



US 20070243916A1

(19) **United States**

(12) **Patent Application Publication**
Lee

(10) **Pub. No.: US 2007/0243916 A1**

(43) **Pub. Date: Oct. 18, 2007**

(54) **OBJECTIVE ORIENTED REALITY HORROR SURVIVAL GAME**

Publication Classification

(51) **Int. Cl.**
A63F 9/24 (2006.01)

(52) **U.S. Cl.** **463/9**

(76) Inventor: **Ren E. Lee**, Tallahassee, FL (US)

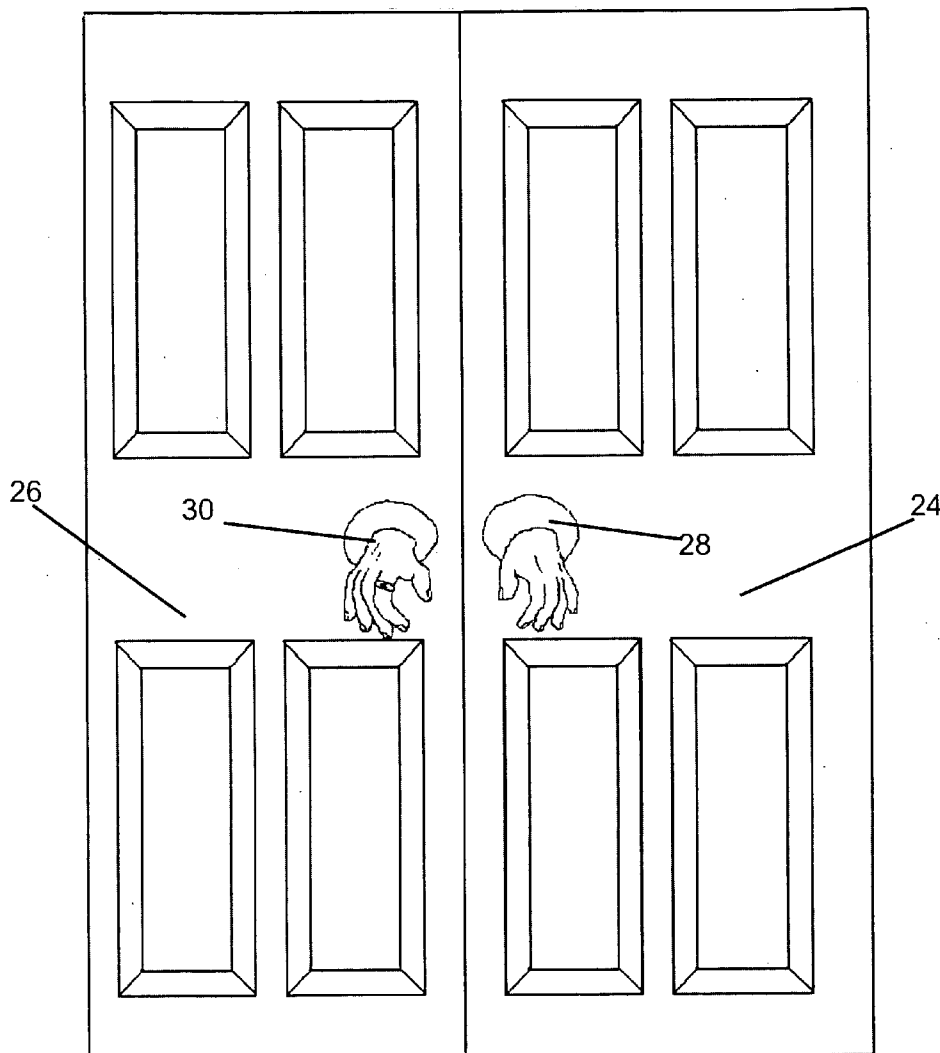
(57) **ABSTRACT**

Correspondence Address:
Pennington, Moore, Wilkinson, Bell & Dunbar,
P.A.
2nd Floor
215 S. Monroe St.
Post Office Box 10095
Tallahassee, FL 32302 (US)

An amusement game and method of entertainment involving player-enacted event sequences, a constructed setting, actors, puzzles, and virtual weapons. In the preferred embodiment of the invention, players are obtained and provided instruction regarding the games objectives. The players are then inserted into the constructed setting or game environment. Once inserted into the game environment, the players interact with actors and manipulate objects to accomplish objectives of the game. Players also utilize virtual weapons to defeat actor-villains and other players in order to accomplish objectives of the game.

