GAME TABLE HAVING LED IN SIDEWALL

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An air cushion gaming table of the invention provides users with a score display that each player may simultaneously observe. The air hockey type gaming table of the invention includes a game surface, a wall surrounding the game surface for maintaining a game piece thereon, and an electronic display on the wall. The display may be located on a side wall so that both users may easily view the display during game play or multiple displays may be used, which would allow for the displays to be located on an end wall or corner member.
GAME TABLE HAVING LED IN SIDEWALL

FIELD OF THE INVENTION

BACKGROUND OF THE INVENTION

Typically, an air cushion game table includes a playing surface that is perforated to permit jets of air to pass through the playing surface for providing an air bed to facilitate low friction movement of a game piece, such as a puck, across an upper surface of the playing surface. Pressurized air is supplied from below the playing surface, which creates a multiplicity of closely spaced air jets emanating from the perforations in the playing surface. The table is bounded by side walls and end walls, which provide rebounding surfaces for the puck. Each player is provided with a pusher, which may be slid across the table surface and into contact with the puck. An automatic scoring system is sometimes provided to record the delivery of pucks into a goal. Several drawbacks associated with known air cushion tables include a tendency for the puck to occasionally exit the playing surface after a hard shot, awkwardly located automatic scoring displays and a lack of a suitable location for storing game components during periods of non-use or for storing other articles during gameplay.

Another drawback associated with air cushion game tables is related to displaying the score and other information to the players. Some tables provide each participant with a means to keep track of the score near each participant's playing end. However, this method does not allow each player the ability to monitor the other player's scoring system. Other tables are provided with a scoring module that is mounted on large supports that span over the center of the playing surface. The module is typically designed to approximate the appearance of scoring display units that are suspended over a real hockey rinks and basketball courts. A disadvantage with such a system adapted for use with air cushion game tables is associated with assembly hassles and shipping problems associated with the large supports.

SUMMARY OF THE INVENTION

The air cushion gaming table of the invention provides users with an electronic score display that each player may observe during game play. The electronic score display of the invention avoids large and unwieldy support structures typically associated with a suspended scoring display. The air hockey type gaming table of the invention includes a game surface, a wall surrounding the game surface for maintaining a game piece thereon, and a display on the wall. In one embodiment, the wall is made up of a side walls, end walls and an inside surface of corner pieces.

In a preferred embodiment the display is located on a side wall so that both users may easily view the display during game play. However, multiple display modules may be used, which would allow for the displays to be located on an end wall or corner piece so that the display could be easily seen when attention is directed towards an opponent's goal.

To avoid disrupting game play, the display preferably has a face that is flush with the wall. The display module of the display may be recessed in a base rail. The face of the display preferably forms an impact surface but may be located at a distance above the game surface by a height sufficient to allow the game piece to impact the wall without impacting the display.

The display may be in electrical communication with a switch that may be activated by a user or the switch may be an automatic goal switch incorporated into a goal for indicating a score.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Before explaining the present invention in detail, it is important to understand that the invention is not limited in its application to the details of the embodiments and steps described herein. The invention is capable of other embodiments and of being practiced or carried out in a variety of ways. It is to be understood that the phraseology and terminology employed herein is for the purpose of description and not of limitation.

Referring now to FIGS. 1 through 4, shown is an air cushion game table 10. Air cushion game table 10 includes a bottom panel 12 (FIG. 2) that defines a central passageway 14 (FIG. 3). Four support legs 16 communicate with the bottom panel 12 for supporting the game table 10. A plurality of longitudinal support members 20 (FIGS. 3 and 4) support game surface 24. Air flow passes through passageways 23 and into longitudinal air channels 22. Longitudinal support members 20 define longitudinal air channels 22 (FIGS. 3 and 4) between adjacent longitudinal support members 20.

Game surface 24 has a plurality of small openings 26 (FIG. 3) formed therein for allowing jets of air to flow through the game surface 24. The air jets provide an air cushion on an upper side of the game surface 24. The small openings 26 are located above the longitudinal air channels 22 (best seen in FIG. 3).

