US 20060228981A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2006/0228981 A1**

Brantley (43) **Pub. Date: Oct. 12, 2006**

(54) **INTERACTIVE ACTION FIGURE AND OSTACLE COURSE**

(76) Inventor: **Melissa Brantley**, Columbus, GA (US)

Correspondence Address:
BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303 (US)

(21) Appl. No.: **11/371,022**

(22) Filed: **Mar. 9, 2006**

Related U.S. Application Data

(60) Provisional application No. 60/660,089, filed on Mar. 10, 2005.

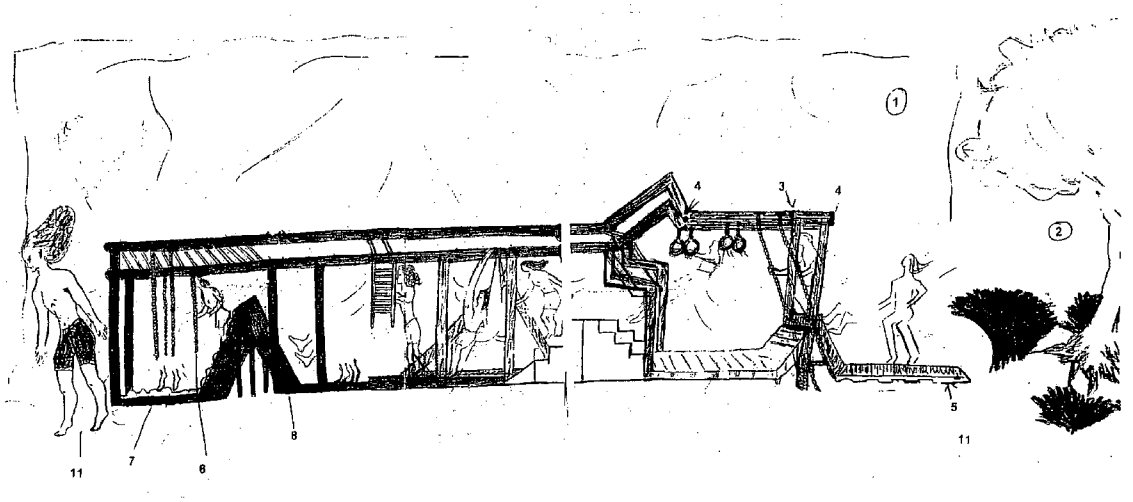
Publication Classification

(51) **Int. Cl.**
A63H 3/00 (2006.01)

(52) **U.S. Cl.** **446/268**

(57) **ABSTRACT**

An interactive play device comprises four main components: an action figure type interactive doll, an obstacle course with backdrop, and a user control device. The doll is designed to traverse the obstacle course according to player commands received from the player control device. The obstacle course consists of several "hindrances" such as hot coals, ropes, slippery inclines, and the like. As the doll encounters each obstacle, it pauses to ask the user for instructions regarding how to proceed. Any conventional micro-electronic technology may be used to facilitate communication between the player and doll. Additionally, more than one doll/player may use the obstacle course, allowing for either individual or group play. The obstacle course may comprise a single unitary structure, or it may be constructed of several, separable components, each of which may be disassembled and reassembled in any order.