(21) Appl. No.: **11/404,546**

(22) Filed: **Apr. 14, 2006**



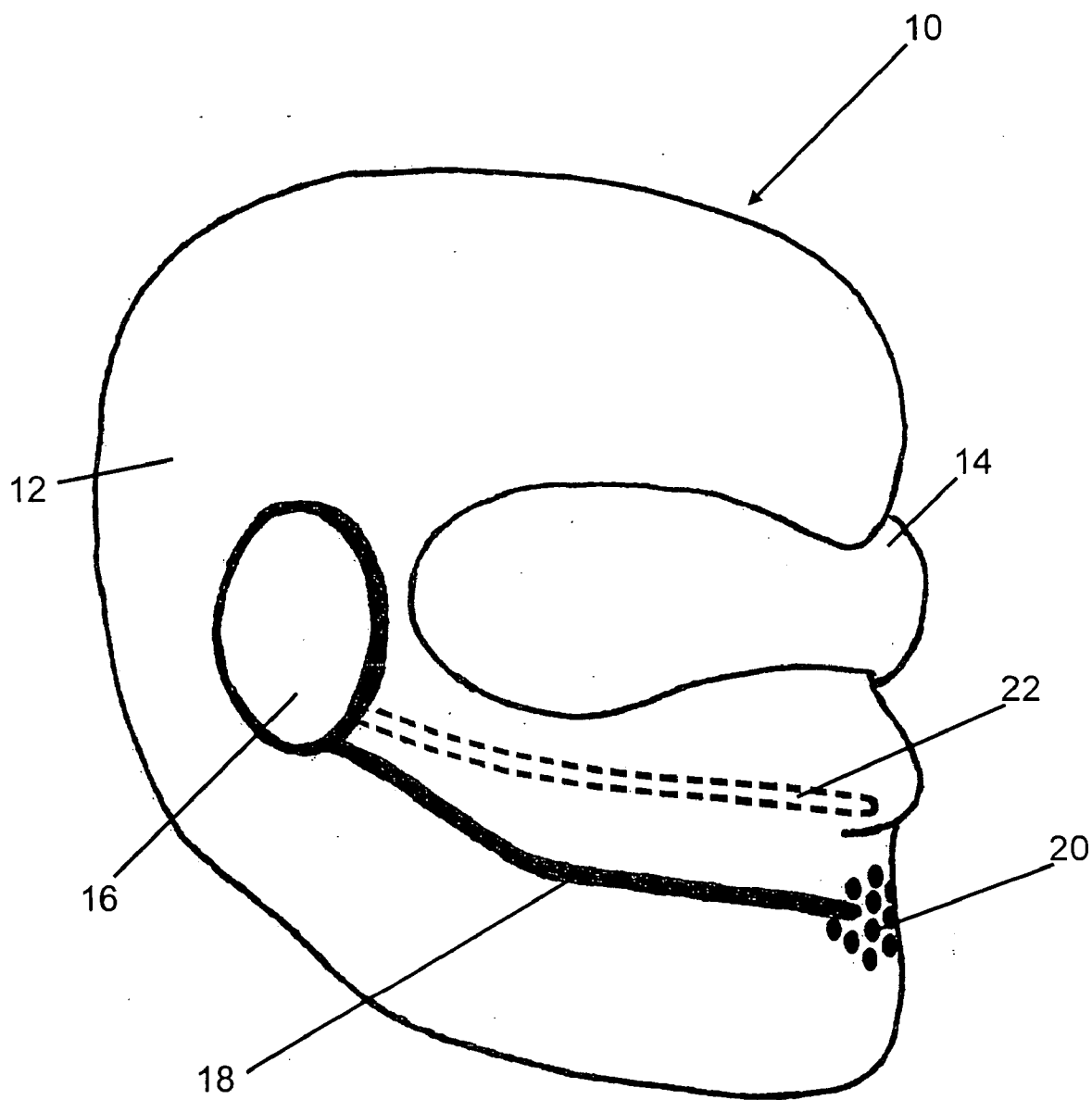


FIG. 1

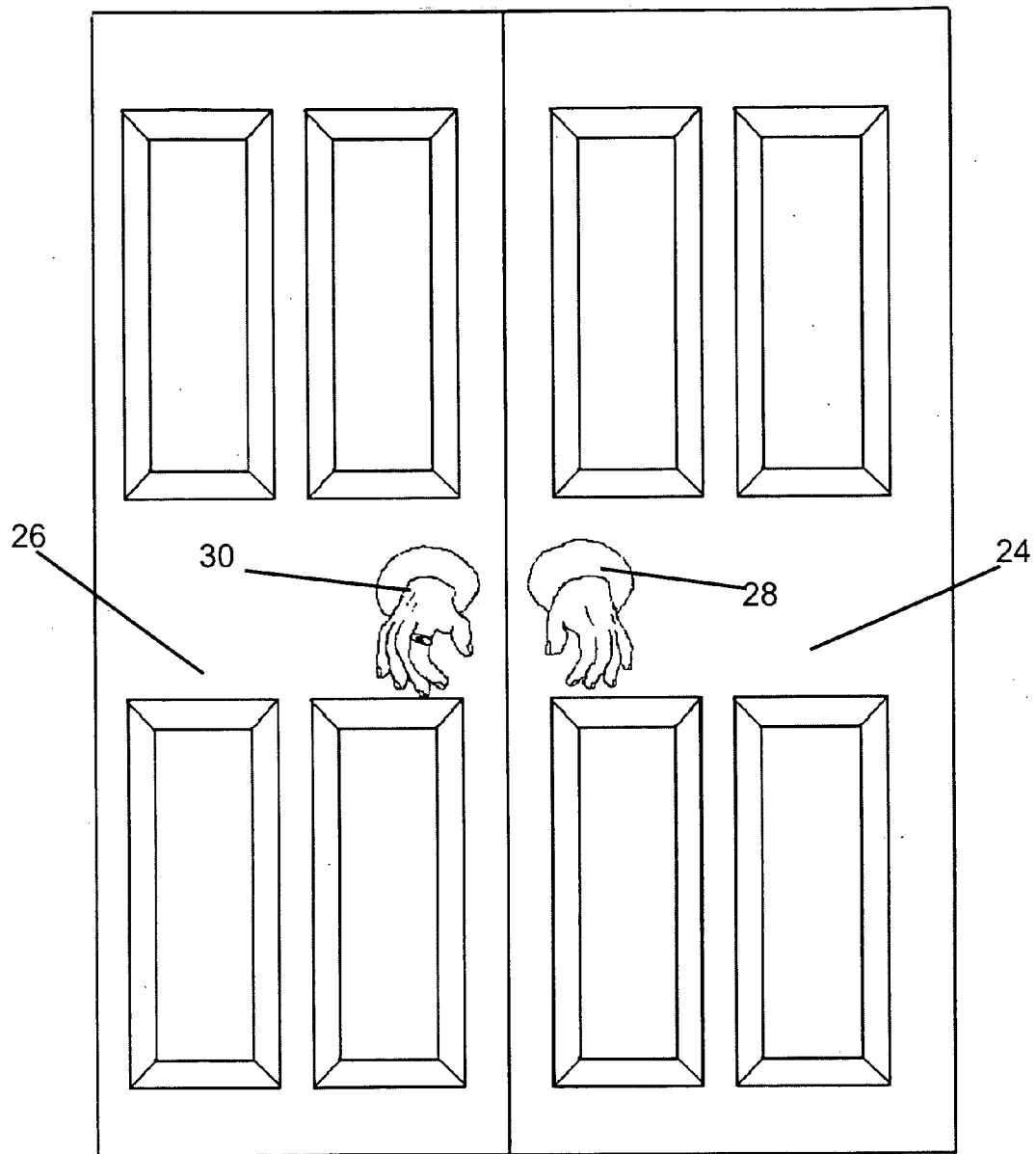


FIG. 2

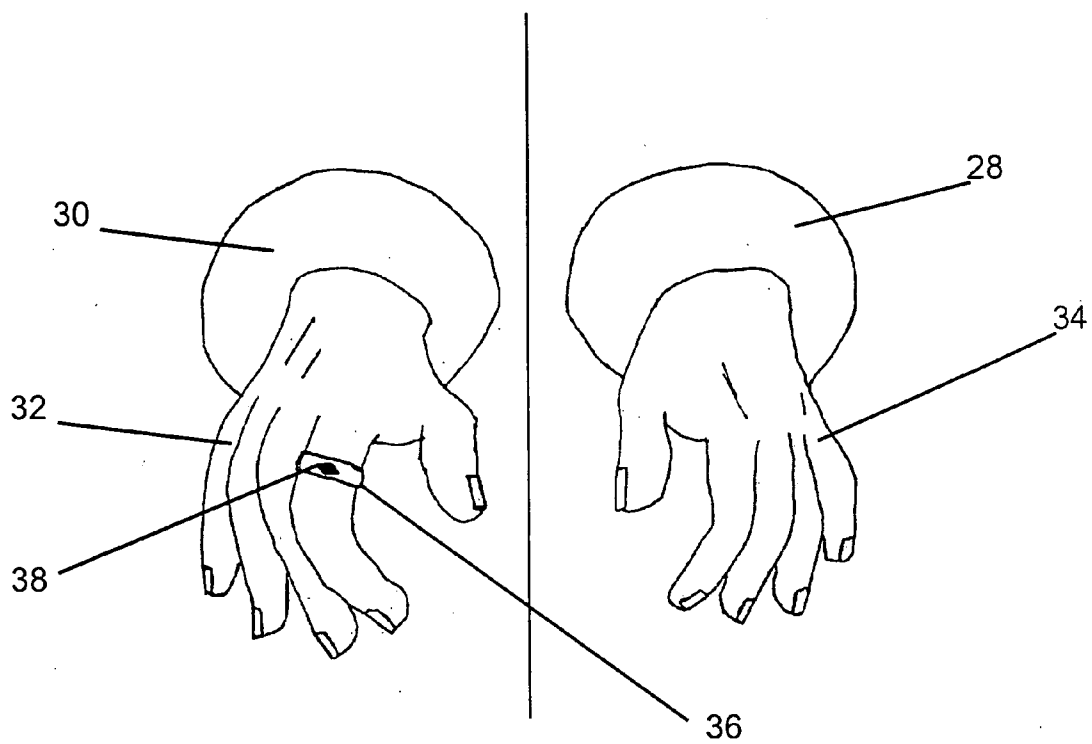


FIG. 3

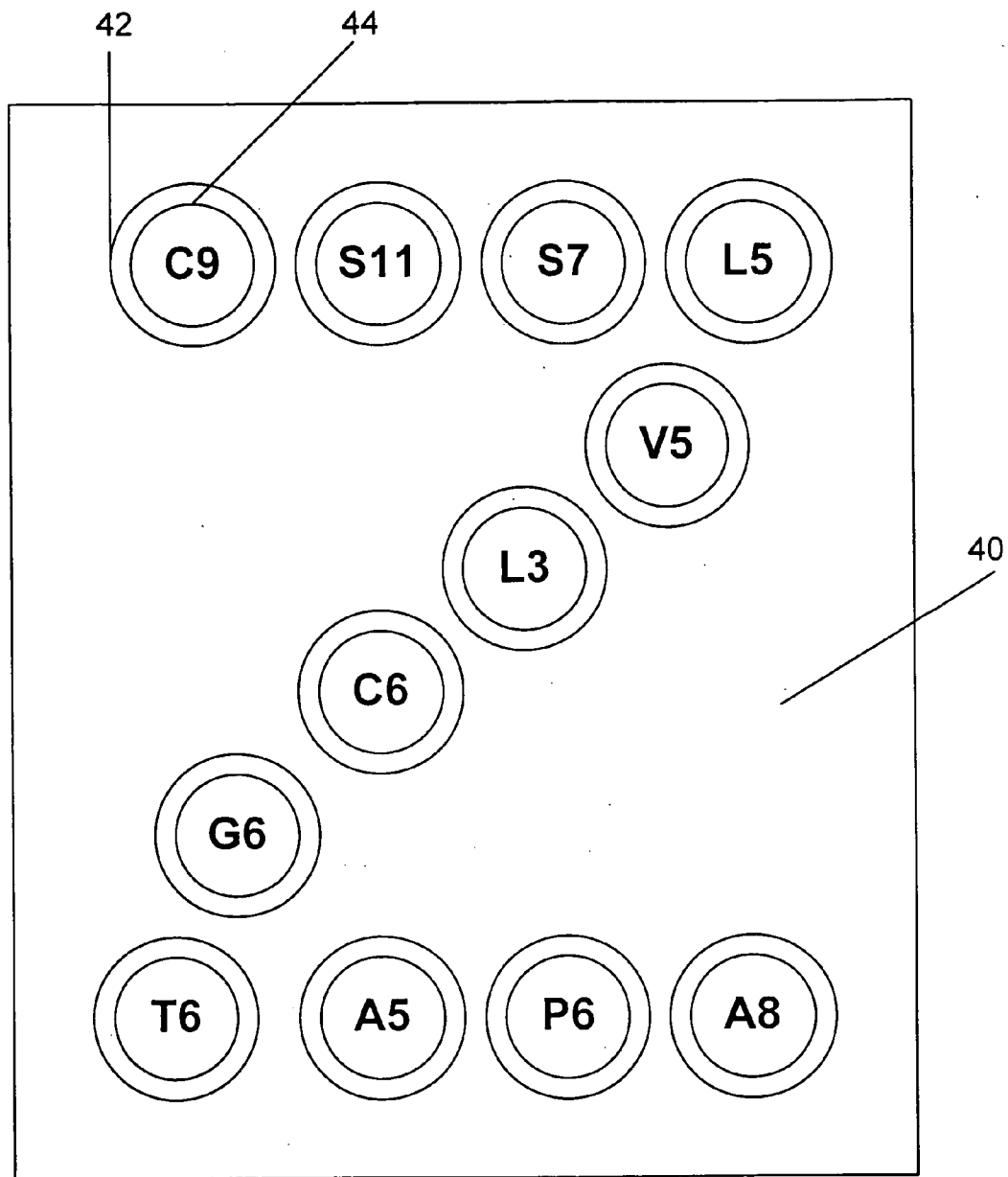


FIG. 4

OBJECTIVE ORIENTED REALITY HORROR SURVIVAL GAME

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] This invention relates to the field of amusement games. More specifically the present invention comprises an objective-oriented reality horror game in which participants attempt to accomplish a game objective before being eliminated from the game.

[0003] 2. Description of the Related Art

[0004] Objective-oriented games exist in many forms. A game is considered objective-oriented when players or participants of the game seek to accomplish some definable objective in the game. Accordingly, games in which players compete against each other or work together for a common purpose all fall within this broad category.

