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(54) **METHODS AND APPARATUS FOR PRESENTING INTERACTIVE ENTERTAINMENT**

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(57) **ABSTRACT**

A method and apparatus for presenting interactive entertainment where consequences of decisions made interactively by a user during the course of the interactive entertainment may later be reflected at any point in the interactive entertainment after which the decision was made. The content and sequence of the interactive entertainment may also vary by user decisions while maintaining a storyline through the use of sets of alternative scenes.

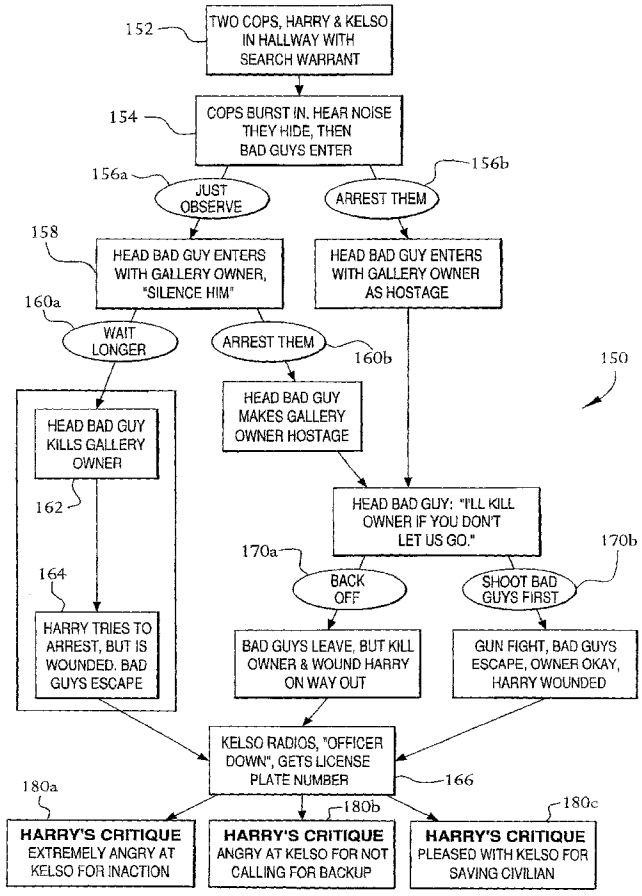
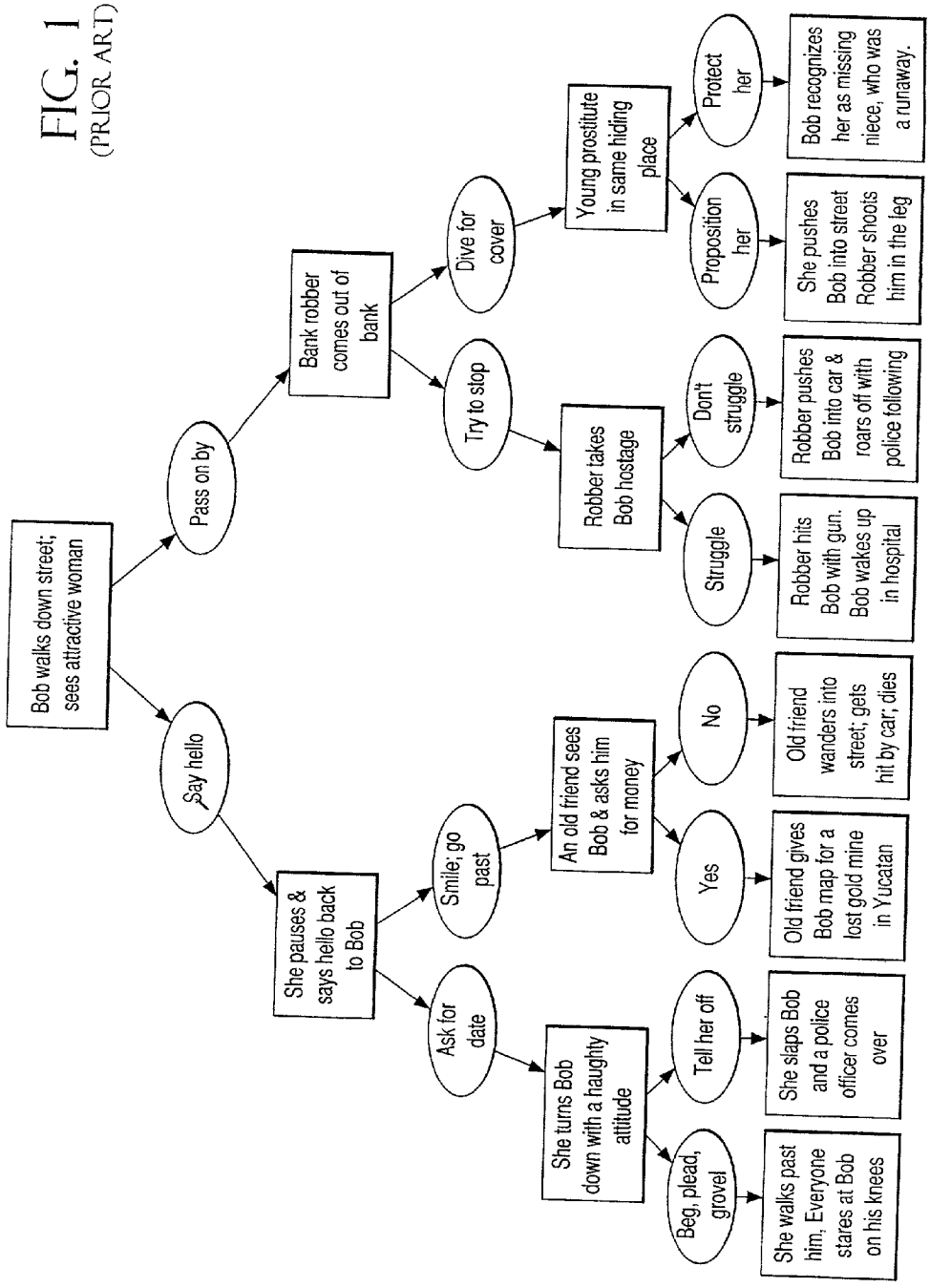


FIG. 1
(PRIOR ART)



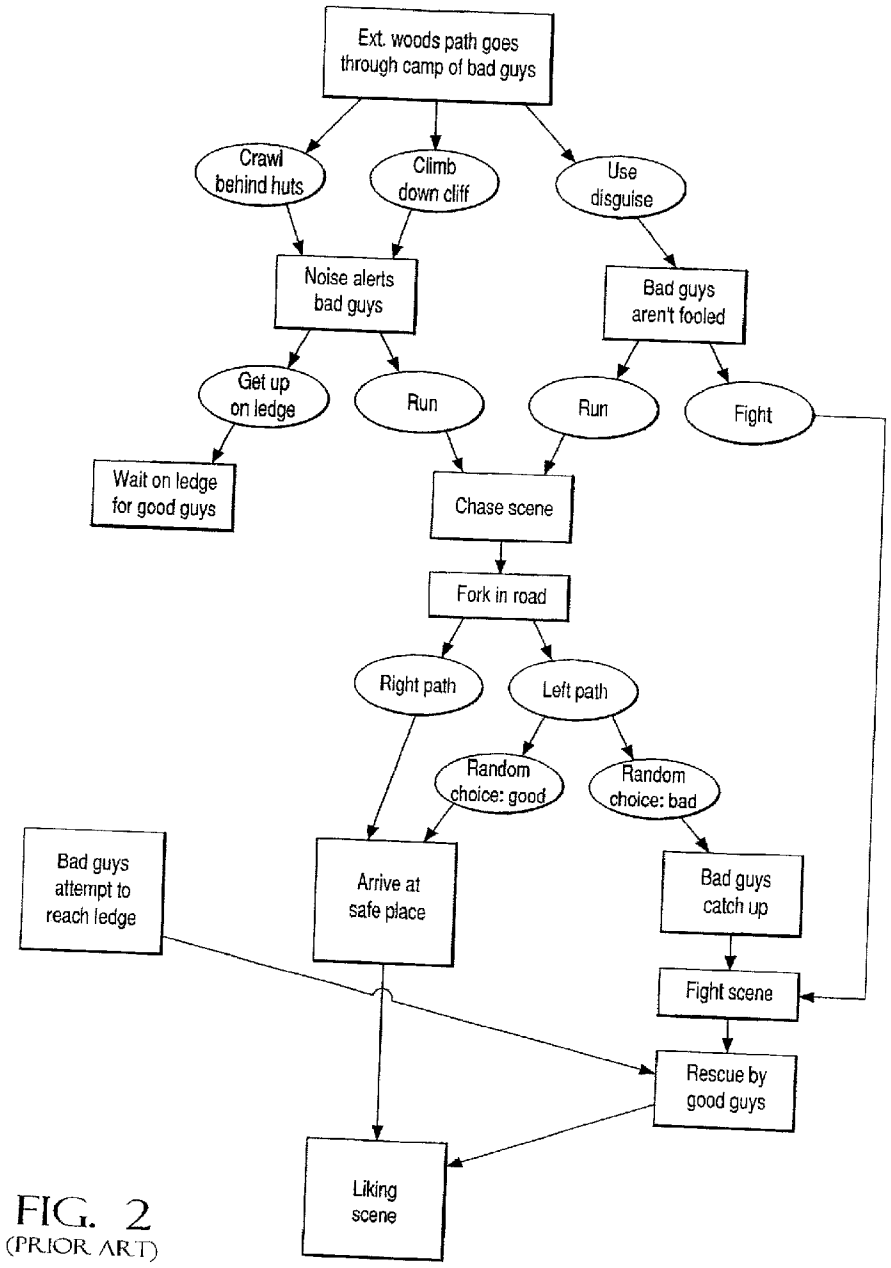


FIG. 2
(PRIOR ART)