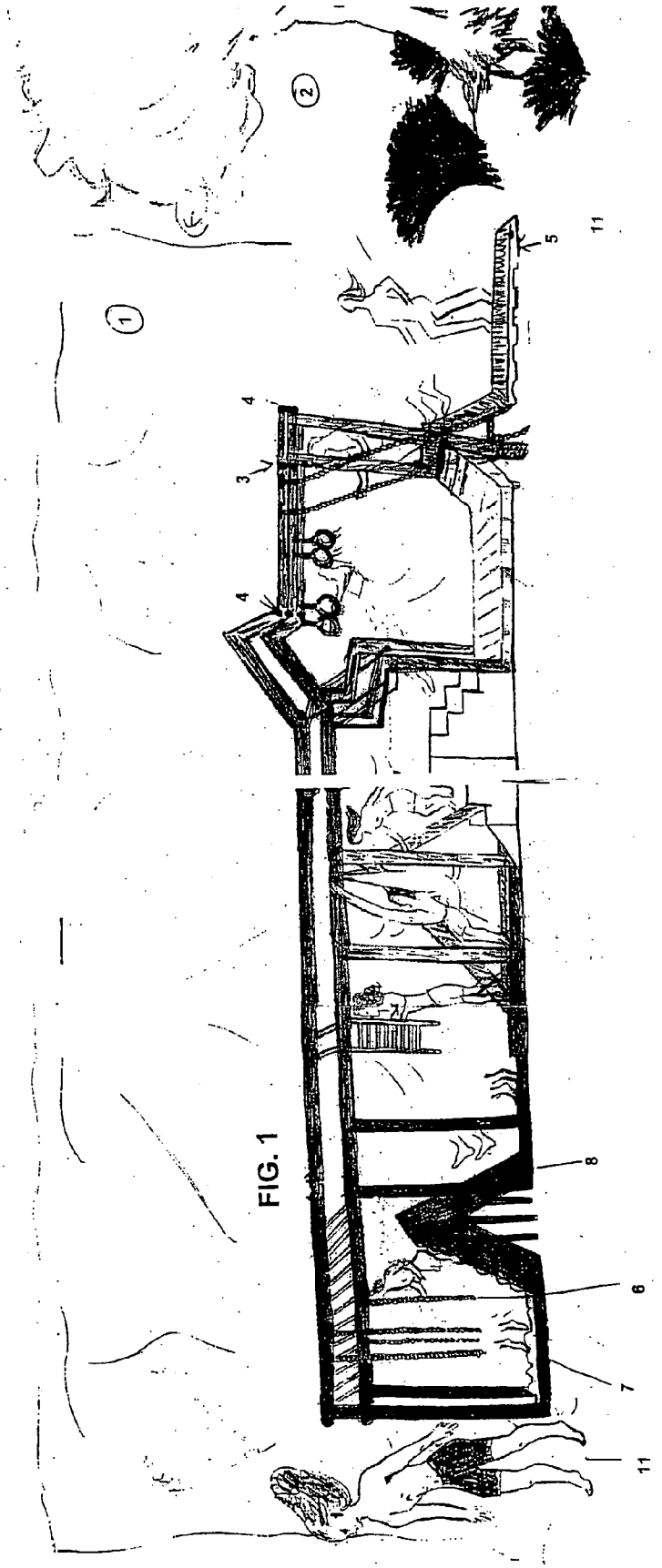


FIG. 1

FIG. 2

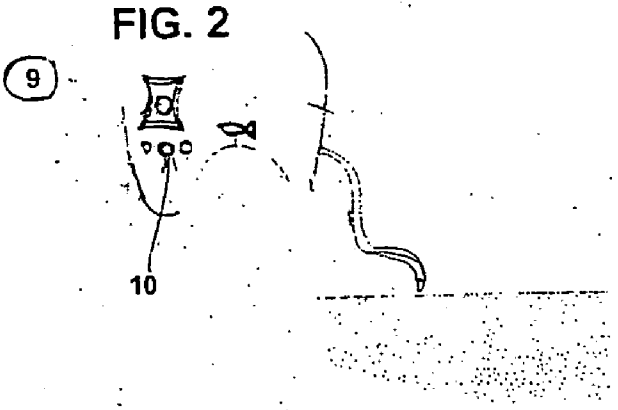