[0005] With developments in the electronics field, objective-oriented games have evolved into sophisticated audio visual games. Fueled by consumer demand, audio visual games have become extremely elaborate. Some of these games allow the player to interact with a virtual environment from the perspective of a character in the virtual environment. These games are often referred to as first-person games. First-person games give the user the sensation that they are interacting in the virtual environment to accomplish objectives such as killing villains or winning a sporting event.

[0006] Although these audio visual games are widely popular, many people also enjoy participating in elaborate objective-oriented games in the real world. As an example, many people enjoy participating in shooter-type games where participants are both shooters and moving targets. One common form of these shooter-type games are battle games where participants shoot at each other with paintball guns or light-emitting guns. These technologies allow participants to know when an opponent has been hit or when they have been hit themselves.

[0007] Despite the existence of these many forms of entertainment and amusement, there remains a need for a game which can be played in the real world that offers the same benefits of audio visual games. Audio visual games in many ways have surpassed the capabilities of their real world counterparts. Virtual environments need not be constrained by the same limitations of the real world. Many audio visual games incorporate supernatural elements in order to make the game more exciting. For example, some audio visual games incorporate aliens or zombies as villains or unnatural sequences of events. Audio visual games currently have their own limitations as well. As the name implies, audio visual games principally engages the player's sight and hearing. Accordingly, audio visual games do not fully engage the player as the player receives continuous sensations indicating that the game is not real. This separation between the virtual world and the real world often leaves the player feeling remote from the action.