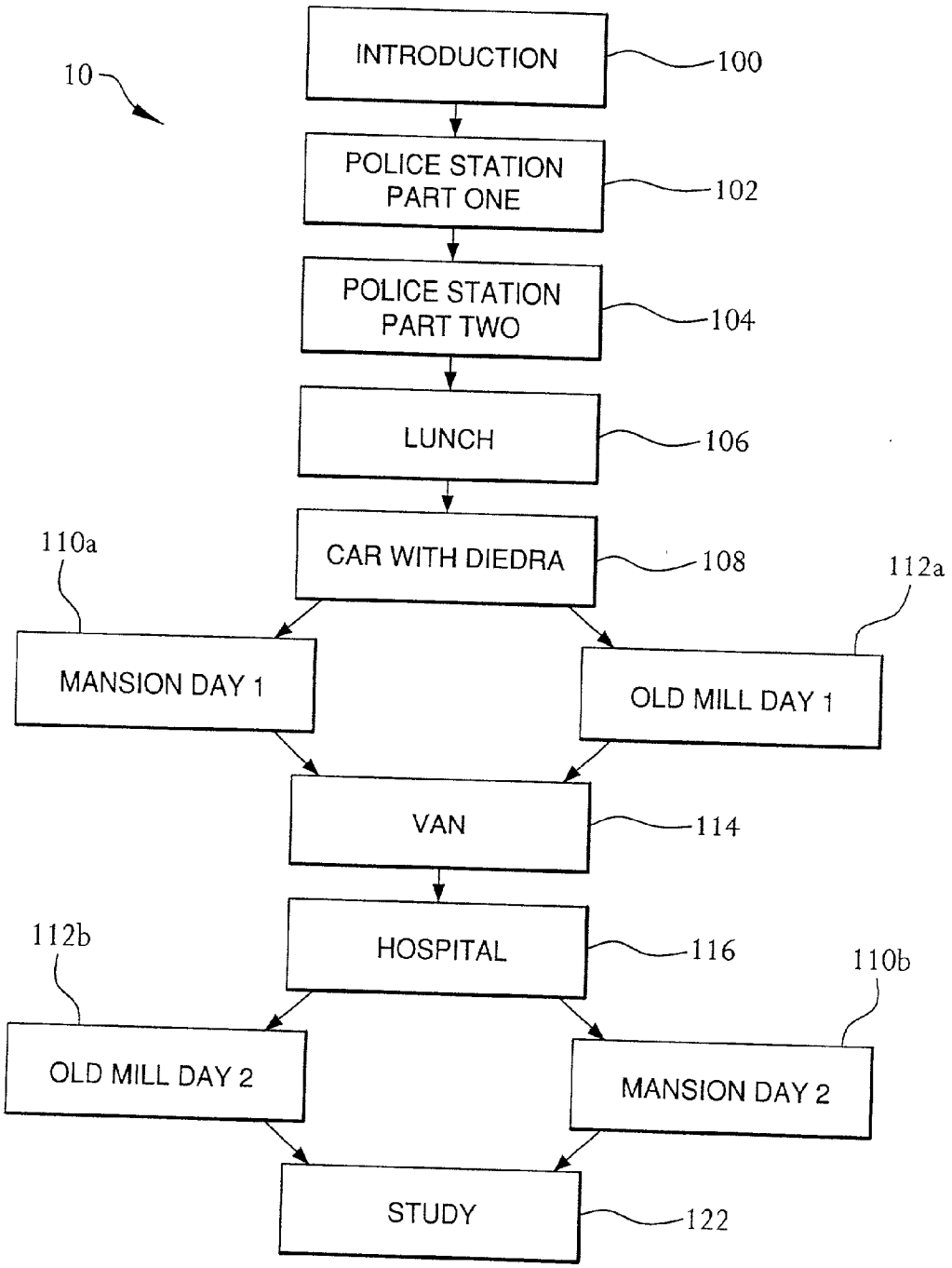
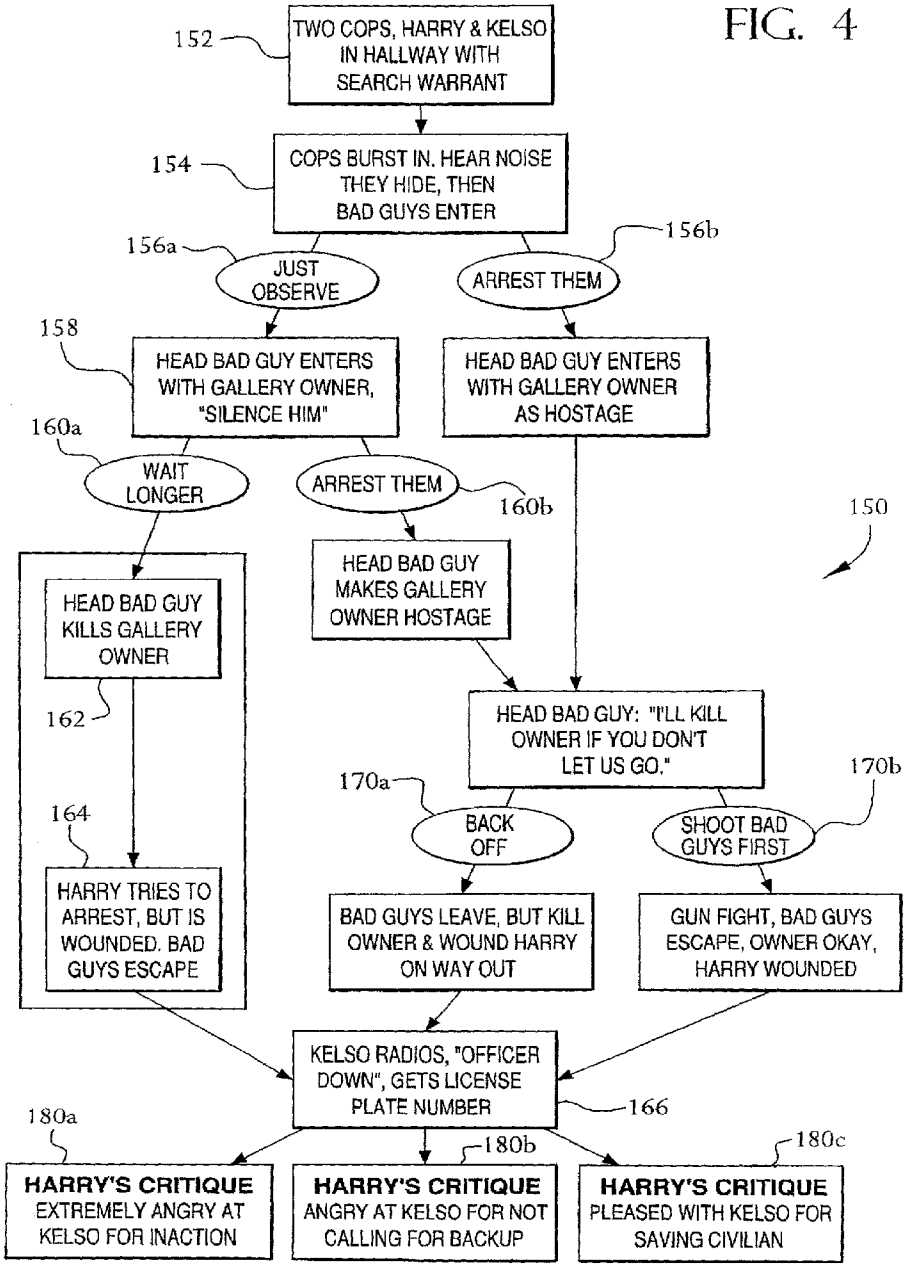

10
INTRODUCTION
100
POLICE STATION PART ONE
102
POLICE STATION PART TWO
104
LUNCH
106
CAR WITH DIEDRA
108
110a
MANSION DAY 1
112a
OLD MILL DAY 1
VAN
114
HOSPITAL
116
112b
OLD MILL DAY 2
110b
MANSION DAY 2
STUDY
122

FIG. 3

FIG. 4


152
TWO COPS, HARRY & KELSO IN HALLWAY WITH SEARCH WARRANT
154
COPS BURST IN. HEAR NOISE THEY HIDE, THEN BAD GUYS ENTER
156a
JUST OBSERVE
156b
ARREST THEM
158
HEAD BAD GUY ENTERS WITH GALLERY OWNER, "SILENCE HIM"
HEAD BAD GUY ENTERS WITH GALLERY OWNER AS HOSTAGE
160a
WAIT LONGER
ARREST THEM
160b
150
HEAD BAD GUY KILLS GALLERY OWNER
HEAD BAD GUY MAKES GALLERY OWNER HOSTAGE
162
HEAD BAD GUY: "I'LL KILL OWNER IF YOU DON'T LET US GO."
170a
170b
164
BACK OFF
SHOOT BAD GUYS FIRST
HARRY TRIES TO ARREST, BUT IS WOUNDED. BAD GUYS ESCAPE
BAD GUYS LEAVE, BUT KILL OWNER & WOUND HARRY ON WAY OUT
GUN FIGHT, BAD GUYS ESCAPE, OWNER OKAY, HARRY WOUNDED
KELSO RADIOS, "OFFICER DOWN", GETS LICENSE PLATE NUMBER
166
180a
180b
180c
HARRY'S CRITIQUE EXTREMELY ANGRY AT KELSO FOR INACTION
HARRY'S CRITIQUE ANGRY AT KELSO FOR NOT CALLING FOR BACKUP
HARRY'S CRITIQUE PLEASED WITH KELSO FOR SAVING CIVILIAN

