(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number : **0 469 869 A2**

(12) EUROPEAN PATENT APPLICATION

(21) Application number : **91306993.6**

(51) Int. Cl.^{5} : **A63F 7/06**

(22) Date of filing : **30.07.91**

(30) Priority : **02.08.90 GB 9017014**

(43) Date of publication of application :
05.02.92 Bulletin 92/06

(84) Designated Contracting States :
DE ES FR GB IT

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(54) Football table.

(57) A football table comprises players (10,12) mounted on two rods (14,16). The first rod (14) is fixed in position and acts as a pivot. The second rod is movable within an arcuate slot (62). In this arrangement only one rod 16 extends from one side of the football table. The table also comprises tracks (108,110,112,114,132,134) which either return the ball from the goal to the centre line or from apertures provided adjacent the goal to the goalkeeper.

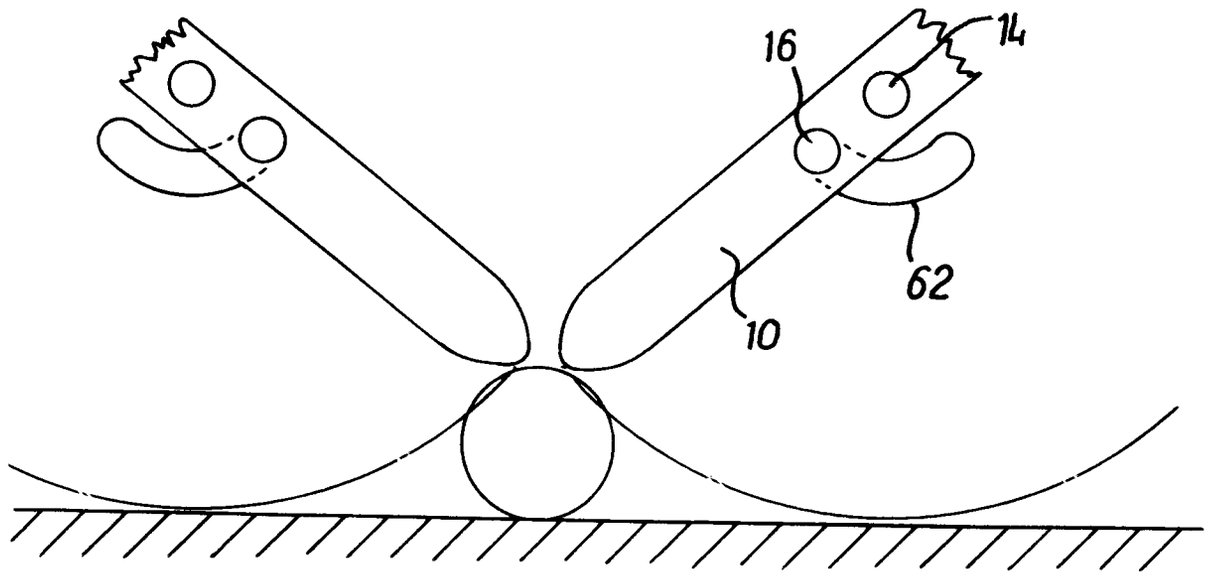

FIG. 2

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This invention relates to a football table and particularly to a token-operated football table.

Known football tables comprise two teams of plastics men, each plastics man being fixed to one of a number of rods extending transversely to the table above a playing surface. The rods are both slidably and rotatably movable.

This sliding movement of the rods has previously been achieved by moving the rods through opposing apertures in the longitudinal walls of the table. These tables are considered to be dangerous as the free end of the rod which does not form a handle protrudes from the table and sudden sliding movement may cause the free end to strike a spectator or player of the game. One solution to this problem has been to mount the plastics men on the outer casing of a telescopic arrangement. However, the telescopic components of this arrangement are not as strong as the known solid rod arrangement and tend to have a more limited product life.

The goals of these known football tables comprise a rectangular hole in each of the transverse walls of the table. Should a man shoot the ball towards but not into the goal, the ball rebounds back from the wall, unlike the real game in which the opposing football team will take a goal kick.