FIG. 3

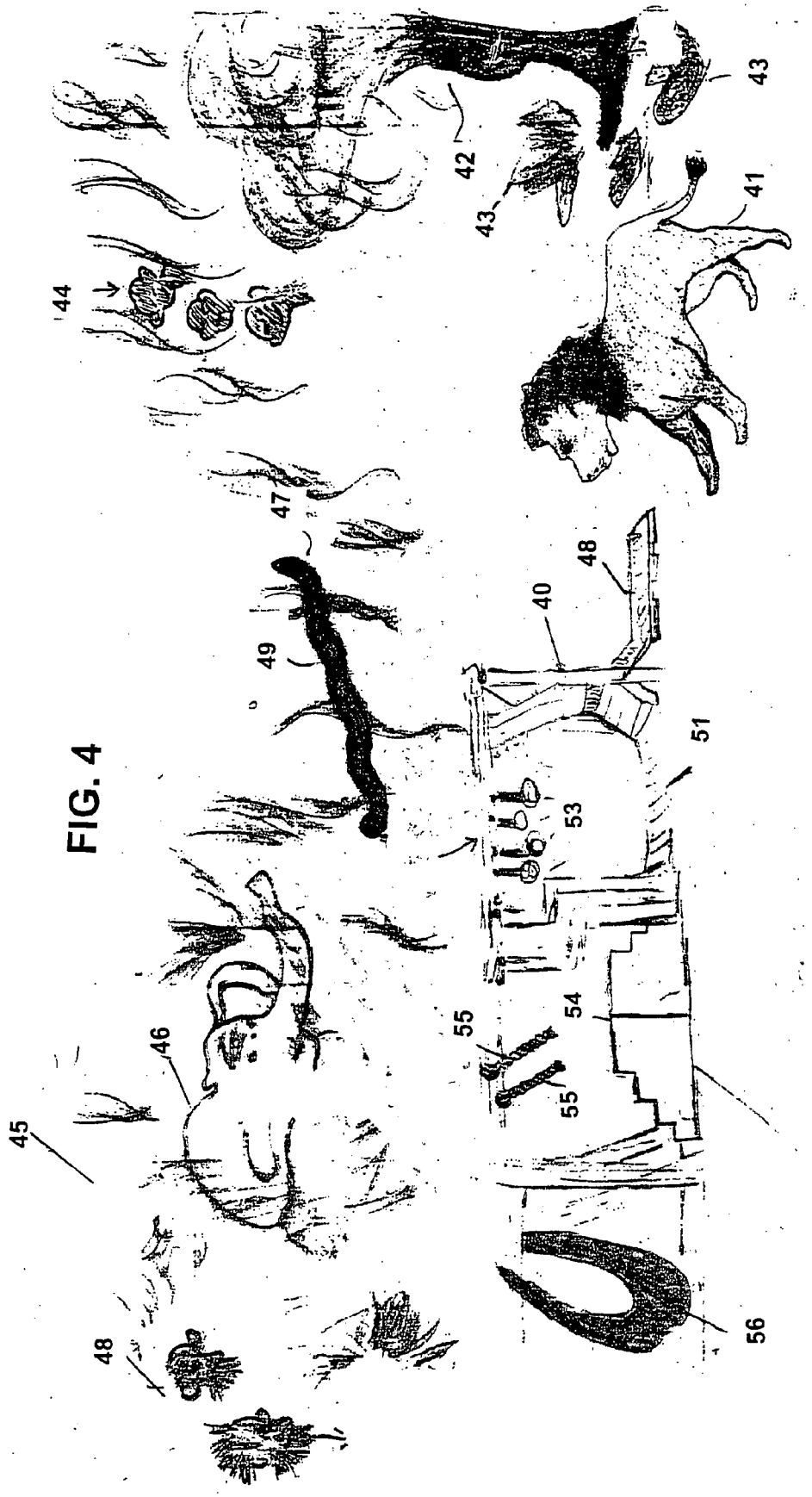
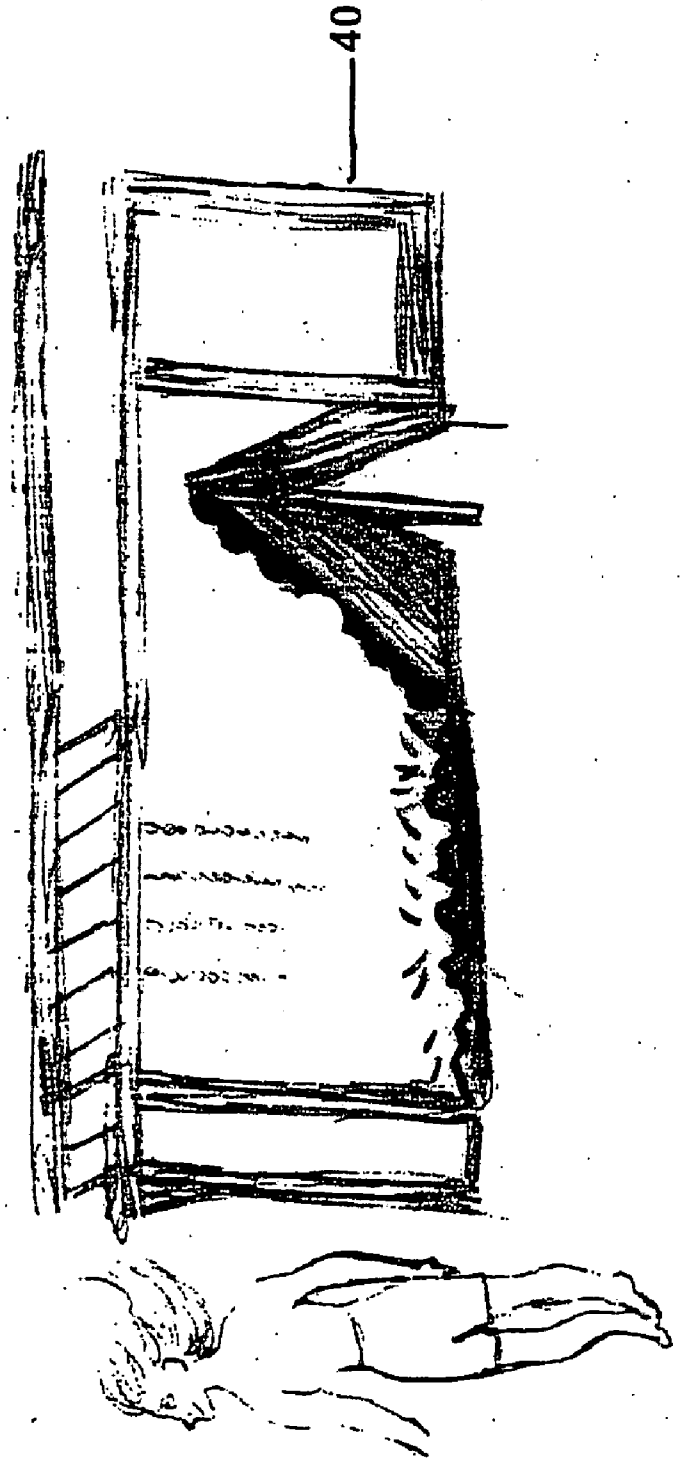