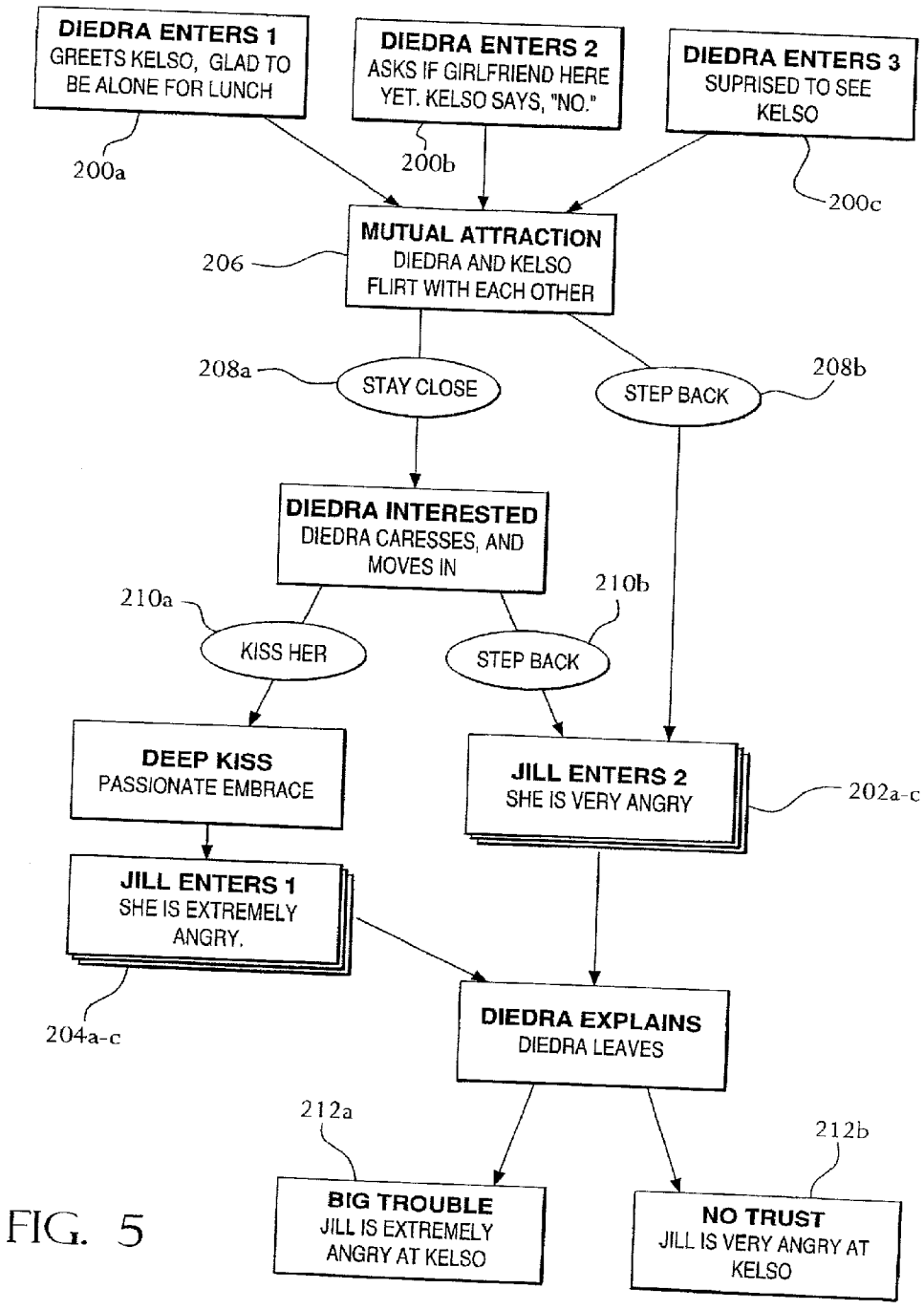

DIEDRA ENTERS 1
GREETS KELSO, GLAD TO BE ALONE FOR LUNCH
200a
DIEDRA ENTERS 2
ASKS IF GIRLFRIEND HERE YET. KELSO SAYS, "NO."
200b
DIEDRA ENTERS 3
SUPRISED TO SEE KELSO
200c
206
MUTUAL ATTRACTION
DIEDRA AND KELSO FLIRT WITH EACH OTHER
208a
STAY CLOSE
STEP BACK
208b
DIEDRA INTERESTED
DIEDRA CARESSES, AND MOVES IN
210a
KISS HER
210b
STEP BACK
DEEP KISS
PASSIONATE EMBRACE
JILL ENTERS 2
SHE IS VERY ANGRY
202a-c
JILL ENTERS 1
SHE IS EXTREMELY ANGRY.
204a-c
DIEDRA EXPLAINS
DIEDRA LEAVES
212a
212b
BIG TROUBLE
JILL IS EXTREMELY ANGRY AT KELSO
NO TRUST
JILL IS VERY ANGRY AT KELSO

FIG. 5

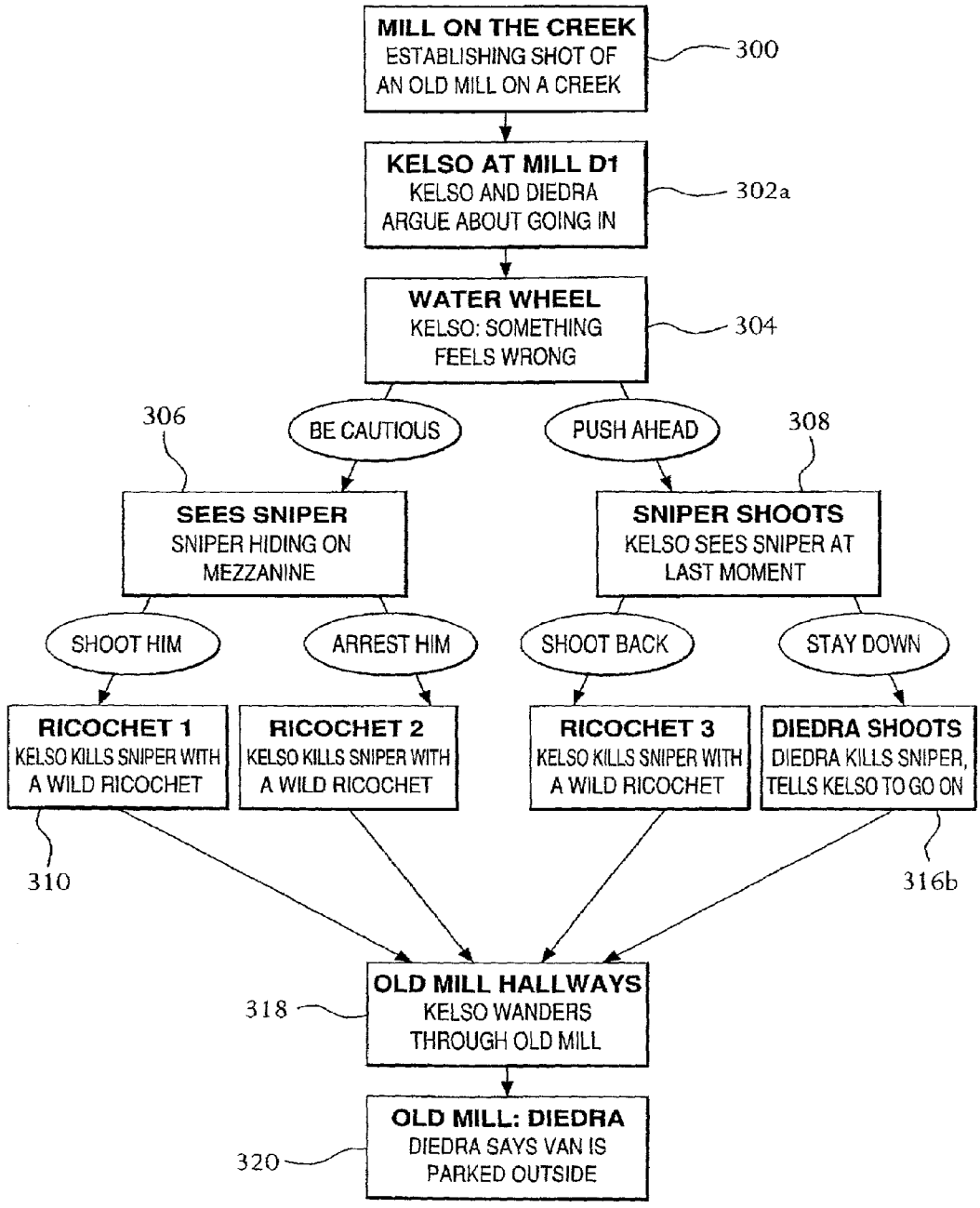

MILL ON THE CREEK
ESTABLISHING SHOT OF AN OLD MILL ON A CREEK
300
KELSO AT MILL D1
KELSO AND DIEDRA ARGUE ABOUT GOING IN
302a
WATER WHEEL
KELSO: SOMETHING FEELS WRONG
304
306
BE CAUTIOUS
PUSH AHEAD
308
SEES SNIPER
SNIPER HIDING ON MEZZANINE
SNIPER SHOOTS
KELSO SEES SNIPER AT LAST MOMENT
SHOOT HIM
ARREST HIM
SHOOT BACK
STAY DOWN
RICOCHET 1
KELSO KILLS SNIPER WITH A WILD RICOCHET
RICOCHET 2
KELSO KILLS SNIPER WITH A WILD RICOCHET
RICOCHET 3
KELSO KILLS SNIPER WITH A WILD RICOCHET
DIEDRA SHOOTS
DIEDRA KILLS SNIPER, TELLS KELSO TO GO ON
310
316b
318
OLD MILL HALLWAYS
KELSO WANDERS THROUGH OLD MILL
OLD MILL: DIEDRA
DIEDRA SAYS VAN IS PARKED OUTSIDE
320

FIG. 6

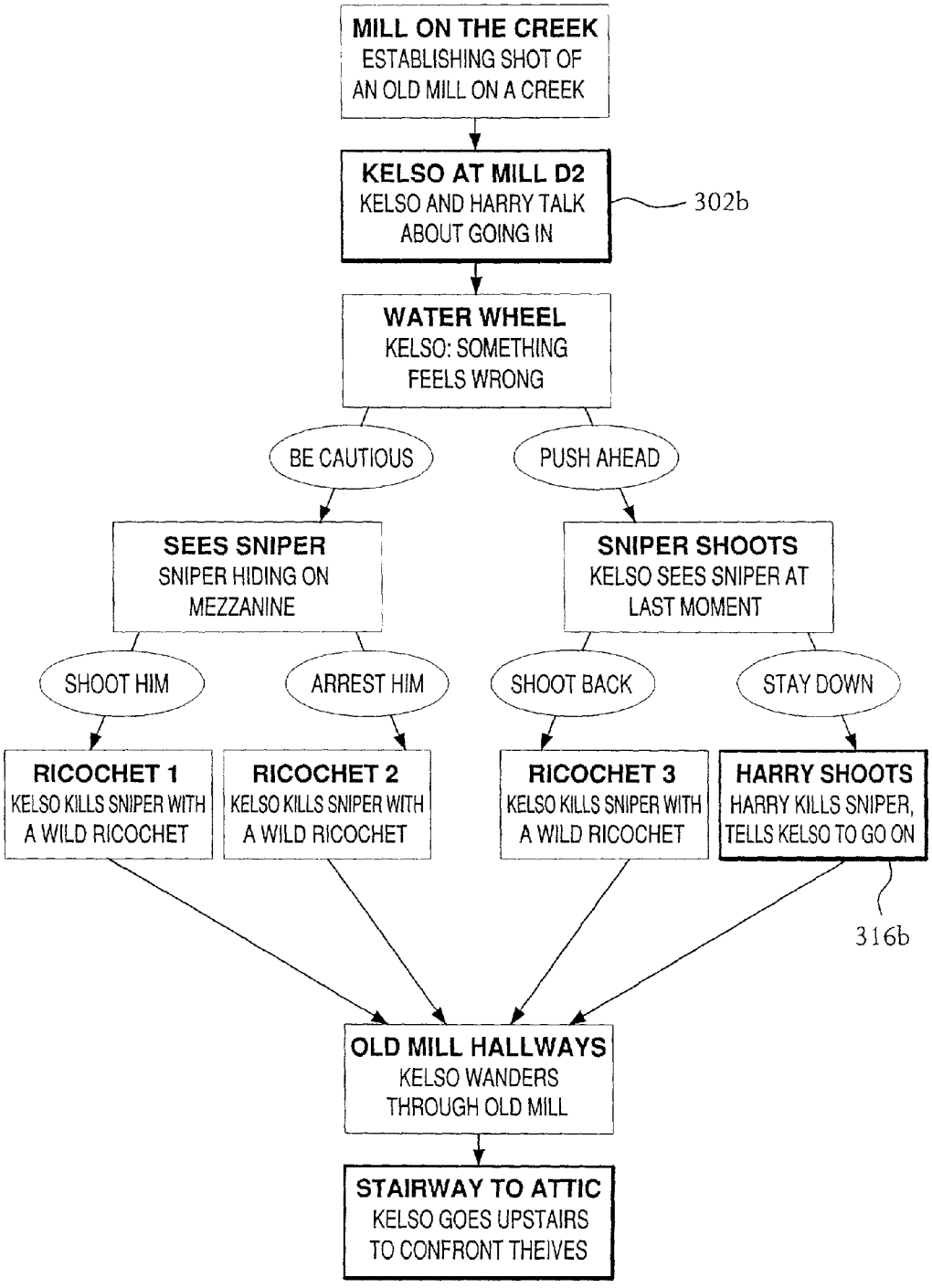

MILL ON THE CREEK
ESTABLISHING SHOT OF AN OLD MILL ON A CREEK
KELSO AT MILL D2
KELSO AND HARRY TALK ABOUT GOING IN
302b
WATER WHEEL
KELSO: SOMETHING FEELS WRONG
BE CAUTIOUS
PUSH AHEAD
SEES SNIPER
SNIPER HIDING ON MEZZANINE
SNIPER SHOOTS
KELSO SEES SNIPER AT LAST MOMENT
SHOOT HIM
ARREST HIM
SHOOT BACK
STAY DOWN
RICOCHET 1
KELSO KILLS SNIPER WITH A WILD RICOCHET
RICOCHET 2
KELSO KILLS SNIPER WITH A WILD RICOCHET
RICOCHET 3
KELSO KILLS SNIPER WITH A WILD RICOCHET
HARRY SHOOTS
HARRY KILLS SNIPER, TELLS KELSO TO GO ON
316b
OLD MILL HALLWAYS
KELSO WANDERS THROUGH OLD MILL
STAIRWAY TO ATTIC
KELSO GOES UPSTAIRS TO CONFRONT THEIVES