Referring now primarily to FIG. 1, game surface 24 is surrounded by side walls 28, end walls 30, and corner
members 32 for containing a puck 34 on the upper surface of game surface 24. Sidewalls 28 and end walls 30 are preferably topped with a rail 29 (FIGS. 1, 4). Rails 29 are preferably provided with an overhang 29a (FIG. 4). Overhang 29a assists in preventing puck 34 from exiting the playing area during play. Corner members 32 are preferably provided with curved rails 33 having a similar overhang. Goals 36 are located proximate each end wall 30 for receiving the puck 34. Goals 36 may be integral with end wall 30 or may be located on the game surface 24. A puck return tray 38 (FIG. 2) is located on an underside of the bottom panel 12 for delivering the puck 34 to a player after the puck 34 is delivered to a goal 36 by an opposing player.

Rails 29, 33 are preferably extruded from aluminum, although other suitable materials may be used. Rails 29, 33 are secured to a base rail 38 (FIG. 4) by a plurality of bolts 40 (FIG. 4). An apron 42 is provided to maintain a pleasing external appearance.

Walls 28 and 30 and corner members 32 preferably have a sufficient height above the game surface 24 to accommodate display 50 (FIG. 4). Display 50 is preferably has a face that is flush with a wall 28, 30 into which it is mounted. Display 50 is preferably spaced above game surface 24 by a height sufficient to allow puck 34 to impact walls 28 or 30 or corner members 32 without impacting display 50. However, if desired, display 50 may be provided such that display 50 forms an impact surface similar to other portions of walls 28, 30 and corner members 32. Display 50 is preferably an LED type display, although other display devices may be used. Display 50 may be used to display score, time remaining or other information. Preferably, display 50 may be activated by an easily accessible switch to which display 50 is electrically connected. The switch may protrude through rails 29, 33 at a location accessible by a user, e.g., near goals 36 or at a midpoint of rail 29. Additionally, display 50 may electrically communicate with a goal switch that is actuated by puck 34 entering a goal 36. Locating display 50 integrally with walls 28, 30 and/or corners 32 provides improved visibility for contestants by eliminating vision obstructing structure seen on some existing designs.

Corner members 32 or apron 42 proximate side-walls 28, 30 may be provided with a storage drawer 51. Storage drawer 51 may be provided with a door 52. Door 52 may be constructed of a plurality of slidably mounted segments, or may be of another construction. Storage drawer 51 is useful for locating playing equipment, such as puck 34 and pushers, when the table is not being used. Additionally, storage drawer 51 may be used to store personal items, such as keys and the like during gameplay.

While the invention has been described with a certain degree of particularity, it is understood that the invention is not limited to the embodiment(s) set for herein for purposes of exemplification, but is to be limited only by the scope of the attached claim(s) set forth herein. Additionally, Storage drawer 51 may be used to store personal items, such as keys and the like during gameplay.

What is claimed is:

1. An air hockey type gaming table comprising:
   a game surface;
   a wall surrounding said game surface for maintaining a game piece thereon, said wall having an inside surface adjacent to said game surface;
   an electronic display mounted on an inside surface of said wall; and
   wherein said display is visible to participants during gameplay.
2. The gaming table according to claim 1 wherein said wall comprises a side wall, an end wall and a corner piece.
3. The gaming table according to claim 2 wherein said display is on said side wall.
4. The gaming table according to claim 1 wherein a display module of said display is recessed in a base rail.
5. The gaming table according to claim 1 wherein said electronic display has a face flush with said inside surface of said wall.
6. The gaming table according to claim 5 wherein said face forms an impact surface.
7. The gaming table according to claim 5 wherein said face is spaced above said game surface by a height sufficient to allow said game piece to impact said wall without impacting said display face.
8. The gaming table according to claim 1 wherein said display is in electrical communication with a switch.
9. The gaming table according to claim 8 wherein said switch may be activated by a user.
10. The gaming table according to claim 8 wherein said switch is a goal switch incorporated into a goal for automatic activation in the event of a score.