FIG. 4

FIG. 5



INTERACTIVE ACTION FIGURE AND OSTACLE COURSE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] The present application claims priority under 35 U.S.C. §119(e) from provisional application Ser. No. 60/660,089, filed Mar. 10, 2005, the entire contents of which are hereby incorporated by reference.

FIELD OF THE INVENTION

[0002] The present invention relates to an interactive action figure and an obstacle course that the action figure traverses.

BACKGROUND OF THE INVENTION

[0003] With the advent of affordable micro-electronic technology, interactive play devices have become an increasingly popular, and profitable, component of the toy industry. Examples of such devices include interactive dolls and vehicles, such as those disclosed in U.S. Pat. No. 6,663,393 to Ghaly, and U.S. Pat. No. 6,554,679 to Shackelford et al., both incorporated herein by reference.

[0004] Specifically, the Ghaly patent discloses dolls and vehicles that "learn" from prior interactions with players, such that subsequent play sessions build upon the "knowledge" accrued by the toy in previous sessions. However, the primary object of such devices, as well as those contemplated in the Shackelford patent, is to mimic human-like responses and simulate human-like moods. The current state of the art appears to lack more dynamic, "action figure" type interactive toys.

SUMMARY OF THE INVENTION

[0005] Thus, it is an object of the present invention to provide an "action figure" type interactive toy that traverses an obstacle course in response to user commands.

[0006] It is a further object of the invention to provide an "action figure" type interactive toy that responds to user commands via computer input, via voice recognition technology, and/or via remote control devices.

[0007] It is a further object of the invention to provide an obstacle course for use with one or more interactive "action figure" type toys that traverse said obstacle course in response to user commands.

[0008] It is a further object of this invention to provide an obstacle course that may be disassembled and reassembled in varying configurations, providing users with a diverse array of possible obstacle courses.

[0009] The present invention provides at least one action figure type interactive doll, an obstacle course with backdrop, and a user control device. The doll is designed to traverse the obstacle course according to player commands input through the user control device. Any conventional micro-electronic technology may be used to facilitate communication between the player and doll. Additionally, more than one doll/player may use the obstacle course, allowing for either individual or group play.

[0010] Preferably, the obstacle course consists of several "hindrances" such as hot coals, ropes, slippery inclines, and the like. As the doll encounters each obstacle, it pauses to ask the user for instructions regarding how to proceed. Upon receiving said commands, the doll traverses the next phase of the obstacle course in accordance therewith. The doll may optionally respond to the instructions, and may also verbally note successful transversal of the obstacle course.