If one of the players scores a goal, the ball is returned to one player who then re-enters the ball onto the playing surface via an aperture in one of the longitudinal walls of the table. It is possible for that player to bias the direction of the ball towards his own men.

The present invention has been made from a consideration of these problems.

According to the present invention there is provided a football table comprising a playing surface and a plurality of bodies, wherein at least one of the bodies is pivotally mounted on a first member and said one body is also mounted for rotational movement on a second member.

One or both members are preferably rods. The second member preferably passes through and is movable within a slot. The slot may be arcuate. The maximum rotational movement of said one body may be limited, for example to less than 180° and preferably to substantially 100°. The first member may be used as a tie rod.

The second member or said one body may be releasably maintained or biassed in a certain position by way of suitable means such as attraction between a magnet and a metal.

According to a second aspect of the present invention there is provided a football table comprising a playing surface, a plurality of bodies movably mounted above the playing surface, wherein a passageway is provided extending from at least one of the edges of the playing surface, said passageway being adapted to return a ball to the playing surface.

The passageway may comprise a track, bore, channel or other means suitable for conveying a ball.

The passageway may be adapted to return a ball from the goal to the playing surface.

The passageway may be adapted to return a ball from an aperture in one of said opposing walls other than the goal.

The passageway may be adapted to slow the movement of the ball, for example a spiral track may extend upwardly from the playing surface.

The passageway may deliver the ball to any part of the playing surface, for example at either opposing end of the playing surface. The passageway may be adapted to deliver the ball to the goalkeeper.

Alternatively, the passageway may be adapted to deliver the ball to the vicinity of the central transverse region or half way line of the table.

The passageway may be adapted to deliver the ball to the team that has conceded the goal as in the real game, or alternate balls may be delivered to the individual teams.

A plurality of passageways may be provided at either opposing end of the playing surface.

The football table may be token operated.

Specific embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:-

Figure 1 is a diagrammatic front elevation of one arrangement of bodies according to the first aspect of the invention;

Figure 2 is a side elevation of two longitudinally spaced arrangements of bodies according to the first aspect of the invention;

Figure 3 is a side elevation of the mounting arrangement of bodies of Figure 2 which have been adapted to be biassed in a certain position;

Figure 4 is a diagrammatic view of one embodiment of the second aspect of the invention in which the tracks return the ball to the goal mouth;

Figure 5 is a perspective view of one of the tracks of Figure 4; and

Figure 6 is a diagrammatic view of a further embodiment of the second aspect of the invention.

Referring to Figures 1 and 2, plastics men 10,12 of a coin-operated football table are mounted on rods 14,16 extending perpendicular to longitudinal walls 18,20 of the football table above a playing surface.

Metal plates 22,24 are fixed to either side of one longitudinal wall 18 via threaded engagement between bolt 26 and nut 28. Similarily, rings 30,32 are located adjacent either side of the other longitudinal wall 20.

The upper rod 14 has a flange 34 provided at one end 36 thereof and a thread 38 at the other end 40. The threaded end 40 of the rod extends through apertures 42,44,46,48,50,52,54,56 in the plate 22, wall 18, plate 46, men 10,12, ring 32, wall 20 and ring 30 respectively. A nut 58 engages the thread and bears against ring 30. By this arrangement, the upper rod 14

is acting as a tie rod whilst effecting sliding and pivotal movement of the men.

A handle 60 is attached to one end of the lower rod 16. The lower rod 16 extends through arcuate slots of corresponding dimension 62,64,66 in plate 22, wall 18 and plate 24 respectively and apertures 68,70 in men 10,12. The men 10,12 are relatively fixed to the lower rod via screws 72,74.

A coil spring 76 is provided intermediate handle 60 and plate 22 and a second coil spring 78 is provided intermediate plate 24 and the adjacent man 10.

It will be appreciated that the free end 80 of the lower rod 16 always remains between the longitudinal walls 18,20 and does not therefore constitute a hazard to persons standing adjacent the table. Also, by using two solid bodies rather than a telescopic arrangement, the present invention provides a sufficiently strong mounting arrangement for the men.