FIG. 7

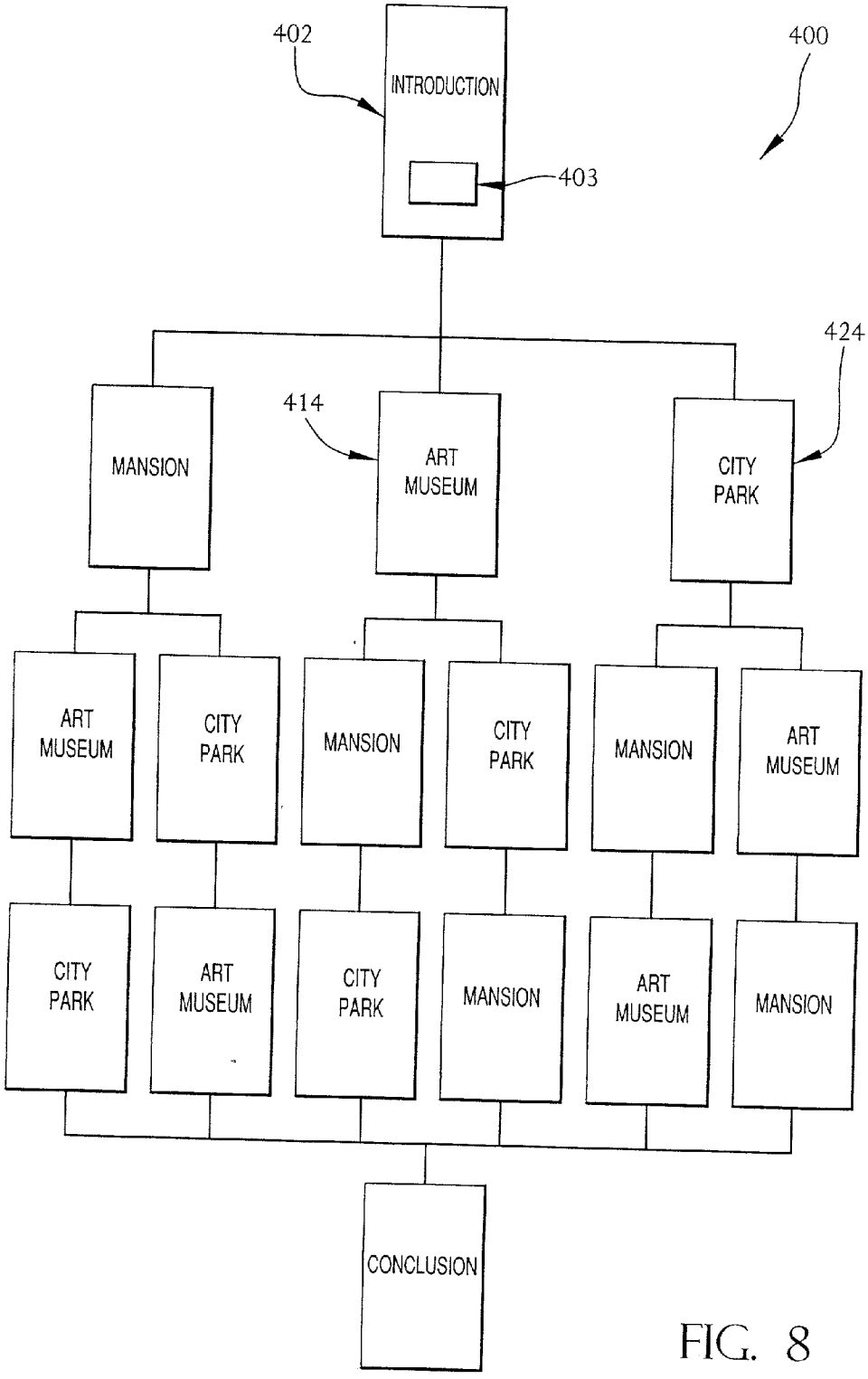

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MANSION
ART MUSEUM
CITY PARK
ART MUSEUM
CITY PARK
MANSION
CITY PARK
MANSION
ART MUSEUM
CITY PARK
ART MUSEUM
CITY PARK
MANSION
ART MUSEUM
MANSION
CONCLUSION

FIG. 8

METHODS AND APPARATUS FOR PRESENTING INTERACTIVE ENTERTAINMENT

RELATED APPLICATIONS

[0001] This application claims the benefit of the earlier filing date of provisional application Ser. No. 60/244,242, filed Oct. 30, 2000.

FIELD OF THE INVENTION

[0002] The invention relates to the entertainment field, particularly interactive entertainment that changes the unfolding of the storyline based on decisions made by a user as the story develops. The invention is directed to methods and apparatus for structuring scenes to maintain the storyline while allowing variations in the order of presentation and in the context of events in the storyline based upon the decisions made.

BACKGROUND OF THE INVENTION

[0003] Interactive entertainment is most widely recognized in book-based adventures or games and in computer games. In book-based games, a user usually assumes the role of a character and makes choices within the context of an adventure. The adventure often involves the pursuit of some ultimate goal, and evolves depending on the choices made by the user. A well-known form of a book-based game is the "Make Your Own Adventure" books. These books present a reader with short text sequences that conclude with a choice. Based on this choice, the reader is directed to another page in the book where the consequences of this choice is described ("You open the door, setting off the burglar alarm. You hear police sirens in the distance, coming closer . . . ").

[0004] Interactive computer games also utilize a user decision mode that yields differing game results depending on the user's choice. As an example, if the game player opens door **1**, he may find a bank robber counting his money. If the player opens door **2**, there may be a woman with a hot tip ("You might want to look behind the trash can").

[0005] The branching structuring of scenes that is employed in games and books is often referred to as the "Christmas tree" decision method because of how the branching structure appears when shown in a flow chart (see **FIG. 1**). In a Christmas tree structure, each branching point leads to at least two (or more, depending upon the number of choices available) separate and diverging branches of scene and decision sequences. As can be seen in **FIG. 1**, this method quickly results in a huge number of possible outcomes. The consequence of these diverse outcomes is a very fragmented storyline. In addition, there is an incremental cost associated with providing the content of each individual scene that each of these decisions generates, thus the need to provide an increasing number of scenes for each level of decision greatly increases costs of production.

[0006] A different type of decision tree for use in a computer game is suggested by U.S. Pat. Nos. 4,305,131 and 4,445,187 to Best. **FIG. 2** is a flow chart showing the decision tree scene structure depicted in **FIG. 11** of both Best patents. It shows an episode of a video game with interactive voice dialog, in which a cascading decision tree is structured such that all branch paths eventually converge to a neutral, or "linking" scene into the next episode, no matter what decisions the user makes within the episode. This reduces the number of scenes needed in relation to the number of branching points and choices, and consequently reduces the total content cost of creating the scenes.

[0007] In addition to cost reduction, an advantage of this cascading decision tree structure is that it makes possible the creation of a coherent storyline, or narrative arc, from beginning to end while allowing the player to determine how the storyline unfolds. This increased ability to follow a storyline makes it easier for the writer or producer to create a more satisfying entertainment experience than the Christmas tree structure. A disadvantage to this prior art cascade structure, however, is that the content of the scene sequences is predetermined. That is, while the user's decisions determine which scene sequences are presented, and in what order, the content of the scene sequences is set. If the user made several relatively "bad" choices on his way to a linking scene, there is no subtle change in the content of the linking scene, or in scene sequences presented after the linking scene, to reflect the consequences of bad choices. For example, after a series of bad choices in an episode that ultimately lead to the linking scene, the interactive user's character may have his employer say, "Job well done" because that content is predetermined in the linking scene as neutral content. However, that content does not reflect and may be inappropriate in light of the decision paths that the user may have followed in arriving at the linking scene. That is, for a particular decision path, it might be more appropriate for the employer to say, "What is wrong with you? You could have gotten killed out there. You got lucky it all worked out. Next time, you'd better do things by the book." Thus, in the prior art form of the linking scene methodology, only the decision-neutral content progresses past a linking scene, while the apparent consequences that are specific to particular decisions, whether good or bad, are forgotten and do not produce any variation in scene sequences after the linking scene.

[0008] In a conventional stage play (non-interactive), the storyline is usually composed in "acts" and "scenes". A scene is the smallest unit of a story, and individual scenes are the fundamental building blocks of the storyline. In conventional stage or screenplay, the acts are composed of a series of scenes related by some common elements of time, location, or characters, and the acts are presented in a fixed sequence. In the fixed-order milieu, the dialog and acting in each scene can be set not only to advance the plot, but also to reflect the interpersonal reactions and demeanor of the characters in response to earlier deeds and words. When writing a storyline for interactive users, however, the unpredictable decisions made by the users is what apparently prompted Best's use of a "neutral" linking scene, i.e., a scene that pulls the characters back to the overall storyline with content that must be neutral and not reflect the consequences of decisions made by a user prior to reaching that linking scene. Since the storywriter could not know in advance which decisions would be selected, the writer would build the storyline around only those events and interactions that the viewer was forced to experience regardless of what decisions were made.

[0009] In addition, the unpredictable nature of the user decisions make it difficult for the storyline to let user's decisions determine the order in which groups of scene sequences or "acts" are viewed. If a writer attempts to

produce an act that can be viewed in a selectable order in the storyline, the act would have to be completely neutral as to any content that may or may not have been viewed before each possible slot in the relative order, and the opening and finishing scenes of the selectable act would have to be content neutral as to the act that precedes and follows it in the order.

