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2,822,176

AERIAL DISK

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Fig. 1

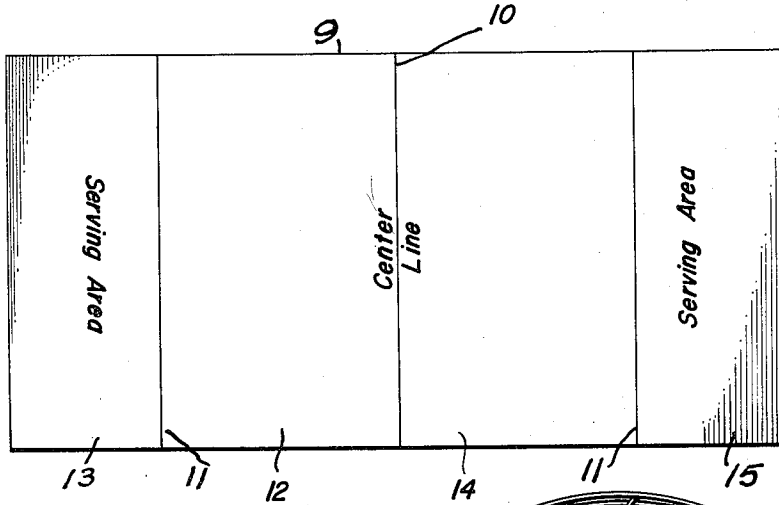


Fig. 2

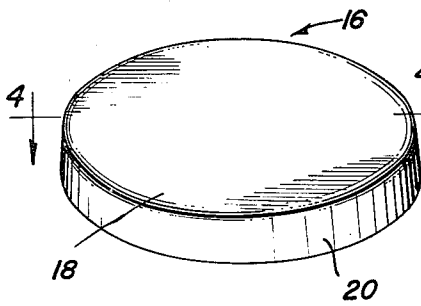


Fig. 3

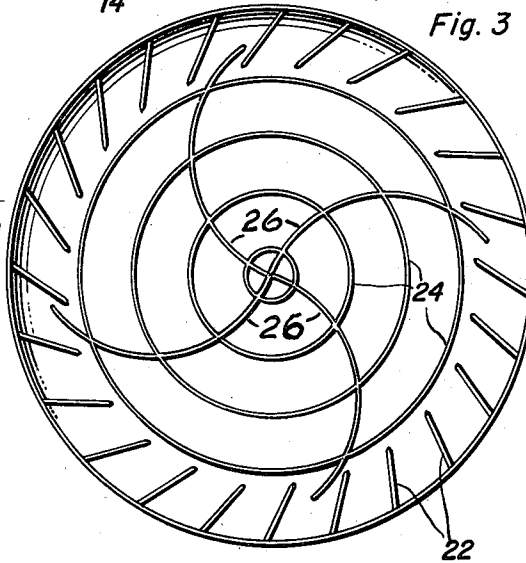
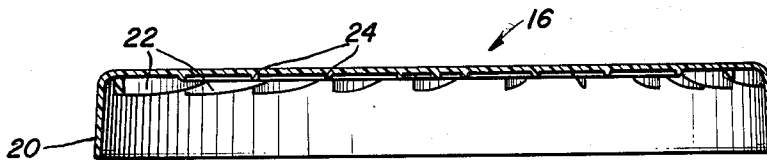


Fig. 4



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1

2,822,176

AERIAL DISK

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1 Claim. (Cl. 273—106)

The present invention relates to games and more particularly to a novel game device adapted to be launched into the air with a spinning motion.

This invention is concerned with a game to be played somewhat on the order of tennis, badminton or volley ball wherein a playing surface is divided by a center line or net into opposing playing areas. A group of players is divided into teams disposed on opposite sides of the center line in each of the playing areas and a game device in the form of a disk or saucer is provided with which to play the game. The disk or saucer is launched into the air by a player of one team and sailed over the center line into the playing area occupied by the other team. One of the players of the receiving team endeavors to catch the disk before it touches the ground, and then sail it back over the net or center line to the playing area of the serving team whereupon the cycle is repeated until the disk goes out of bounds or into the net, or touches the ground.

The primary object of the present invention is to provide a disk for playing the game aforementioned which is provided with a unique structural arrangement whereby the duration of flight and the type of flight are subjected to a very precision like degree of control depending upon the skill of the player launching the disk.

More specifically, it is an object of the invention to provide a disk adapted to be launched into the air provided with a unique arrangement of vanes and ribs for controlling the flight characteristics thereof in accordance with the manner in which the disk is launched.