BRIEF SUMMARY OF THE INVENTION

[0008] The present invention comprises an amusement game and method of entertainment involving player-enacted

event sequences, a constructed setting, actors, puzzles, and virtual weapons. In the preferred embodiment of the invention, players are obtained and provided instruction regarding the games objectives. The players are then inserted into the constructed setting or game environment. Once inserted into the game environment, the players interact with actors and manipulate objects to accomplish objectives of the game. Players also utilize virtual weapons to defeat actor-villains and other players in order to accomplish objectives of the game.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

[0009] FIG. 1 is a perspective view, showing a mask that may be worn by players participating in the game.

[0010] FIG. 2 is a perspective view, showing a puzzle that may be utilized in the game.

[0011] FIG. 3 is a perspective view, showing a puzzle that may be utilized in the game.

[0012] FIG. 4 is a plan view, showing a puzzle that may be utilized in the game.

REFERENCE NUMERALS IN THE DRAWINGS

- [0013] 10 mask
- [0014] 12 shroud
- [0015] 14 goggles
- [0016] 16 control module
- [0017] 18 microphone
- [0018] 20 air passage
- [0019] 22 tube
- [0020] 24 door
- [0021] 26 door
- [0022] 28 handle
- [0023] 30 handle
- [0024] 32 hand
- [0025] 34 hand
- [0026] 36 ring
- [0027] 38 jewel setting
- [0028] 40 panel
- [0029] 42 receiver
- [0030] 44 component

DESCRIPTION OF THE INVENTION

[0031] The present invention comprises an amusement game and method of entertainment involving player-enacted event sequences, a constructed setting, actors, puzzles, and virtual weapons. In the preferred embodiment of the invention, players are obtained and provided instruction regarding game objectives. The players are then inserted into the constructed setting or game environment. Once inserted into the game environment, the players interact with actors and solve puzzles to accomplish objectives of the game. Players

also utilize virtual weapons to defeat actor-enemies and other players in order to accomplish objectives of the game.

[0032] In order to begin the game, a single participant or group of participants is selected. Depending on the complexity and projected length of time of the game, participants may be selected by their spot in a waiting line or participants may be selected or obtained in advance by appointment or invitation. Any number of participants may be used in practicing the present invention. In the preferred embodiment of the present invention, a group of three to seven participants is preferred, with five participants being the most preferred. The quantity of participants may vary, however, depending on the complexity, length of time, and requirements of the game.

[0033] Once the participants are selected, it is desirable to inform the players of the objectives of the game. There are many ways that the participants may be informed of the game objectives. In the preferred embodiment, participants are brought into a "briefing room" where an informer describes the game objective or objectives. The informer may provide the objective as part of a story. For example, the informer may describe a sequence of events which has occurred in the past. The informer then may tell the participants what their "mission" is. As an example, the informer may tell the participants that they have been selected for a search and rescue mission. They may be given information about the person to be rescued or the person to be rescued's last known whereabouts. The objective need not be accurately defined. The reader will note that the background story or the mission may also contain misinformation. For example, the informer may tell the participants to rendezvous with an "ally" who will help them accomplish their objectives. The ally may in fact be an enemy whose goal is to sabotage the mission. The main purpose of informing the players of the objective, nevertheless, is to provide the participants with a general introduction to the game and a general direction of how the participants should proceed when they enter the game. The informer may be a live person acting off of a script, or the information could be a prerecorded message delivered to the briefing room through a speaker.

[0034] Once the participants have been informed of the game objectives, the participants are inserted into the game. Inserting the participants into the game generally involves placing the participants in the game's environmental setting. The environmental setting is generally geographically defined by the boundaries of a constructed setting. It is generally desirable to construct a setting that is consistent with the background story of the game. For example, the informer may tell the participants about some supernatural event that occurred on a college campus. In this scenario, the constructed setting would have features that one would expect to find at a college campus such as buildings, sidewalks, grounds and trees. The buildings may contain conventional classrooms and hallways to make the game more realistic. The constructed setting is geographically limited, but the participants need not be aware of the actual limits of the game "map."

[0035] There are many ways that the players may be inserted into the game. In order to add more mystery to the game, participants may be blindfolded or otherwise disoriented before being inserted into the game. For example, the

participants may be driven into the constructed setting in the back of a van, and then dropped off with no further instruction. The players may also be inserted into the game by simply walking through a door leading out of the briefing room. It should be noted that the players may also enter the constructed setting before being briefed on their mission.

[0036] As mentioned previously, actors may be embedded in the constructed setting. These actors loosely follow a script and may have various objectives of their own. Since the actions of the participants are unknown, the actors may need to improvise as appropriate in order to accomplish their objectives. Actors may be used to play the role of enemies or allies. They may also be used to play roles of neutral characters that appear to be disinterested in the outcome of the game. An actor may also play the role of a participant with or without the knowledge of the other participants.

[0037] In order to make the game more exciting, actors that are playing the role of the enemies preferably have supernatural powers or unusual abilities. For example, they may play the role of zombies, aliens, monsters or the like. Some actors may have the objective of eliminating participants by capturing the participant or shooting the participant with a virtual weapon. When a player is eliminated they may be escorted out of the constructed setting or otherwise removed from the game. Alternatively, they may be restricted from entering the game for a period of time or until some other objective is accomplished.

