows.

[0024] Referring to FIG. **2**, in a first modified example of the preferred embodiment, the output assembly **14** includes a pair of first and second output units **141**, **142** coupled to the graphics processing assembly **13**. In this first modified example, the gaming screen of the first game is rendered on the first output unit **141** and the gaming screen of the second game is rendered on the second output unit **142**.

[0025] Referring to FIG. **3**, in a second modified example of the preferred embodiment, the graphics processing assembly **13** includes a pair of first and second graphics processing units **131**, **132**, and the output assembly **14** includes a pair of first and second output units **141**, **142** coupled respectively to the first and second graphics processing units **131**, **132**. In this second modified example, the gaming screen of the first game is rendered on the first output unit **141** by the first graphics processing unit **131**, and the gaming screen of the second game is rendered on the second output unit **142** by the second graphics processing unit **132**.

[0026] Referring to FIG. **4**, in a third modified example of the preferred embodiment, the processing assembly **12** includes a pair of first and second processing units **121**, **122** configured to perform steps of a gaming method respectively of the first and second games, the graphics processing assembly **13** includes a pair of first and second graphics processing units **131**, **132** coupled respectively to the first and second processing units **121**, **122**, and the output assembly **14** includes a pair of first and second output units **141**, **142** coupled respectively to the first and second graphics processing units **131**, **132**. In this third modified example, the gaming screen of the first game is rendered on the first output unit **141** by the first graphics processing unit **131**, and the gaming screen of the second game is rendered on the second output unit **142** by the second graphics processing unit **132**.

[0027] In the first, second, and third modified examples of the preferred embodiment, the first and second output units **141**, **142** may be arranged vertically to allow for easy viewing of the gaming screens of the first and second games.

[0028] The preferred embodiment of a gaming method providing a dual game function will now be described with reference to FIG. **5**. For purposes of illustration, the gaming method is described as being implemented using the gaming apparatus of the preferred embodiment of FIG. **1**. Alternatively, the gaming method may be implemented by any one of the modified examples of the preferred embodiment. As another alternative, the gaming method may be executed by a computer as part of a gaming program stored in the computer-readable storage medium of the computer program product of the present invention.

[0029] First, in step **201**, before a player starts to play the first and second games, control is performed such that the output assembly **14** displays preview screens of the first and second games. This is done to attract the attention of players, as well as to provide a brief introduction to the first and second games to players not familiar with the dual game of the present invention.

[0030] Next, in step **202**, the player is allowed to place a bet and the bet is received. For example, control may be performed to prompt the user via the output assembly **14** to place a bet, which the user may do via the input unit **11** such as by inserting tokens into the gaming apparatus.

[0031] Subsequently, the first game is started in step **203**, and the second game is started in step **204**. In the preferred embodiment, steps **203** and **204** are performed simultaneously, i.e., the first and second games are started simultaneously.

[0032] In this embodiment, the first game is a slot machine game and the second game is a car racing game. Stated differently, in this embodiment, the first game is a game of chance and the second game is a game of skill. FIG. **6** shows two gaming screens **61**, **62** as they might appear on the output assembly **14** for this example. Of course, the present invention is not limited with respect to game type, and the first and second games may be any combination of two games, each involving differing degrees of chance and/or skill.

[0033] In this embodiment, the first game quickly ends and so may be played multiple times during one round of play of the second game. Therefore, assuming one round of play of the first game is completed, in step **205**, the processing assembly **12** determines whether the first game is restarted by the player. In this embodiment, such a determination is made on the basis of whether the player continues betting. As a concrete exemplary embodiment involving step **205**, the processing assembly **12** may determine whether the first game is restarted by the player, and if not, whether a predetermined time period has elapsed. If the processing assembly **12** determines that the predetermined time period has elapsed before the first game is restarted, the second game is discontinued and the flow returns to step **201** of displaying the preview screens of the first and second games. In other embodiments, step **205** may be performed at different or additional points in the gaming method of the present invention, with the determination of step **205** yielding different results depending on at which point in the gaming method step **205** is performed. Examples will be given below.