[0010] If the entertainment includes scenes that were produced at high cost to achieve a high thrill value, such as scenes of a high-speed vehicle chase or staged explosion, the writer would want to assure that every user experiences these scenes, no matter what choices are made. In the prior art linking scene approach, this would mean locating the segment containing these scenes after a linking scene had brought the decision paths back to a fixed point on the storyline. It would be difficult in the prior art of interactive entertainment to allow the high value segment to appear in a selectable order.

[0011] An objective of this invention is to improve upon the prior art by structuring scene sequences in a manner that maintains control of the storyline with linking scenes while permitting the apparent consequences of selected decisions to vary the story beyond linking scenes.

[0012] Another objective of this invention is to structure scene sequences to provide better ability to produce an interactive entertainment in which individual scenes or scene sequences as well as entire acts or episodes may be presented in differing order and with differing content as a result of interactive decisions.

BRIEF SUMMARY OF THE INVENTION

[0013] One aspect of the invention is a method for structuring scene sequences for interactive entertainment to carry the apparent consequences of decisions made prior to a neutral linking scene into selected scene sequences occurring after the linking scene. The entertainment is produced with an overall storyline to be delivered to a viewer in a plurality of potentially viewable scenes, depending upon choices between alternative decisions made at branching points. The interactive user or viewer makes the decision at a branching point that determines the next scene sequence to be presented. To maintain the storyline, the branching points and their related scene sequences are structured such that most or all potential paths eventually converge to a linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene. To carry the apparent consequences of selected particular decisions past a linking scene, however, sets of variation scenes are produced that introduce content which appears to be related to the consequence of the selected particular decision or decisions made prior to the linking scene. Each set of variation scenes is associated with a scene that is viewable with or after the linking scene. When the viewer is brought to a scene sequence that contains a scene that is associated with a set of variation scenes, the variation scene that is related to the particular decision or combination of selected decisions made earlier by the user is taken from the set and interspersed into the scene sequence.

[0014] When the entertainment is in the form of digital video, this method of using variation scenes to carry the apparent consequences of a decision past a neutral linking scene can be accomplished efficiently by producing the variation scenes in each set with essentially the same characters and props, such that the variation scenes in each set differ from each other by the dialog and expression of one or more characters.

[0015] Another aspect of the invention is a method for structuring scene sequences for interactive entertainment in which some of the acts can be viewed in a different order in the storyline depending upon decisions made by the interactive user. The overall storyline is produced to be delivered to a viewer in a plurality of acts containing potentially viewable scenes. In at least one of the acts, the viewer is presented alternative decisions that will determine an order in which subsequent acts will be presented, usually, but not necessarily, presented as a decision to be made for a character. The interactive viewer is enabled to make the decision. Each act that can be presented in a different order on the storyline has neutral scenes in which the content is not dependant upon the order in which the act is viewed, and also has sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed. When the order of an act is determined by the viewer's decision, the alternative scenes that are appropriate to the relative order in which the act is presented are selected from the sets of alternative scenes and interspersed with the act's neutral scenes.

[0016] Using the method described above makes it cost effective to include scenes of relatively high production costs in acts that can be experienced in different order. By producing most or all of the relatively high production cost scenes as neutral scenes, and producing alternative scenes with relatively low production costs to be interspersed with the neutral scenes, there is very little production cost penalty to allow the act to be viewed in different orders in the storyline.

[0017] Another related aspect of the invention, when the interactive viewer's decision can determine when a selectable order act will be presented, is to provide one or more sets of alternative connecting scenes for the beginning and/or finishing scene sequences. Each alternative connecting scene has content appropriate for the order in which the act is viewed. When the viewer makes a decision that determines the order of the act, the alternative connecting scene or scenes appropriate for that order are selected and viewed in the beginning and/or finishing scene sequence.

[0018] In one tangible form, the interactive entertainment may be embodied in a digital video storage medium. As with the aspects mentioned above, the interactive entertainment may comprise fixed and selectable order acts as well as neutral, variation and alternative scenes in order for the content and sequence of the story to vary in response to decisions made by a user while the story develops. In related tangible form, the interactive entertainment may by embodied in a digital video system.

[0019] In other tangible forms, the interactive entertainment may be embodied as digital text and/or digital images on a storage media and as an entertainment system wherein reader decisions link to appropriate text and image scenes.

[0020] Once in a tangible form, the interactive entertainment may be transmitted to a viewer using a variety of delivery modes. For example, the interactive entertainment may be delivered over a computer network such as the

Internet or it may be transmitted using a terrestrial broadcast, as well as cable and satellite television systems. The transmitted entertainment may also be recorded or stored by the viewer so that they may enjoy the interactive entertainment at their leisure.

[0021] In the methods and articles described above, the entertainment may be structured to permit decisions to be made by more than one viewer. The interactive entertainment can be structured so that multiple viewers can independently make decisions that change the story and thus interact directly or indirectly with each other. For example, each viewer might control a separate character. Decisions made by one viewer for that viewer's character can vary the storyline and may impact the choices available to other viewers. Linking scenes are used to bring the decision paths of two or more interactive viewers back to a common point on the storyline, and variation scenes would still be used to track the repercussion of selected decisions past linking scenes. When the entertainment is in embodied in digital electronic format, the interactive viewers need not be at the same location.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] For purposes of illustrating the invention, the drawings show forms that are presently preferred; it being understood, however, that this invention is not limited to the precise arrangements shown in these drawings.

[0023] **FIG. 1** is a flow chart showing a prior art "Christmas Tree" structure of branching points and story paths for interactive games and books.

[0024] **FIG. 2** is a flow chart showing a prior art cascade structure of branching points and scenes that use a linking scene to converge the decision paths back to the storyline at the end of an episode.

[0025] **FIG. 3** is a flow chart of the acts in an interactive entertainment using an embodiment of the present invention in which selectable acts can be viewed in different order based upon a user decision, while other acts remain in a fixed relative order.

[0026] **FIG. 4** is a flow chart showing the scenes and scene sequences that make up the first or "introduction" act shown in **FIG. 3**, wherein interactive decision points provide different possible paths through the act and all of the possible paths eventually leading to a neutral content linking scene and a set of variation scenes immediately following the linking scene, the variation scenes having content that is related to the apparent consequences of certain decisions made before reaching the linking scene.

[0027] **FIG. 5** is a flow chart showing the scenes and scene sequences that make up the fourth, or "lunch" act of the storyline shown in **FIG. 3** which includes two linking scenes entitled "Mutual Attraction" and "Diedre Explains."

[0028] **FIG. 6** is a flow chart showing the neutral and variable scenes of one of the selectable acts shown in **FIG. 3**, the "Old Mill" act, as it would be structured if viewed as "Day 1" based upon a user decision.

[0029] **FIG. 7** is a flow chart showing the neutral and variable scenes of the same "Old Mill" act as it would be structured if viewed as "Day 2" based upon a user decision.

[0030] **FIG. 8** is a flow chart of an interactive entertainment that has multiple selectable acts that can be viewed in different relative orders determined by user decisions.

DETAILED DESCRIPTION OF THE INVENTION

[0031] In composing an interactive entertainment, the writer must be aware that the viewer's decisions determine the scene sequences that are presented to the viewer, and thus make it difficult to compose the entertainment in a manner that adheres to an overall storyline. One way to achieve some control of the storyline is to present the entertainment in a structure where decision points and scene sequences converge together to a common linking scene at various points in the story. Linking scenes may be located anywhere in the storyline and may be used to converge together any number of decision points and scene sequences.

[0032] When the media of an interactive entertainment is live acting captured on digital video, or a computer simulation of live acting, it is helpful to use the terminology of a traditional stage play. The fundamental units of a stage play are the "scenes", or units of continuous related action in which the setting is generally fixed. In the traditional stage or screenplay, the scenes are presented in a fixed sequence. In the interactive mode, however, there are many possible scene sequences. When the viewer is required to make a decision at a "branching point", his decision elects between two or more possible scenes or series of scenes. Hence, a scene sequence is a series of scenes that begins at a branching point and ends at the next branching point.

[0033] A large related group of scene sequences and branching points, generally related to each other by some common element, such as cast, location or incident, may be referred to as an "act", again similar to traditional stage play wherein the acts are the major divisions of the play. In describing this invention, the acts are broken into two groups—fixed acts and selectable acts. A fixed act is an act whose order or location within a storyline is fixed. A selectable act is not fixed and the order in which it is presented is determined by user decisions.

[0034] If the entertainment were presented in electronic book format or paper book format, it might be more intuitive to refer to the scenes as "pages" of text or of text combined with digital images, and to describe the acts as "chapters" and the scene sequences as "page sequences." If the entertainment were presented in periodic serial format, similar to a television series, it might be conceptually useful to describe a grouping of acts as an "episode" for each periodic release. In that case, there may be fixed episodes and selectable episodes, similar to fixed acts and selectable acts. The fixed episodes and selectable episodes may each comprise fixed acts and selectable acts, as desired. Since the preferred format is digital video, however, the invention will be described in the terminology of scenes and acts, with the understanding that these terms do not limit the invention to a single medium or to a particular manner of distribution or to any particular unit or units of entertainment

[0035] Unlike traditional entertainment, an interactive entertainment could potentially enable the user to determine the order in which some entire acts are presented. **FIG. 3** shows such an interactive entertainment, wherein two

"selectable" acts can be viewed in different order based upon a user decision, while the other acts remain in a fixed relative order.

[0036] The subject of the interactive entertainment of **FIG. 3** is a police drama involving art theft, in which the main character (and the interactive decision-maker) is a police detective named Kelso. The storyline line or "arc" of the story involves Kelso making what he believes is a terrible mistake in the introductory act (**100**), and thereafter seeking redemption by capturing the thieves. Woven into the storyline are dramatic encounters with the criminals and interpersonal relations with his partners and superiors.

[0037] The Kelso drama described hereafter is an interactive entertainment made with a digital video camera. The individual scenes are stored on compact disk (CD), although any suitable digital video storage medium such as DVD, computer hard drive, broadcast file or server file could be used for storage of the entertainment. The programming of scene sequences, branching points, display of alternative decisions to prompt the viewer, and decision buttons for detecting the user's decisions may be done with software such as an executable projector software package, such as MacroMedia Director™. The entertainment may be played on a computer having a CD drive and viewer software such as Apple QuickTimer™.

[0038] The Kelso storyline, shown in **FIG. 3**, includes selectable acts and fixed acts. Most of the acts (**100-108**, **114**, **116**, and **122**) are fixed acts that will always appear in the same order. Two acts (**110** and **112**) are selectable acts. At the end of the second act (**102**), the user must select between Kelso going to search the mansion or going to search the old mill. If the user selects the mansion, he will, upon completion of fifth act (**108**), be presented neutral scenes of the mansion act with alternative scenes that are appropriate for searching the mansion before the old mill being interspersed with the neutral scenes as described hereafter. This set of common neutral scenes interspersed with alternative scenes make the "day one" variation (**110***a*) of the mansion act.