[0011] The obstacle course itself may comprise a single unitary structure, or it may be constructed of several separable components, each of which may be disassembled and reassembled in any order. Thus, a user might decide to construct an obstacle course of hot coals and ropes only, and subsequently dismantle the obstacle course to insert, say, a slippery incline between the hot coals and ropes. Such flexibility provides for a greater diversity of play possibilities.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] **FIG. 1** is a view of the entire obstacle course, with doll and backdrop

[0013] **FIG. 2** is a possible design for a player control unit for communicating with the doll

[0014] **FIG. 3** is a more detailed view of a one type of action figure designed to traverse the obstacle course in response to player commands

[0015] **FIG. 4** is part of an obstacle course

[0016] **FIG. 5** is another part of the obstacle pictured in **FIG. 4**

DETAILED DESCRIPTION OF THE INVENTION

[0017] The present invention comprises three or four basic components: optional obstacle course, backdrop, doll/action figure, and player control unit (**FIGS. 1-5**). Referring specifically to **FIG. 1**, the backdrop (**1**) may comprise any conventional material, such as vinyl, cloth, etc. Preferably, it has painted, silkscreened, or otherwise imprinted on it an image (**2**) relating to the obstacle course. Thus, in **FIG. 1**, the backdrop is embellished with an image of a tree, grass, and the like. The obstacle course itself (**3**) may be manufactured from wood, plastic, metal, or other suitable sturdy material. In a preferred embodiment, the components of the obstacle course are constructed of wood, secured with strong metal bolts (**4**). The base of the course consists of a series of wooden planks (**5**). Along the length of the course are various barriers/obstacles, such as "curly ropes" (**6**), "hot coals" (**7**), a "slippery incline" (**8**) and the like. Battery powered lights (or similar devices) may be used to create a glowing effect for the hot coals (**7**). Any desirable or suitable obstacle may be incorporated into the obstacle course (**3**). Sound producing devices may also be incorporated into the obstacle course, for example, the sound of fire crackling, crickets chirping, etc.

[0018] In another embodiment, the obstacle course (**3**) may comprise a plurality of discrete, separable individual obstacles. Users may then disassemble and reassemble the obstacle course according to their desires. For example, a player first may construct a course consisting only of a slippery incline and hot coals, and later decide to insert "curly ropes" there between.

[0019] In the embodiment shown in **FIGS. 4 and 5**, the obstacle course **40** is similar to that shown in **FIGS. 2 and 3**, but with enhancements to simulate a jungle situation.

[0020] Immediately before the obstacle course **40** begins is a trees **42** and bushes **43**. A lion **41** is provided to simulate a lion chasing the action figure. At this point in the game the sounds heard are a lion's roar and the action figure's huffing and puffing and heavy breathing as the action figure sees the lion. The action figure shouts "run", and jumps onto the wooden plank **48** and runs up the plank. A plurality of monkeys **43** appear in the background at predetermined intervals, e.g., every fifteen seconds, and sing a song to encourage the action figure.

[0021] The background **45** is a jungle-like scene, adorned with animals such as elephants, snakes, and orangutans. Sound effects are provided to sound like screeching monkeys **44**, trumpeting elephants **46**, hissing snakes **47**, and laughing hyenas.

[0022] The next part of the obstacle course is hanging bars **50**. A snake **49** appears and wraps itself around the hanging bars to prevent the action figure's further progress. The action figure must be strategic enough to grab the correct bars.

[0023] Below the bars **50** is a second wooden plank **51** which includes alternately dropping planks that the action figure must strategically step on to jump to the iron rings **53**.

[0024] The next obstacle is "waterfall steps" in which water is constantly pumped up from the steps. At this point there is the sound of a waterfall. As the action figure reaches this point and tries to traverse the steps with a rope **55** or merely by stepping onto the steps, the action figure may verbalize something, such as "Whoa."

[0025] The next obstacle is a pendulum **56**, which can have three speeds, e.g., moderate, fast, and "superswing." There are sounds of a pendulum swinging. At this point the action figure may be heard to sing, "Swing Low, Sweet Chariot." Orangutans **48** appear and throw rocks at the action figure, which the action figure must dodge. Since the orangutans want the action figure to lose the game, they swipe at him and swing down his way in addition to throwing rocks.