[0038] As mentioned previously, virtual weapons may also be used by participants and actors in order to accomplish game objectives. Virtual weapons include all devices that may be used to simulate combat. In the preferred embodiment, virtual guns are used by participants and actors to simulate combat. When a participant or actor is "shot" they may be eliminated or otherwise removed from the game. Many virtual weapon technologies exist and can be used in practicing the present invention. These technologies are readily known by those that are ordinarily skilled in the art; therefore a detailed description of such technologies is omitted herein.

[0039] In the preferred embodiment, participants and actors are equipped with tagging devices and sensors. The tagging device emits a signal, typically projected in a narrow beam. The signal can be emitted in infrared, radio, line-of-sight microwave, laser or any combination or foregoing mediums. Preferably, the signal may be directed by pointing the virtual gun in the direction of the target to be "tagged." The signal is then emitted when the participant or actor pulls the trigger. The sensor can be any technology that is configured to detect the presence of a signal emitted by the tagging device. The sensors are preferably worn by the participants and actors at or near "vital" portions of their body. Accordingly, sensors may be placed around the head, chest, abdomen, and back. The sensors may include a communication means for notifying the participant or actor when they have been shot or "tagged" by a tagging device. For example, the sensor may communicate with a light worn on the participant or a speaker which emits an audible alarm when the sensor detects the signal emitted by the tagging device.

[0040] Excitement and mystery are heightened by the integration of puzzles into the present invention. In order to accomplish the game objectives, participants may need to

solve these puzzles. The term “puzzles” as used herein includes word puzzles that must be solved, clues which must be deciphered, physical objects which must be manipulated, physical tasks which must be performed, or any combination of the foregoing. By solving, deciphering, manipulating, or performing these puzzles the participant is able to gain information that helps the participant understand the game objectives or otherwise assists the participant in completing the game objectives. For example, the information may direct the participant to another puzzle or it may direct the participant to the next sequence of events that must be performed in order to accomplish the game objectives. In this sense, the puzzles are directional when solved.

[0041] As an example, by looking behind a painting, a participant may discover a map that leads the participant to a room. Also, the participant may discover a number written in an unusual location. The number may correspond to a license plate on a car, a room in a building, or a phone number where more information can be obtained. Upon making these discoveries, the participant is able to advance further in the game towards completing the game objectives. While exploring the constructed setting for puzzles, the participant must be attentive of the presence of enemies in order to avoid detection and possible elimination from the game. Accordingly, stealth movement and the use of reconnaissance while moving around the constructed setting will generally help the participant survive.

[0042] Other examples of puzzles that may be incorporated into the game are illustrated in FIGS. 2-4. In FIG. 2, door 24 and door 26 are normally in the closed and locked position. Handle 28 and handle 30 are provided for opening the doors. If a participant attempts to turn the handles, however, the doors will not open. As shown in FIG. 3, handle 28 includes hand 34 and handle 30 includes hand 32. Hand 34 and hand 32 function as door knobs and can be rotated with respect to the door. Upon closer inspection of hand 32, the participant may recognize ring 36 with exposed jewel setting 38. Jewel setting 38 is missing a “jewel.” If the participant locates the missing jewel and places the jewel into jewel setting 38, the participant may rotate hand 32 and hand 34 to open the door. The door may lead to a passageway or a room.

[0043] In this manner, the missing jewel functions as a key to open the set of double doors. An electronic circuit may be employed for an “unlocking” mechanism. For example, an electronic circuit may integrate the door lock and jewel setting 38. When the jewel is not placed within jewel setting 38, a portion of the circuit is open and the lock is disabled. When the jewel is placed into jewel setting 38, the circuit is closed, opening the lock.

[0044] Another puzzle which may be used to gain access to a room or passageway is illustrated in FIG. 4. The puzzle illustrated in FIG. 4 has a group of components 44 which may be inserted into receivers 42 which are incorporated into panel 40. Panel 40 houses an electronic circuit which integrates each receiver 42 with an opening feature of a door. When components 44 are inserted into receivers 42 in the “correct” arrangement, the opening feature opens the door or passageway. In the illustrated example, the participant is not given any instructions on how to solve the puzzle. Receivers 42 are arranged in a formation resembling a “Z” and components 44 have alpha-numeric combinations which

symbolize zodiac signs. For example, “C9” symbolizes the zodiac sign “Capricorn” which starts with the letter “C” and has 9 letters. Likewise, “S11” represents “Sagittarius.” If the participant deciphers these clues and arranges the “symbols” in the correct sequence, a designed electronic circuit will be completed and the door or passage will open.

[0045] Other puzzles may incorporate performance related tasks. For example, a hallway may have a plaque which reads “What you need, is what you read; Five second speed, may pass indeed.” The participant should understand this clue to mean that they must run from one point to another within 5 seconds. A “start” button may be placed on one end of the hallway and a “stop” button may be placed near the other end. The buttons may be placed apart at any distance, but 40 yards separation between the buttons provides an adequate physical challenge for most participants. The start and stop buttons may be electronically connected to a timer so that when the participant presses the start button, a countdown timer is activated. If the participant presses the stop button before the countdown timer elapses, then a door may be opened by an electronic circuit. Speed detecting devices such as radar and laser guns may also be used in place of or in addition to the start and stop buttons.

[0046] The reader should understand that the aforementioned puzzles are merely examples of the types of puzzles that may be used as part of the proposed game. Many other puzzles which, when solved, assist the user in completing game objectives may also be used.