[0039] The same choice, made after the second act (**102**), of going to search the mansion also determines, although it is not apparent to the user when making the decision, that Kelso will go to the old mill after he is discharged from the hospital in the eighth act (**116**). At that time the user will be presented neutral scenes of the old mill act interspersed with the alternative scenes that are appropriate for searching the old mill after leaving the hospital. This set of common neutral scenes interspersed with alternative scenes make the "day two" variation (**112***b*) of the old mill act.

[0040] Conversely, if the user's decision after the second act (**102**) had been to search the old mill, the user would have been presented common neutral scenes interspersed with the appropriate alternative scenes to make the day one version (**112***a*) of the old mill act. After Kelso is discharged from the hospital in the eighth act (**116**), the user would be presented neutral scenes of the mansion act interspersed with the appropriate alternative scenes to make the "day two" variation (**110***b*) of the mansion act.

[0041] Referring now to **FIG. 4**, the scenes that make up the introductory act (**100**) form a cascading structure (indicated generally by reference numeral **150**). The act begins with two scenes (**152**, **154**) leading to a branching point having two possible decisions (indicated by ovals **156***a*, **156***b*). Within each box representing a scene, and each oval representing a possible decision, is a concise description of the content of the scene or a summary of the decision. The first scene (**152**) contains narrative between Kelso and his partner in a hallway outside of an art gallery with a search warrant for premises. In the second scene (**154**), they burst inside, search the gallery and find it unoccupied, but then hear noises of someone approaching another entrance. They hide from view and observe two suspects enter the gallery. At this point, the viewer is prompted to make Kelso's decision between staying hidden and observing the intruders (**156***a*) or immediately attempting to arrest them (**156***b*).

[0042] The decision alternatives and the user's vicarious decision for Kelso are communicated through the interactive system by an appropriate communication means. For example, when using a computer with CD drive to operate the interactive entertainment described above, the means for prompting the viewer is an on-screen text display of the choices (**156***a* and *b*), and the means for communicating the viewer's decision is a mouse click on a button associated with the choice. Alternately, the choices could be announced by voice, or the viewer might communicate the decision by a microphone and software to recognize the voice command. If the entertainment were presented in print, the decision could be implemented by turning to different numbered pages. If the entertainment were in electronic book or interactive network format, the decision could be implemented by a signal that triggers a hyperlink to a different scene or digital page.

[0043] Returning to **FIG. 4**, assume the user decision is to "just observe" (**156***a*). for this choice the entertainment is programmed to move forward to a scene (**158**) showing another thief, this one the leader, entering the art gallery with the gallery owner being held at gunpoint. This scene concludes by prompting another user decision in which the choice is between continuing to wait (**160***a*) or now attempting to make the arrest (**160***b*)). If the user's decision is to "wait longer" (**160***a*), the story moves forward in a two-scene sequence (**162**, **164**) in which the head bad guy kills the gallery owner (**162**), followed by Kelso's botched attempt to make an arrest that results in Kelso's partner (Harry) getting wounded by gun shot and the bad guys escaping (**164**). This sequence leads to a linking scene (**166**) in which Kelso is shown calling for help and writing down the license plate number of the getaway car.

[0044] As can be seen in **FIG. 4**, all of the other branching points and potential decisions (**156***a-b*, **160***a-b*, **170***a-b*) would have produced scene sequences that eventually converge at the linking scene (**166**), which has a neutral content that does not depend upon the specific alternative decisions that were chosen in arriving at the linking scene. In the prior art, the consequences that are unique to specific decisions would be forgotten at the linking scene and only content that is common to all of the decision paths would be carried past the linking scene. However, in an interactive entertainment using this invention, the consequences of decisions the user made for Kelso leading to the linking scene (**166**) may be carried into or past the linking scene. In **FIG. 4**, the three branching points (**156**, **160**, and **170**) each require the user to select one of two possible decisions. Depending on which decisions the user made on behalf of Kelso prior to reaching

the linking scene (**166**), the entertainment may be programmed to display an appropriate scene from a set of variation scenes at any point after the linking scene to reflect the consequences of those decisions.

[**0045**] For example, in the path described above, the user made choices resulting in scene sequences in which the gallery owner was killed. As a result, a variation scene (**180***a*) is displayed where Harry is angry and blames Kelso's bad decision for the outcome. However, if the user had made choices causing the gallery owner to survive, a different variation scene (**180***c*) from the set (**180***a-c*) would be displayed following the linking scene (**166**) that contains dialog and expression by Harry showing that he is pleased with Kelso's work.

[**0046**] To specifically illustrate how consequences of decisions made prior to a linking scene may be reflected in scenes subsequent to the linking scene, reference is again made to decision point (**156***a, b*). At that point, the user may select between "just observe" and "arrest them." If the user selects just observe **156***a*, the story progresses as shown and the user encounters another decision point **160***a, b*. If the user selects wait longer (**160***a*), the gallery owner ends up being killed by the bad guys. To reflect the user poor decision making which resulted in the gallery owner being killed, a scene **180***a* positioned past the linking scene (**166**) is displayed that properly reflects the user's poor decisions. Therefore, it can be seen that if a user selects decisions **156***a*, and **160***a* while navigating towards linking scene (**166**), they will encounter scene (**180***a*), located past the linking scene, that reflects decisions (**156***a*) and (**160***a*). In similar fashion, if a user made decisions (**156***b*) and (**170***a*), they would encounter scene (**180***b*)). If a user made decisions (**156***b*) and (**170***b*)), the user would encounter scene **180***c*. It is important to note that while the variation scenes related to decisions (**156**), (**160**) and (**170**) are shown immediately following the linking scene (**166**) which converges the particular sequence of scenes shown in **FIG. 4** together, the variation scenes and therefore the repercussions of the decisions to which the variation scenes relate, may be presented at any point in the storyline subsequent to linking scene (**166**).

[**0047**] Apart from variation scenes to carry the consequences of decisions past a linking scene, the introductory act (**100**) is structured around neutral scenes where no matter what choices the viewer makes, several of the same things happen. For example, no matter what choices are made, the gallery owner is held hostage, Harry gets wounded, the bad guys escape, and Kelso copies down the license plate number. These are essential elements of the "terrible mistake" that Kelso believes he has made, and are used to drive the story forward beyond the linking scene (**166**) and into the next act **102**. The viewer's decisions have not changed those essential elements. However, the interactive viewer's decisions have determined the outcome of other significant events (i.e., whether the gallery owner is killed or rescued) that should affect the reactions of other characters not only in the introductory act but also in subsequent acts.

[**0048**] In order to maintain the storyline while carrying the apparent consequences of specific decisions past neutral linking scenes, more sets of variation scenes can be related to neutral scenes later in the story line, and when a related neutral scene is reached, the appropriate variation scene can be interspersed into the scene sequence to make the sequence have a subtle variations. Variation scenes may be interspersed at any point in the storyline to carry the apparent consequences of a decision or combination of decisions past linking scenes into later points in the story.

[**0049**] In the variation scenes (**180***a, 180b*), and **180***c*) of the introductory act, Harry either blames Kelso for waiting too long until the owner is murdered (**180***a*), berates Kelso for not having called for back-up (**180***b*)), or compliments Kelso for decisive action saving the owner's life (**180***c*). These variation scenes in the scene sequence reflect the apparent consequences of the possible decisions the viewer could have made for Kelso. In later acts in the storyline, i.e., acts other than the act in which the decisions were made, other characters might also react differently to Kelso, depending on whether the gallery owner was killed or rescued in the introductory act. At the end of the introductory act, however, the essential, action-oriented elements of the story have not changed regardless of the decisions made and the hindsight wisdom of those decisions. Thus, the creator of the storyline still has control of its narrative arc, but is given the ability to carry along the arc subtle content that is biased to specific decisions.

[**0050**] An important aspect of this structuring of variable scene sequences is its efficiency and cost reduction, especially from a film or video perspective. When using live actors, each variation scene in a set can be essentially identical in its cast, props, camera set-up and overall content, but the actors can use different dialog and expression as appropriate to reflect the previously made decisions. Each variation scene (**180***a-c*) shown in **FIG. 4** can be produced using the same set and camera angles, only Harry's dialog and expression change.

[**0051**] While in the above example the variation scenes (**180***a-c*) serve as the finishing scene of the introductory act (**100**) in the sense that the story progresses directly from one of those variation scenes to the first scene of the next act (**102**), the variation scenes do not have to be the final scene or be in the final scene sequence of an act, nor is there any limitation to how many variation scenes an act may have. Variation scenes can be selectively interspersed into story at various points, including later acts, to reflect the consequences of decisions made by the user. In addition, while most decision paths will eventually converge to a linking scene, not all have to converge. The branch points can be constructed to converge through most of the storyline and then eventually diverge to separate points, for example, to make different endings.

[**0052**] To farther illustrate how decision consequences are carried past linking scenes, the lunch act (**106**) of **FIG. 5** is shown. **FIG. 5** begins with one of three variation scenes (**200***a-c*) determined by a decision the user made for Kelso in the preceding act. In the earlier act, Kelso must decide whether to accept an invitation to lunch by an attractive female co-worker (Diedra) when he had earlier committed to a lunch date with his girlfriend (Jill). Specifically, the user must decide on behalf of Kelso whether to cancel with his girlfriend and go with Diedre, invite Diedre to go to lunch with him and his girlfriend, or blow off Diedre and just keep his date with his girlfriend. Regardless of Kelso's decision, Diedra meets Kelso in the restaurant in the set of variation scenes (**200***a-c*) that relate to those decisions, but the interaction between them varies depending upon the decision made earlier.

[0053] These alternative variation scenes (**200***a-c*) in the fourth act (**106**) all return to the storyline in a linking scene (**206**), which contains neutral content of a mutual attraction between Diedra and Kelso. After the linking scene (**206**), the user must decide on behalf of Kelso whether and when to back off or to move closer and ultimately kiss Diedra. These decisions and the decision made in the previous act regarding whether to accept the lunch invitation are jointly taken into account in determining how Jill reacts when she enters the restaurant. Jill's various reactions are reflected in the two sets of variation scenes (**202** and **204**) that can be interspersed into the scene sequence. Jill's reaction varies not only as a result of decisions (**208***a, b*) and (**210***a, b*) but also Kelso's decision regarding the lunch invitation. Note, decisions (**208***a, b*) and (**210***a, b*) are made after linking scene (**206**) while the decision regarding the lunch invitation was made before linking scene (**206**). If Kelso kisses Diedra, Jill will enter the restaurant during the kiss and a particular variation scene (**240***a,* **240***b*) or **240***c*) will be displayed in which Jill is extremely angry about the kissing but chastises Kelso in a way that is consistent with whether Kelso lied to her about being too busy for lunch in the previous act. Therefore, two sets of decisions are reflected in that set of variation scenes. For example, if Kelso accepted Diedra's offer for lunch and cancelled his date with Jill in the previous act, a variation scene (**204***a*) is interspersed wherein Jill acts betrayed by both the kiss and the canceled date.

