as an advertisement, news, stock quotes, electronic mail, a web page, a message service, a locator service or a hotel/casino service, a movie, a musical selection, a casino promotion and a broadcast event. Further, the windows may contain traditional casino games generated from 2-D objects.

[0132] The present invention is not limited to windows arranged in an essentially planar manner on the display screen, i.e. rectangular windows arranged side by or overlayered on top of one another. A 3-D interface may be employed where the game windows are arranged in 3-D geometric pattern. In one embodiment, the 3-D interface may be a virtual 3-D gaming environment used to organize gaming information for viewing by a game player. **FIGS. 8 and 9** are perspective drawings of a 3-D interface **800** for a gaming machine for one embodiment of the present invention.

[0133] In **FIG. 8**, six 3-D game windows are arranged on a display screen **802**. Five of the 3-D game windows, **804**, **808**, **811**, **812** and **814** are arranged in a cubic manner and one game window, **816**, is displayed on a surface essentially parallel to the display screen. The cubic arrangement of the windows may be generated by rendering an open box in a 3-D virtual gaming environment. The five sides of the box are each used as a game window. Next, the game information shown in each of the five 3-D game windows are rendered to the 5 sides of the box. Then, a virtual camera positioned directly above the box may be used to render the photograph displayed on the display screen **802**. With this approach any of the methods described above with regard to manipulating a virtual camera in a virtual camera in a 3-D gaming environment may be applied to the 3-D interface **800**.

[0134] In **FIG. 8**, game window **804** is used to display attract information, game window **814** is used to display a bonus slot reel game, game window **812** is used to display a slot game, game window **808** is used to display a multi-hand card game and game window **811** is used to display a gaming tutorial. The displaying of information in the 3-D interface **800** may involve multiple transformations and rendering in different game environments. For instance, the multi-hand card game may be rendered in a first gaming environment. Then, a virtual camera in the first gaming environment may be used to generate a photograph showing a portion of the multi-hand card game (e.g. 3-D to 2-D transformation). Then, the photograph may be rendered in the game window **808** in the 3-D interface virtual environment (2-D to 2-D transformation). Next, a virtual camera in the 3-D interface environment may be used to render a photograph including game window **808** which is displayed on at least one display screen on the gaming machine (3-D to 2-D transformation). Game information may also be directly rendered into game windows in the 3-D interface virtual environment. For instance, the attract information in game window **804** may be directly rendered in the 3-D interface virtual environment.

[0135] The information in each of the windows is mapped to a particular side of the cube in the 3-D interface gaming environment. In one embodiment, a user of the 3-D interface may be able manipulate the mapping of the game windows. For example, a user may be able to exchange the position of various game windows such as exchanging the position of windows **811** and window **812** (see **FIG. 9**). When the game windows are exchanged, the 3-D interface may appear to rotate or move in some manner and other game windows may appear on the display screen while other windows may move off of the display screen. As another example, when the mapping is changed, the game windows may be re-rendered with the game information in each of the windows swapped.

[0136] Game window **816** is used to convey game window information about active game windows on the display screen **802**. An "active game window" is a game window that may be operated actively by a user of the gaming machine. The user may use an input mechanism on the gaming machine such as a touch screen or mouse with cursor **803** to select a window for activation. In **FIG. 8**, the active game window is **811** which is being used to present a tutorial for playing a card game. Game **816** indicates that the tutorial is for "Pai gow poker." The user may move a cursor over different game windows in the 3-D game interface to obtain information about each game window. For instance, when the cursor **803** is moved from game window **811** to game window **812**, the information in the game information window **816** may change to indicate that game window **812** is a slot game.

[0137] In one embodiment, the game windows may contain shared information. For instance, the multi-hand card game window **808** may be a shared game where each of the three card hands is played by a different player and the players are competing against one another. Therefore, the game window **808** may be used to participate in a card game tournament but also engage in other activities while watching the activities occurring in the game tournament. As another example, two players may be able to compete in a game of checkers. In another example, the bonus game **814** window may display a bonus game that is triggered by the activities of multiple players linked together on different gaming machines. Further, the bonus game may be visible to each of the players participating in the bonus game.

[0138] The players playing the shared game may be participating via different gaming machines. To share the game, the gaming machines may be linked via a local area network, a wide area network or combinations thereof. A remote gaming device in communication with a group of gaming machines, such as game sharing server or a tournament game server, may also be used to enable game sharing between groups of gaming machines.

[0139] Updates of game windows may occur in a simultaneous manner. Thus, while a game player is using a first game window, information in other game windows may be updated. For instance, while the game player is watching the tutorial in game window **811** updates of the multi-hand card game window **808**, such as cards being dealt, may be occurring. As another example, a live video feed such as sporting event may be viewed in one of the game windows. As the live video feed is continually updated, the game player may play a game of chance in one of the other game windows.

[0140] In another embodiment, the multi-hand card game in the multi-hand card game window **808** may be a multi-hand poker game. The multi-hand poker game may be rendered in a 3-D multi-hand poker hand gaming environment. The number of hands rendered may range from 1 to a