EXAMPLE

[0047] In order to better understand the present invention, the following example is illustrative. The game host constructs a setting resembling a college campus. As such, the constructed setting contains buildings with classrooms, hallways, offices, and laboratories. The campus also includes campus grounds complete with trees and sidewalks. The campus is surrounded on all sides by roads, and the roads are surrounded by trees. Framing the trees and the campus is a fence which defines the geographic limits of the constructed setting.

[0048] The game host retains approximately ten actors and actresses to play the roles of allies, enemies, and neutral parties. The game host teaches the actors and actresses about the storyline of the game, and the various roles and objectives. The actors and actresses are given scripts which contain lines, set directions, and event sequences that are to be performed by the actors and actresses. The script includes notations where improvisation may be needed. The actors and actresses are equipped with costumes that are appropriate for the roles played.

[0049] After learning about the game, a group of five participants make an appointment with the game host to participate in a game. A day and time is set for the game, and the participants are advised of the items that they will need to bring. The game host also sends the participants a liability waiver contract which advises the participants of the conditions to which they will be exposed while playing the game.

[0050] The group of five participants arrives at the location of the game at the appropriate time. The game host greets the participants, again advises the participants about

the dangers to which they will be exposed while playing the game, collects the signed liability waiver contracts, and directs the participants to a briefing room.

[0051] When the participants arrive in the briefing room, they are greeted by an actor playing the role of the informer. The informer is a special operations commander who tells the participants a story and tells them their mission. The informer tells the participants about a college campus owned by the London family. The informer tells the participants that rumor has it that the London family practiced some type of Black Magic or Voodoo and in the early 1800s built a secret laboratory under the campus. The informer explains that several people have disappeared including a prominent member of the London family. The informer adds that there are clues throughout the campus that bring life to the myth of some sort of paranormal existence. The informer also explains that a group of special operations forces was sent in to the campus but never returned. The informer then explains that it is the job of the participants, "The Omega Unit," to solve the mystery and bring the missing people to safety—the game objectives.

[0052] Before dismissing the team, the informer gives the participants equipment that they will need for their mission, including a virtual gun and a mask. Mask 10 is illustrated in FIG. 1. Mask 10 includes a shroud 12 which wraps around the face and head of the participant. Shroud 12 may include a fastener for attaching mask 10 to the participant's head, or it may be made of an elastic material which loosely constricts around the participant's head thereby holding mask 10 in position. Goggles 14 are integrated into mask 10 so that the participant can see. Goggles 14 can include head-up-display technology, the purpose of which will be explained subsequently. A plurality of air passages 20 are provided in mask 10 so that the participant can breathe and speak through mask 10. Mesh may also be used in place of air passages 20.

[0053] Mask 10 also includes control module 16. Control module 16 contains a computer with associated memory. A program is embedded in the memory and directs the computer to operate the various technologies integrated into mask 10. Control module 16 may include a speaker placed near the participant's ear. Microphone 18 communicates with control module 16. Control module 16 includes a communications transmitter and receiver to enable communication with other participants. The transmitter transmits signals corresponding to sounds detected by microphone 18 via a transmission medium such as radio waves. The receiver detects transmissions from other participants and relays the signals to the speaker.

[0054] Tube 22 is integrated into mask 10 and extends from control module 16 to the region of mask 10 near the participant's nasal passages. Tube 22 is porous in the portion near the participant's nasal passages. Tube 22 serves as a conduit for the passage of gases stored in a storage vessel in control module 16. Various gases may be used including the vapors of halothane, sevoflurane, desflurane, isoflurane, and other inhaled anesthetics. Control module 16 is programmed to release a dose of anesthetic gas when the participant is tagged by a tagging device. Accordingly, control module 16 communicates with the participant's sensors so that it "knows" when the participant has been shot by a virtual weapon.

[0055] As mentioned previously, goggles 14 may include head-up-display ("HUD") technology. The various types of HUD technology are well known, and one that is ordinarily skilled in the art would know how to project images on the inside surface of goggles 14. Preferably a combiner is used on the surface of goggles 14 and a micro-display technology is used for an image source such as Liquid Crystal Display ("LCD"), Liquid Crystal on Silicone ("LCOS"), Digital Micro Mirrors ("DMM"), Organic Light Emitting Diode ("OLED") or Laser. Also, in the alternative of using inhaled anesthetics, goggles 14 can be used to disorient the participant when the participant is shot by a virtual weapon. For example, the HUD could be used to obfuscate the participant's vision.

[0056] The reader will appreciate that the various technologies integrated into mask 10 may be controlled by control module 16. The components of control module 16 need not be centrally located within one housing as shown in FIG. 1. The various components may be separated without affecting their functionalities.

[0057] The informer instructs the participants to don mask 10 so that he can teach them how to use its various features. After going through some of the features of the mask and equipment, the participants are disoriented by dispensing inhaled anesthetics through tube 22 or by manipulation of goggles 14. The participants are then inserted into the game and moved into the constructed setting near one of the buildings.