[0026] Additions to the obstacle course **40** may include a slippery board **58**. The sound effects include the action figure's pounding his feet on the board. The action figure may remark, "This climb is rough! Hold on, steady yourself."

[0027] Following the slippery board is an incline bearing bumps **59**. At this stage of the game the action figure may say, "Ouch, ouch, ouch" as it goes down the bumpy incline.

[0028] The next obstacle illustrated is glowing hot rocks **57**, with sounds like a fire crackling and lighting up as if on fire. When the action figure approaches this, he may say, "Hot, hot, hot."

[0029] After successfully navigating the obstacle course, the action figure may exclaim, "Made it! Let's do it again!" or similar exclamations.

[0030] Each of the obstacles can be arranged in any desired sequence. If two players are playing the second player can strategically halt or slow the figure for the first player by inserting or changing obstacles to be overcome. The action figure asks for help from the player for each obstacle course before moving on. For example, after the action figure jumps onto the wooden plank from the lion, he may say, "Hey, will you help me make this great escape?" The player than responds, in order to activate the game, "yes." The action figure may then turn his head in the player's direction and say, "Hey, thanks!" The action figure may reassure the player that he can make

[0031] Alternatively, the game can be constructed for video interactive play as well.

[0032] Referring now to **FIG. 2**, the player control unit (**9**) may comprise any shape that is easily and conveniently handled. Various knobs, buttons, or the like (**10**) make up the control panel. Each knob corresponds to a specific movement command for the doll, e.g., "reverse". In an alternative embodiment, the doll may respond to user commands using voice-recognition technology. This would eliminate the need for hand-held control devices. In another embodiment, communication with the doll may be accomplished via conventional home computers, or via "walkie-talkie" type voice units. Any type of communication of signals to the doll can be used, examples of which can be found in Gabai, et al., U.S. Pat. No. 5,752,880, 6,773,344 and 6,160,986, the entire contents of which are herby incorporated by reference another example is Carr et al., U.S. published application 2004/0103222, the entire contents of which are hereby incorporated by reference.

[0033] Regardless of the method of doll-player communication, the doll/action figure (**11**) proceeds along the obstacle course in response to player commands. After traversing each individual obstacle, the doll pauses, waiting for additional player commands. Preferably, the doll is equipped with voice-generating technology, permitting it to ask, for example, "Where shall I go next?" This process then continues until the doll has successfully traversed the obstacle course, and play may resume at the start of the obstacle course.

[0034] As will be apparent to those skilled in the art, numerous variations, modifications, and improvements may be made to the described embodiments without departing from the scope and spirit of the invention. For example, the action figure may comprise an astronaut, an animal, or even a vehicle. Additionally, numerous technologies may yet evolve for equipping the doll with voice recognition/response, and voice simulation, capabilities. Accordingly, it is to be understood that the invention is not to be limited by the specific illustrated embodiments, but only by the scope of the appended claims.

1. An interactive play set comprising an at least one action figure, an obstacle course, optional backdrop, and user control device, the action figure being designed to traverse the obstacle course in response to user commands.

2. The interactive play set of claim 1 wherein said obstacle course comprises a single, unitary structure of any suitable sturdy material.

3. The interactive play set of claim 1 wherein said obstacle course is constructed of wood.

4. The interactive play set of claim 1 wherein said obstacle course is constructed of metal.

5. The interactive play set of claim 1 wherein said obstacle course is constructed of plastic.

6. The interactive play set of claim 1 wherein said obstacle course is secured with strong bolts

7. The interactive play set of claim 6 wherein said bolts are made of metal.

8. The interactive play set of claim 1 wherein said obstacle course comprises a series of separable, discrete obstacle components that may be assembled and disassembled in various order by the user.

9. The interactive play set of claim 1 whereby said obstacle course is enhanced with lighting and sound effects.

10. The interactive play set of claim 1 wherein the obstacle course is designed to accommodate multiple action figures.

11. The interactive play set of claim 1 wherein the action figure responds to user commands via voice recognition technology.

12. The interactive play set of claim 1 wherein the action figure responds to user commands from a manual remote control device.

13. The interactive play set of claim 1 wherein the play set is constructed for interactive video play.

* * * * *