[0054] To provide a specific example of which decisions are related to which variation scenes, reference is again made to **FIG. 5**. If Kelso cancelled with his girlfriend variation scene (**200***a*) is presented. If Kelso continues from there and proceeds to make decisions (**208***a* and **210***a*), variation scene (**204***a*) is shown. Scene (**204***a*) is a variation scene wherein Jill is extremely angry because not only did Kelso cancel their date, Jill finds him kissing another woman. Therefore, variation scene (**204***a*) includes Jill expressing her extreme anger in a manner consistent with the fact that Kelso cancelled their lunch. The other variation scenes of **FIG. 5** similarly depend on more than one decision and are displayed accordingly. For example, if Kelso kept his date with Jill and made decision (**208***b*), variation scene (**202***c*) is displayed where Jill is angry because she saw Kelso flirting with Diedre and will express her anger in a manner consistent with the fact their date had not been cancelled. For instance, she may say "I am glad you found something to keep you occupied until I arrived." If, on the other hand, Kelso had cancelled their date and decided not to kiss Diedre, variation scene (**202***a*) is presented where Jill may say "I thought you weren't hungry." Furthermore, whether the user encounters scene (**212***a* or **212***b*) also depends on the previous plurality of decisions made by the user. For example, if Kelso cancelled the date and was caught kissing Diedre, scene (**212***a*) may be displayed. If Kelso kept the date and was able to refrain from actually kissing Diedre while flirting with her, scene (**212***b*) may be displayed.

[0055] This use of variation scenes extends the sophistication of the interactive story structure, as any number of variation scenes may be used. The methodology, however, allows the story's overall thematic plot points to be delivered, creating a single, coherent narrative arc. The interactive user is provided with frequent opportunities to choose his character's actions, which affects how the story unfolds and appears to influence the actions of the other characters. The user gets the rewards of appreciating a good story unfold smoothly along a coherent narrative arc, rather than in a disjointed and arbitrary manner, as in the prior art. The user also gets the vicarious thrill of deciding how a character behaves or exercises judgement and then seeing the consequences of the decisions, including how other characters respond

[0056] While the ability to vary the response of other characters past a linking scene is a major advantage, other apparent consequences of decisions can be carried past a linking scene. For example, if the consequence of a possible decision is the loss of a piece of equipment, such as a gun or radio, the variation scenes in a set can reflect a handicap of either having or not having the equipment.

[0057] It is also possible to create a more satisfying narrative experience when a main, action-oriented storyline can be delivered in a controlled sequence, but the emotional subtilities are allowed to vary. This structure means that users will reach common points on the storyline, but how they (and the story's characters) feel about the experience may be very different, based on how they behaved. For instance, if a user consistently made choices that were opportunistic and greedy, all the other characters might despise that user's character by the end of the story. Conversely, if the user's decisions were brave and selfless, then other characters during the story might praise the user's character.

[0058] As described above, the effect of decisions in one act may be carried over into later acts, and can be accumulated with the effects of other decisions, to determine which variation scene will later be viewed. Another example of slightly varied subsequent scenes would be the progress of a possible romantic interest between two characters in a mystery story. As the story evolves, these characters could grow either fonder or angrier with each other, depending on choices made by the user(s). Regardless of whether the characters wind up loving or hating each other by the end of the story, the main, action-oriented storyline would be exactly the same. The characters would visit the same locations, interact with the same sets of characters, and arrive at the same conclusion to the mystery. What would be different is the dialog between two characters in variations of some scenes, reflecting how they felt about each other at the particular time as a result of decisions made earlier.

[0059] The storylines of the interactive entertainment shown in **FIGS. 3, 8** and **9** allow users to make choices which determine the relative order in which they view some of the acts. As can be seen in **FIGS. 3, 8** and **9**, an interactive story may contain a number of acts that may vary in the order in which they are displayed as well as a number of acts that are displayed in a particular order. The acts that may vary in the order in which they are displayed may be referred to as selectable acts. The acts that are displayed in a particular order may be referred to as fixed acts.

[0060] **FIG. 6** illustrates the combination of neutral and alternative scenes that make up the selectable old mill act (**112***a*) if the user elects to search it, instead of the mansion, in his decision at the end of the second act (**102**). In the old mill act (**112***a*), alternative scenes are interspersed among neutral scenes to reflect the order in which the act is viewed. The content of these alternative scenes reflects the order in which a selectable act is viewed. Variation scenes may also

be interspersed, as described earlier, to reflect character reactions to the apparent consequences of previous decisions.

[0061] In this order selectable act (**112***a*), the initial scene (**300**) is a fixed neutral scene that appears in the old mill act whether it is viewed in the day one order (**112***a*) or the day two order (**112***b*). The next scene (**302***a*), however is an alternative scene that is interspersed at this point to reflect the order in which the act is being viewed. When the old mill is searched on day one, the person accompanying Kelso is Diedra. Consequently, the two alternative scenes where Diedra appears (**302***a*, and **316***a*) are interspersed into the act. The rest of the scenes, **300**, **304-314**, and **318-320** are neutral scenes that can be displayed regardless of order in which the act is viewed.

[0062] If the user had decided to search the mansion first, and therefore is required to visit old mill after the hospital act, the "day two" version of the old mill act (**112***b*) would be displayed as shown in **FIG. 7**. In this version, two different alternative scenes (**302***b* and **316***b*) are interspersed into the neutral scenes to show that Kelso and his partner Harry are together at old mill.

[0063] All of the alternative scenes in a set that the user may or may not view can be made with essentially the same set and camera positions, and can use the set and camera positions of the common and linking scenes that they are associated with. For shooting film or digital video, less than 10% of the time is actually spent shooting the actors speaking their lines. The remainder of the time is spent setting up lights, camera angles, microphones, props and the like. To make the production of an interactive entertainment as efficient as possible, the variation scenes in a set and the alternative scenes in a set can share the same set-ups, and vary only the actors, action and/or dialog. Working this way, it is possible to shoot all the film/video needed for an interactive story at a cost that is only 20 to 30 percent greater than a traditional linear story. It is much less expensive to create alternative scenes within the same settings than it is to create completely unique settings for scenes in diverging story paths, as is required with the traditional Christmas tree structure.

[0064] This method of introducing alternative scenes into the scene sequencing can also be used to ensure that the interactive user always gets to participate in certain "high value" scene sequences, regardless of his decisions. For example, if the overall story plot includes a high adventure scene sequence such as a car chase in a city, producing the actual chase content may be very expensive in relation to the acting and narrative component edited into it. Because it is a high adventure scene sequence, the interactive user should experience it at some point, and the writer or producer will structure decision points such that some decision will eventually launch the user into the high value sequence. With the user making choices that determine the relative order of acts, however, he may get to the chase scene sequence earlier or later in the overall story. The chase scene sequence can be made to appear appropriate to the time when it is experienced by producing several sets of alternative scenes to be interspersed with fixed high value scenes, and interspersing into the sequence the alternative scenes most appropriate to the timing and prior experience leading to the chase module. For example, the chase can be made of a scene sequence in which the exterior scenes are in fixed order, but can have interspersed among them alternative interior or dialog scenes that are appropriate for the relative order in which the chase is encountered.

[0065] In the story line (**400**) of **FIG. 8**, the selectable acts are the mansion (**404**), the art museum (**414**) and the city park (**424**). The story begins with an introductory act (**402**) that culminates in a finishing scene (**403**). In this scene is a branching point with three possible decisions, each leading to a particular one of the three selectable acts (**404**, **414**, **424**). If the mansion act (**404**) is selected, then at its conclusion, the user must then decide between the art museum act (**414**) and the city park act (**424**). If the user decides on the art museum (**414**), then at its conclusion, the storyline continues immediately into the city part act (**424**).

[0066] While making acts selectable helps make more efficient use of the story material, it creates a problem for the scenes within the selectable acts. If a selectable act can appear either early or late in a story, it important that there is a way to insert content into the scenes that fits sensibly at that point of the storyline. The method used is to deconstruct the narrative content from the location/action by sets of alternative scenes. By deconstructing the narrative content from certain scenes in a sequence, such as the car chase, it is possible to efficiently produce different versions of the sequence. Most of the sequence, including all of the expensive exterior shots, would be exactly the same.

[0067] At a more advanced level of deconstruction, actors can be filmed separately from their backgrounds, using either a blue or green screen behind the actor. The desired background scenery can then be matted in behind the foreground image. Based on viewer decisions, a variety of different backgrounds could be matted into the same foreground scene. This process is an extension of the order-selectable act technique. An example might be two characters in a city setting. The characters could have an entire set of potentially viewable dialog scenes filmed on blue screen, and associated in scene sequences between branching points for decisions they might make, such as which direction to pick at an intersection, whether to enter a building, and so forth. Different background scenery would be matted into the backgrounds of the dialog scenes in the alternative scene sequences. The result would be a seamless sequence of two characters moving around a city, along whatever geographic path the interactive viewer(s) choose.

[0068] An alternate embodiment of the invention involves creation of stories where different users can control two or more characters. Returning to the story line shown in **FIG. 3**, one user might control the detective while another user controls the detective's male partner. A third user might control the female partner. All that is necessary is to build the scene sequences and decision points from multiple perspectives, and then make the branching structure eventually lead to common linking scenes to return to the storyline. Sets of variation scenes can be created to carry the apparent consequences of certain decisions made for each interactive character past the linking scene.

[0069] The other user(s) participating in the same story might be physically present in the same location, or they might be in different locations. The other user(s) might even have absolutely no knowledge of each other, except through the selected behaviors of the characters that each is control-

ling. When the entertainment is in digital electronic format, public or private network connectivity would allow several remote users to communicate their decisions. The interactive viewers could make their decisions autonomously, or alternatively it would be possible to provide video, voice, and/or text communication channels so that they could discuss the story and their decisions.

[0070] While the style of entertainment described above was a drama, other styles are suited for interactive participation. One is the "game" structure where the object is to outsmart or overpower obstacles to achieve a goal. The obstacles may be in the form of other characters, or something inanimate, such as a puzzle to be solved.

[0071] The invention may include a medium for storing, delivering or presenting the interactive entertainment but is not limited to any particular type of medium. A preferred medium is digital video with software-enabled decision prompts and alternative scene selection resulting from the decisions made. In this medium the story can be distributed on CD, DVD or other digital storage devices, or down loaded from or streamed over various communications networks.

[0072] Where the interactive entertaimment is distributed on a digital storage device such as, for example, a CD or DVD, the viewer may enjoy the interactive entertainment using a digital video player or any other device or combination of devices capable of interactively presenting digital video. For example, a general purpose computer and monitor may be used, as can a game player and a television, a set-top box having a microprocessor and a television, a personal video recorder with digital storage capability and a television, a computer and a television, a television with built-in computing capability, or a cable television system having a computer located at its head-end and a television.