[0058] Once inserted into the game, the participants are free to explore the constructed setting. The participants may elect to move around together as a group or split up. Based on the instructions from the special operations commander, the participants know that they are to look for clues and signs of the paranormal. If the participants were to explore the entire constructed setting they would discover such things as hidden doors, alpha-numeric codes to be deciphered, keys that unlock locked doors, and other puzzles. The participants would also encounter actors playing the role of zombies, beasts, students, and members of the missing Special Forces team.

[0059] The participants also may encounter apparitions while exploring the campus. These apparitions may be either be projected onto the goggles with HUD technology or projected at locations within the constructed setting using volumetric display technologies. The game host may use various technologies to create the volumetric display including swept-plane display, emissive volume display, varifocal mirror display, and laser display technologies. Like HUD technologies, volumetric display technologies are known in the prior art. Accordingly, a detailed description of the technology is omitted herein.

[0060] Participants who manage to survive and find the secret laboratory and rescue the missing allies complete and win the game. In order to find the laboratory and rescue the missing allies, the participants should generally attempt to avoid detection by the enemies. Once a participant is detected, the participant should attempt to kill the enemy before being killed. The reader will appreciate that in order to gain access to the secret laboratory, many obstacles can be placed in the participant's way. For example, access to the laboratory may be available only after finding a hidden door, unlocking a door with a hidden key, scaling a wall with the

assistance of another participant, shooting a group of enemies which are guarding the access point to the laboratory or any combination of the foregoing. The secret laboratory could also be placed in a remote location of the constructed setting, thereby requiring the participants to travel a relatively long distance and explore a large portion of the constructed setting before arriving at the destination.

[0061] The preceding description contains significant detail regarding the novel aspects of the present invention. It should not be construed, however, as limiting the scope of the invention but rather as providing illustrations of the preferred embodiments of the invention. As an example, the constructed setting need not be a campus. The background story also does not need to be paranormal in nature. For example, the constructed setting may also resemble a Western ghost town, and the participants may be told that their objective is to root out a group of outlaws that have overtaken the town. Such variations would not alter the function of the invention. Thus, the scope of the invention should be fixed by the following claims, rather than by the examples given.

Having described my invention, I claim:

1. A method of providing entertainment, comprising the steps of:

- a. providing a constructed setting, said constructed setting relating to a background story;
- b. obtaining a plurality of non-actor participants;
- c. informing said plurality of participants about a portion of said background story and a first objective to be accomplished;
- d. inserting said participants into said constructed setting; and
- e. providing a plurality of actors to interact with said plurality of participants, each of said plurality of actors playing a role relating to said background story; and
- f. wherein at least one of said plurality of actors plays the role of an enemy, wherein said enemy has a second objective of preventing said plurality of participants from accomplishing said first objective.

2. The method of claim 1, said constructed setting further comprising a puzzle that must be solved in order to accomplish said first objective.

3. The method of claim 1, wherein at least one of said plurality of participants is equipped with a virtual weapon, said virtual weapon configured to simulate a device used in combat.

4. The method of claim 2, wherein at least one of said plurality of participants is equipped with a virtual weapon, said virtual weapon configured to simulate a device used in combat.

5. The method of claim 1, further comprising the step of providing an apparition, said apparition projected at a location within said constructed setting as a volumetric display.

6. The method of claim 2, further comprising the step of providing an apparition, said apparition projected at a location within said constructed setting as a volumetric display.

7. The method of claim 2, wherein one of said plurality of participants must decipher an alpha-numeric code in order to solve said puzzle.

8. The method of claim 2, wherein one of said plurality of participant must find a hidden door in order to solve said puzzle.

9. The method of claim 2, wherein one of said plurality of participants must find a key to unlock a locked door in order to solve said puzzle.

10. The method of claim 2, wherein one of said plurality of participants must manipulate an object in order to solve said puzzle.

11. The method of claim 2, wherein by solving said puzzle, one of said plurality of participants gains information that assists said one of said plurality of participants in accomplishing said first objective.

12. The method of claim 1, wherein said first objective is to search said constructed setting and find an actor playing the role of a person to be rescued.

13. The method of claim 2, wherein said first objective is to search said constructed setting and find an actor playing the role of a person to be rescued.

14. The method of claim 1, further comprising the step of providing each of said plurality of participants with a mask, said mask including

- a. a microphone configured to detect sounds,
- b. a transmitter for transmitting signals corresponding to said sounds detected by said microphone,
- c. a receiver for receiving signals transmitted by other transmitters, and
- d. a speaker for converting said signals received by said receiver into corresponding audible sounds.

15. The method of claim 2, further comprising the step of providing each of said plurality of participants with a mask, said mask including

- a. a microphone configured to detect sounds,
- b. a transmitter for transmitting signals corresponding to said sounds detected by said microphone,
- c. a receiver for receiving signals transmitted by other transmitters, and
- d. a speaker for converting said signals received by said receiver into corresponding audible sounds.

16. The method of claim 14, said mask further comprising goggles, said goggles having an inside surface, and wherein said goggles contain integrated head-up-display technology, whereby images are projected on said inside surface of said goggles.

17. The method of claim 14, said mask further comprising a control module, said control module having a computer with associated memory, and a program embedded in said memory.

18. The method of claim 17, said mask further comprising

- a. a storage vessel for containing an inhalable anesthetic;
- b. a tube for transferring said inhalable anesthetic from said storage vessel;
- c. wherein the transfer of said inhalable anesthetic is controlled by said control module.