[0034] Next, in step **206**, it is determined if a predetermined first winning result is obtained at the end of playing one round of the first game (i.e., the just-completed round prior to restarting of the first game). If so, in step **207**, a corresponding enhancement feature is applied to the second game that enhances the ability of the player to play the second game, and the second game is played with this enhancement feature. If not, however, in step **208**, the second game is continued in a normal manner without the enhancement feature applied thereto. To provide an example, in this embodiment where the first game is a slot machine game and the second game is a car racing game, the first winning result of the slot machine game may be that corresponding to a "TURBO" enhancement feature, and when this enhancement feature is applied to the car racing game, the speed of a car in the car racing game is increased such that the ability of the player to play the car racing game is enhanced.

[0035] In an alternative embodiment where the second game is a game of chance, a winning probability of the second game may be set to a high level in step **207** or determined randomly in step **208**, depending on the determination result of step **205**.

[0036] To provide an example of an alternative embodiment involving step **205**, it may be determined in step **205** whether the first game is restarted by a wager amount that is greater than or equal to a predetermined wager amount. If so, step **207** may be performed to apply the enhancement feature to the second game. If not, however, step **208** may be performed to continue the second game in a normal manner without the enhancement feature applied thereto. In yet another alternative embodiment involving step **205**, this step may be performed after step **207**, i.e., at any point during continued play of the second game with the enhancement feature applied thereto, in which case if the first game is not restarted, the second game is continued but with the enhancement feature applied in step **207** removed. It is to be noted that "wager amount" may also be an accumulated amount of wagers placed by the user in restarting the first game a multiple number of times during play of one or more rounds of the second game.

[0037] Next, in step **209**, it is determined if a predetermined second winning result is obtained at the end of play of the second game. If so, in step **210**, an award is granted. If not, however, in step **211**, no award is granted. As an example, step **211** may involve providing an indication to the player on the output assembly **14** that he or she has lost the game.

[0038] Finally, in step **212**, it is determined if the first game is restarted by the player. If so, then the flow returns to step **204** and the second game is restarted. If not, however, then the flow returns to step **201** and control is performed such that the output assembly **14** displays the preview screens of the first and second games.

[0039] It is to be noted that in addition to application to a single gaming apparatus, the present invention may also be applied in a network environment in which a plurality of individual gaming apparatuses are interconnected. In such a network application, a plurality of players may play the second game together and compete against each other. Further, in this exemplary embodiment, each player plays the first game individually and the results of the first game for each of the players can influence his or her ability to play the second game (i.e., can determine whether the enhancement feature is applied to his or her particular game player, item, etc.). Alternatively or additionally, the amount wagered by each player when restarting his or her respective first game can influence his or her ability to play the second game in the manner described above. Finally, win and loss among the players in this exemplary embodiment may be determined by the outcome of the second game.

[0040] In the present invention, due to the close association between the first and second games as described hereinabove, players are provided with a more exciting and enjoyable gaming experience.

[0041] While the present invention has been described in connection with what is considered the most practical and preferred embodiment, it is understood that this invention is not limited to the disclosed embodiment but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation so as to encompass all such modifications and equivalent arrangements.

What is claimed is:

1. A gaming method providing a dual game function and implemented using a gaming apparatus, said gaming method comprising the steps of:
   a) simultaneously starting a first game and a second game; and
   b) if a predetermined first winning result is obtained at the end of playing one round of the first game, applying a corresponding enhancement feature to the second game that enhances ability of a player to play the second game.

2. The gaming method of claim **1**, further comprising the step of:
   c) granting an award if a predetermined second winning result is obtained at the end of play of the second game.

3. The gaming method of claim **1**, further comprising the step of:
   d) determining if the first game is restarted by a wager amount that is greater than or equal to a predetermined wager amount, and if so, applying the enhancement feature to the second game.

4. The gaming method of claim **1**, further comprising the step of:
   e) continuing the second game but with the enhancement feature applied in step b) removed if the first game is not restarted.

5. The gaming method of claim **4**, wherein, in step e), the second game is discontinued if a predetermined time period elapses before the first game is restarted.