The novel features that are considered characteristic of the invention are set forth with particularity in the appended claim. The invention itself, however, both as to its organization and its method of operation, together with additional objects and advantages thereof, will best be understood from the following description of a specific embodiment when read in connection with the accompanying drawings, wherein like reference characters indicate like parts through the several figures and in which:

Figure 1 is a view of a typical playing area for playing a game of which the present invention forms a part;

Figure 2 is a top view in perspective of the game device constituting the present invention;

Figure 3 is a bottom plan view of the game device constituting the present invention; and

Figure 4 is a cross-sectional view of the game device taken substantially along the plane of section line 4—4 of Figure 2.

Referring now to the drawing in detail, specifically to Figure 1, there is depicted therein a typical playing court 9 divided into playing areas by a center line or net 10, the playing areas being designated by the numerals 12 and 14 respectively. These playing areas constitute the playing surface and the surface may be of varying sizes according to the number and skill of the players playing the game. The opposed ends of the playing areas 12 and 14 are subdivided by lines 11 to provide serving areas 13 and 15 respectively.

2

The game itself may resemble a volley ball game to a large degree and is played by a plurality of players on each side of the net or center line 10; one group of players being disposed in the playing area 12 and the other group of players being disposed in the playing area 14. As a specific example, the court 9 may be approximately 40' x 80'. The players are divided into two teams of four or eight each. Each team lines up on its own side of the field into two lines of four players each extending across the field with one line of each team being behind the other line of the same team much in the manner of the volley ball player alignment.

A disk or saucer, which constitutes the game device of the present invention and is designated in its entirety by the numeral 16, is adapted to be launched into the air or thrown or sailed by one of the players from one of the serving areas 13 or 15 on one side of the net or center line 10 into the playing area on the other side of the net or center line. The object of the game is for the player on the other side of the center line, within whose area the saucer or disk is thrown, to catch the disk before it hits the ground and sail it back over the center line or net to the opposite playing area.

Failure of the server to sail the disk to land within bounds of the opposite playing area or over the net or center line scores a point for the receiving opponents or team. If a receiver on either side catches the saucer, he must return the saucer or disk from the place where it was caught. The sailing of the saucer or disk back and forth over the net or center line continues until it either flies out of bounds, or is not caught or is dropped by the receiver. After each point, the disk must be served by the team losing the point. After each play, the players rotate in a clockwise direction so that a new server takes the place of the one who had previously served the disk.

The disk 16, which constitutes the present invention, comprises a generally flat, circular web or disk portion 18 having a downturned peripheral flange 20. The disk or saucer 16 has a plurality of circumferentially spaced vanes 22 projecting from the underside of the web or disk portion 18 and the inner surface of the downturned flange 20, said vanes spanning the juncture of the web 18 and the flange 20. These vanes are disposed at a common angle relative to the respective disk radii and serve as the primary means for stabilizing and controlling the flight of the disk when it is spinningly launched into the air.

The web or disk portion 18 is further provided with a plurality of concentrically spaced ribs 24 which project from the underside thereof. These ribs serve as a means to promote a swirling air current under and within the confines of the disk or saucer 16 as it spins through the air. In addition, spiral ribs or fins 26 project from the under surface of the web 18 of the disk or saucer, the spiral ribs extending from the center of the disk toward the peripheral edge thereof in intersecting relation to the circumferential ribs 24 and serving as a means for directing the swirling air currents created by the ribs 24 to the peripheral vanes 22 and assist in stabilizing the flight of the saucer.

With the particularly recited combination of vanes and ribs or fins, the air lift of the outer edge of the saucer is increased after launching of the saucer, thereby causing the saucer to ride more steadily through the air and giving the saucer a greater range of distance per unit of launching force than would be possible without the vane or rib arrangement. Also, the combination of vanes and ribs serves to effectively control the curving, dipping and sliding movements of the saucer in accordance with the manner in which the saucer is launched by the sender.

3

Although a certain specific embodiment of the invention has been shown and described, it is obvious that many modifications thereof are possible. The invention, therefore, is not to be restricted except in so far as is necessitated by the prior art and by the spirit of the appended claim.

What I claim is:

A game device comprising a disk to be launched or thrown by hand and having a circular web and a downturned peripheral flange, said web being constituted by a flat plate all in one plane and said flange being constituted by a uniform narrow annular strip, said web having a relatively large number of circumferentially spaced thin, fin-like vanes projecting perpendicularly from the under surface thereof at the juncture of the web with the flange and extending inwardly a short distance from said flange, said vanes being disposed at a common angle to the re-

4

spective disk radii and serving as a means to stabilize the flight of the disk when it is spinningly launched into the air, and a relatively small number of spiral ribs projecting from the under surface of said web and extending generally diametrically of the disk and from the center of said disk toward the peripheral edge thereof and terminating adjacent and between the inner ends of certain of said vanes to direct swirling air currents to said vanes.

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