[0073] Where the interactive entertainment is downloaded or streamed over various communications networks, it may delivered directly to a storage device in a person's home or otherwise. The interactive entertainment delivered over a communications network may be enjoyed in real time or stored on the storage device to be enjoyed at the user's convenience. The interactive entertainment may be transmitted via digital cable television, digital terrestrial broadcast television, digital satellite television or a computer network such as an intranet or the Internet. Where the interactive entertainment is transmitted via digital cable television, digital terrestrial broadcast television or digital satellite television, it may delivered over a broadcast network to a local storage system. Once the download or transmission is complete, the user may play the interactive entertainment at his convenience. In one embodiment however, the downloaded or transmitted interactive entertainment may be limited to a fee-based predetermined number of viewings.

[0074] The invention is similarly not limited to presenting interactive stories, but instead may be used to present games or educational materials. Furthermore, the interactive entertainment may be embodied in digital text or digital text and images. The methods described herein could also be used in print or electronic text and images, or with conventional movie film or VHS. The invention may be embodied in still further specific forms without departing from the spirit or essential attributes thereof.

I claim:

1. A method for structuring scene sequences for interactive entertainment, the method comprising the steps of:

(a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer;

(b) delivering some of the scenes to the viewer as branching points at which alternative decisions are presented that will determine the next scene sequence to be presented to the viewer;

(c) for each alternative decision at a branching point, having available to present to the viewer a scene sequence corresponding to the decision;

(d) enabling the viewer to make one of the alternative decisions;

(e) in response to the viewer's decision, presenting the scene sequence that corresponds to the decision;

(f) structuring the branching points and their related scene sequences such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene;

(g) for selected decisions made prior to a linking scene, producing one or more sets of variation scenes that introduce content that appears to be related to the consequence of the particular decision made, each set of variation scenes being associated with a scene that is viewable after the linking scene; and

(h) when the viewer is brought to a scene sequence that contains a set of variation scenes, interspersing into the scene sequence the variation scene from the set that is related to the particular decision made.

2. The method of claim 1, further comprising the step of producing the variation scenes in a set with essentially the same characters and props, such that the variation scenes in a set differ from each other by the dialog and expression of at least one character.

3. The method of claim 1 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of

(a) delivering some of the scenes to each interactive viewer as branching points at which alternative decisions are presented that will determine the next scene sequence to be presented; and

(b) enabling different interactive viewers to make at least one of the alternative decisions.

4. A method for structuring scene sequences for interactive entertainment, the method comprising the steps of

(a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer in a plurality of acts, each act containing potentially viewable scenes;

(b) in at least one of the acts, presenting to the viewer alternative decisions that will determine an order in which at a subsequent act will be presented;

(c) enabling the viewer to make one of the alternative decisions;

(d) in each act that can be presented in a different order, providing neutral scenes in which the content is not dependant upon the order in which the act is viewed, and providing sets of alternative scenes in which the content is dependant upon the order in which the act is viewed;

(e) prompting the viewer to make one of the alternative decisions that will determine the order of a subsequent act;

(f) presenting to the viewer, in the act determined by his decision, neutral scenes of the act interspersed with alternative scenes that are appropriate to the relative order in which the act is presented.

5. The method of claim 4, in which the neutral scenes include scenes of relatively high production cost in relation to the alternative scenes.

6. The method of claim 4 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of;

(a) presenting to each interactive viewer alternative decisions that will determine an order in which a different subsequent act will be presented; and

(b) enabling each interactive viewer to make at least one of the alternative decisions.

7. A method for structuring scene sequences for interactive entertainment, the method comprising the steps of:

(a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer in a plurality of acts, each act containing potentially viewable scenes;

(b) in at least one of the acts, presenting to the viewer alternative decisions that will determine an order in which a subsequent act will be presented;

(c) enabling the viewer to make one of the alternative decisions;

(d) in each act that can be presented in a different order, providing alternative connecting scenes leading into and out of the act;

(e) prompting the viewer to make one of the alternative decisions that will determine the order of a subsequent act;

(f) presenting to the viewer, in the subsequent act determined by his decision, the alternative connecting scenes that are appropriate to the order in which the act is presented.

8. The method of claim 7 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of;

(a) presenting to each interactive viewer alternative decisions that will determine an order in which a different subsequent act will be presented; and

(b) enabling each interactive viewer to make at least one of the alternative decisions.

9. An interactive entertainment embodied in a digital video storage medium and having an overall storyline to be delivered to a viewer, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes;

(b) some of the scenes defining branching points of the entertainment by presenting alternative decisions which must be made by the viewer;

(c) for each alternative decision at a branching point, a sequence of scenes corresponding to the decision;

(d) the branching points and their related scene sequences being structured such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene; and

(e) for selected decisions made prior to a linking scene, one or more sets of variation scenes that introduce content that appears to be related to the consequence of the particular decision made, each set of variation scenes being associated with a scene that is viewable after the linking scene.

10. An interactive entertainment system including, in combination, the digital video storage medium of claim 9, and a digital video player having:

(a) means for enabling the viewer to make the alternative decisions, and

(b) software for presenting the scene sequences that corresponds to the viewer's decisions, for identifying when the viewer is brought to a scene sequence that contains a set of variation scenes, and for interspersing into that scene sequence the variation scene from the set that is related to the particular decision made.

11. An interactive entertainment system as in claim 10, wherein the digital video player is a general purpose computer and monitor.

12. An interactive entertainment system as in claim 10, wherein the digital video player is a game player and television.

13. An interactive entertainment system as in claim 10, wherein the digital video player is a set-top box and a television.

14. An interactive entertainment system as in claim 10, wherein the digital video player is a personal video recorder having digital storage capability and a television.

15. An interactive entertainment system as in claim 10, wherein the digital video player is a computer and a television.

16. An interactive entertainment system as in claim 10, wherein the digital video player is a television having computing capability, wherein the television is adapted to present digital video to a user.

17. An interactive entertainment system as in claim 10, wherein the digital video player is a cable television system having a computer located at its head-end and a television.

18. An interactive entertainment embodied in a digital video storage medium and having an overall storyline to be delivered to a viewer, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes grouped as a plurality of acts;

(b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions that will determine an order in which a subsequent act will be presented; and

(c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed.

19. The interactive entertainment of claim 18, in which the neutral scenes include scenes of relatively high production cost in relation to the alternative scenes.

20. An interactive entertainment system including, in combination, the digital video storage medium of claim 18 and a digital video player, comprising;

(a) means for enabling the viewer to make the alternative decisions that determine the order of the selectable-order acts; and

(b) software for presenting to the viewer, in the acts determined by his decision, the act's neutral scenes interspersed with alternative scenes that are appropriate to the relative order in which the act is presented.

21. The interactive entertainment of claim 18, wherein the selectable-order acts have alternative connecting scenes leading into and out of the act.

22. An interactive entertainment system including in combination the digital video storage medium of claim 21 and a digital video player, comprising;

(a) means for enabling the viewer to make the alternative decisions that determine the order of the selectable-order acts; and

(b) software for presenting to the viewer, in the acts determined by his decision, the connecting scenes appropriate to the order in which the act is presented.

23. An interactive entertainment embodied in digital text, or digital text and images, on a storage medium and having an overall storyline to be delivered to a viewer, said interactive entertainment comprising:

(a) a plurality of potentially viewable pages;

(b) some of the pages defining branching points of the entertainment by presenting alternative decisions which must be made by the viewer;

(c) for each alternative decision at a branching point, a sequence of pages corresponding to the decision;

(d) the branching points and their related page sequences being structured such that essentially every set of page sequences determined by viewer decisions eventually reaches at least one linking page containing content that is not dependant upon the particular decisions made prior to the linking scene; and

(e) for selected decisions made prior to a linking page, one or more sets of variation pages that introduce content that appears to be related to the consequence of the particular decision made, each set of variation pages being associated with a page that is viewable after the linking page.

24. An interactive entertainment embodied in an electronic format and having an overall storyline to be transmitted to a viewer over a communications network, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes;

(b) some of the scenes defining branching points of the entertainment by presenting alternative decisions which must be made by the viewer;

(c) for each alternative decision at a branching point, a sequence of scenes corresponding to the decision;

(d) the branching points and their related scene sequences being structured such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene; and

(e) for selected decisions made prior to a linking scene, one or more sets of variation scenes that introduce content that appears to be related to the consequence of the particular decision made, each set of variation scenes being associated with a scene that is viewable after the linking scene.

25. The interactive entertainment of claim 24 wherein the interactive entertainment is transmitted to a viewer over a communications network in real time.

26. The interactive entertainment of claim 24 wherein the interactive entertainment is transmitted to a viewer over a communications network and stored on a storage device.

27. An interactive entertainment embodied in an electronic format and having an overall storyline to be transmitted to a viewer over a communications network, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes grouped as a plurality of acts;

(b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions that will determine an order in which a subsequent act will be presented; and

(c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed.

28. The interactive entertainment of claim 27 wherein the interactive entertainment is transmitted to a viewer over a communications network in real time.

29. The interactive entertainment of claim 27 wherein the interactive entertainment is transmitted to a viewer over a communications network and stored on a storage device.

30. An interactive entertainment embodied in an electronic format and having an overall storyline to be transmitted to a viewer over a broadcast network, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes;

(b) some of the scenes defining branching points of the entertainment by presenting alternative decisions which must be made by the viewer;

(c) for each alternative decision at a branching point, a sequence of scenes corresponding to the decision;

(d) the branching points and their related scene sequences being structured such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content

that is not dependant upon the particular decisions made prior to the linking scene; and

(e) for selected decisions made prior to a linking scene, one or more sets of variation scenes that introduce content that appears to be related to the consequence of the particular decision made, each set of variation scenes being associated with a scene that is viewable after the linking scene.

31. An interactive entertainment embodied in an electronic format and having an overall storyline to be transmitted to a viewer over a broadcast network, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes grouped as a plurality of acts;

(b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions that will determine an order in which a subsequent act will be presented; and

(c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed.

32. A method for providing interactive entertainment in periodic serial format, the method comprising the steps of:

(a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer in a plurality of periodic episodes, each episode containing potentially viewable scenes;

(b) in at least one of the episodes, presenting to the viewer alternative decisions that will determine an order in which a subsequent episode will be presented;

(c) enabling the viewer to make one of the alternative decisions;

(d) in each episode that can be presented in a different order, providing at alternative connecting scenes leading into and out of the episode;

(e) prompting the viewer to make one of the alternative decisions that will determine the order of a subsequent episode;

(f) presenting to the viewer, in the subsequent episode determined by his decision, the alternative connecting scenes that are appropriate to the order in which the episode is presented.

33. The method of claim 32 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of;

(a) presenting to each interactive viewer alternative decisions that will determine an order in which a different subsequent episode will be presented; and

(b) enabling each interactive viewer to make at least one of the alternative decisions.

34. An interactive entertainment embodied in a digital video storage medium and having an overall storyline to be delivered to a viewer, said interactive entertainment comprising:

(a) a plurality of potentially viewable scenes grouped as a plurality of periodic episodes;

(b) at least one of the episodes having a scene that presents to the viewer a at least one set of alternative decisions that will determine an order in which a subsequent episode will be presented; and

(c) each episode that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the episode is viewed, and sets alternative scenes in which the content is dependant upon the relative order in which the episode is viewed.

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