6. The gaming method of claim **1**, further comprising the step of:
   f) at the end of play of the second game, restarting the second game if the first game is restarted by the player.

7. The gaming method of claim **1**, wherein the first game is a game of chance and the second game is a game of skill.

8. A gaming apparatus providing a dual game function, comprising:
   an input unit allowing input by a player;
   an output assembly for performing display; and
   a processing assembly coupled to said input unit and said output assembly, and configured to perform steps of a gaming method;
   wherein the gaming method includes:
   a) simultaneously starting a first game and a second game; and
   b) if a predetermined first winning result is obtained at the end of playing one round of the first game, applying a corresponding enhancement feature to the second game that enhances ability of a player to play the second game.

9. The gaming apparatus of claim **8**, further comprising a graphics processing assembly coupled to said processing assembly and performing graphics rendering of gaming screens of the first and second games on said output assembly.

10. The gaming apparatus of claim **9**, wherein said output assembly includes a pair of first and second output units coupled to said graphics processing assembly, the gaming screen of the first game being rendered on said first output unit and the gaming screen of the second game being rendered on said second output unit.

11. The gaming apparatus of claim **9**, wherein said graphics processing assembly includes a pair of first and second graphics processing units, and said output assembly includes

a pair of first and second output units coupled respectively to said first and second graphics processing units, the gaming screen of the first game being rendered on said first output unit by said first graphics processing unit and the gaming screen of the second game being rendered on said second output unit by said second graphics processing unit.

12. The gaming apparatus of claim **9**, wherein said processing assembly includes a pair of first and second processing units configured to perform steps of a gaming method respectively of the first and second games, said graphics processing assembly includes a pair of first and second graphics processing units coupled respectively to said first and second processing units, and said output assembly includes a pair of first and second output units coupled respectively to said first and second graphics processing units, the gaming screen of the first game being rendered on said first output unit by said first graphics processing unit and the gaming screen of the second game being rendered on said second output unit by said second graphics processing unit.

13. The gaming apparatus of claim **8**, wherein the gaming method further includes the step of:
    c) granting an award if a predetermined second winning result is obtained at the end of play of the second game.

14. The gaming apparatus of claim **8**, wherein the gaming method further includes the step of:
    d) determining if the first game is restarted by a wager amount that is greater than or equal to a predetermined wager amount, and if so, applying the enhancement feature to the second game.

15. The gaming apparatus of claim **8**, wherein the gaming method further includes the step of:
    e) continuing the second game but with the enhancement feature applied in step b) removed if the first game is not restarted.

16. The gaming apparatus of claim **15**, wherein, in step e), the second game is discontinued if a predetermined time period elapses before the first game is restarted.

17. The gaming apparatus of claim **8**, wherein the gaming method further includes the step of:
    f) at the end of play of the second game, restarting the second game if the first game is restarted by the player.

18. The gaming apparatus of claim **8**, wherein the first game is a game of chance and the second game is a game of skill.

19. A computer program product comprising a computer-readable storage medium that stores a gaming program for causing a computer to execute steps of a gaming method including:
    a) simultaneously starting a first game and a second game; and
    b) if a predetermined first winning result is obtained at the end of playing one round of the first game, applying a corresponding enhancement feature to the second game that enhances ability of a player to play the second game.

20. The computer program product of claim **19**, wherein the gaming method further includes:
    c) granting an award if a predetermined second winning result is obtained at the end of play of the second game.

21. The computer program product of claim **19**, wherein the gaming method further includes the step of:
    d) determining if the first game is restarted by a wager amount that is greater than or equal to a predetermined wager amount, and if so, applying the enhancement feature to the second game.

22. The computer program product of claim **19**, wherein the gaming method further includes the step of:
    e) continuing the second game but with the enhancement feature applied in step b) removed if the first game is not restarted.

23. The computer program product of claim **22**, wherein, in step e), the second game is discontinued if a predetermined time period elapses before the first game is restarted.

24. The computer program product of claim **19**, wherein the gaming method further includes the step of:
    f) at the end of play of the second game, restarting the second game if the first game is restarted by the player.

25. The computer program product of claim **19**, wherein the first game is a game of chance and the second game is a game of skill.

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