In use, the men 10,12 may be rotated by moving the lower rod 16 through arcuate slots 62,64,66. The angular movement of the men 10,12 is limited by the length of the slots 62,64,66. In this embodiment the men are rotatable through substantially 100°. This enables adjacent sets of rods 14,16 to be successfully pitched closer together than known football tables and therefore there is less chance that the ball will rest in a position between adjacent longitudinally spaced men in which neither sets of men can reach the ball.

Referring to Figure 3, there is shown an embodiment of the invention similar to that previously described except that a magnet 82 is located adjacent one end 84 of slot 62. This magnet attracts the metallic lower rod 86 to the position shown in Figure 3. This arrangement has the advantage of arranging the men in a raised position unless repositioned by the player of the game. Therefore, should a man shoot the ball towards the opponents goal mouth, all of his men located in between the shooting man and the goal mouth which are not in operation will substantially not interfere with the movement of the ball.

Alternatively, the magnet may be an electromagnet and the players not in operation may be raised from the playing surface by operating the electromagnet via a switch.

Referring to Figures 4 to 6, alternative embodiments of the invention are illustrated in which the men and mounting arrangements of the men are omitted for clarity.

Referring to Figures 4 and 5, a football table 90 has longitudinal side walls 92,94 and goals 96,98. Entry portions 100,102,104,106 to spiral tracks 108,110,112,114 extend between the goals 96,98 and side walls 92,94. The spiral tracks extend upwardly from the playing surface as illustrated in Figure 5. If the ball is shot towards a goal 96,98 but misses the goal, then the ball will travel up a spiral track 108,110,112,114, and gradually lose velocity as it travels up the track 108,110,112,114.

The ball eventually returns down the track 108,110,112,114 and is deflected towards the plastics goalkeeper by a projection 116,118,120,122 adjacent entry portions 100,102,104,106.

Referring now to Figure 6 a coin-operated football table 130 comprises tracks 132,134 or other suitable passageways for a ball extending from the goal mouth 136,138 to apertures 140,142 in the longitudinal side walls 144,146 of the football table 130. The apertures 140,142 are located substantially adjacent the half way line 148 on the playing surface 150.

The tracks 132,134 illustrated are adapted to return the ball to the team that has conceded the goal.

Alternatively, the tracks may be adapted to turn alternate balls to the individual teams.

It is to be understood that the above described embodiments of the invention are by way of illustration only. Many modifications and variations are possible.

Claims

1. A football table comprising a playing surface and a plurality of bodies (10,12), wherein at least one of the bodies (10,12) is pivotally mounted on a first member (14) and said one body (10) is also mounted for rotational movement on a second member (16).

2. A football table as claimed in claim 1, wherein the first member (14) is fixed in position.

3. A football table as claimed in claim 1 or claim 2, wherein the second member (16) is movable.

4. A football table as claimed in any preceding claim, wherein the maximum rotational movement through which said one body can go is limited to less than 180°.

5. A football table as claimed in any preceding claim, wherein means (82) are provided for releasably maintaining or biassing at least one of the second member (16) or said one body (10,12) in a certain position.

6. A football table as claimed in any preceding claim, comprising a passageway (108,110,112,114, 132,134) extending from at least one of the edges of the playing surface, said passageway (108,110,112,114,132,134) being adapted to return a ball to the playing surface.

7. A football table comprising a playing surface,a plurality of bodies (10,12) movably mounted above the playing surface, wherein a passageway (108,110,112,114,132,134) is provided

extending from at least one of the edges of the playing surface, said passageway being adapted to return a ball to the playing surface.

8. A football table as claimed in claim 7, wherein the football table comprises at least one goal and the passageway (132,134) is adapted to return a ball from at least one goal to the playing surface.

9. A football table as claimed in claim 7 or claim 8, wherein the passageway (108,110,112,114) is adapted to return a ball from a part of the edge of the playing surface other than the goal to the playing surface.

10. A football table as claimed in any of claims 7 to 9, wherein the passageway (108,110,112,114, 132,134) is adapted to slow the movement of the ball.

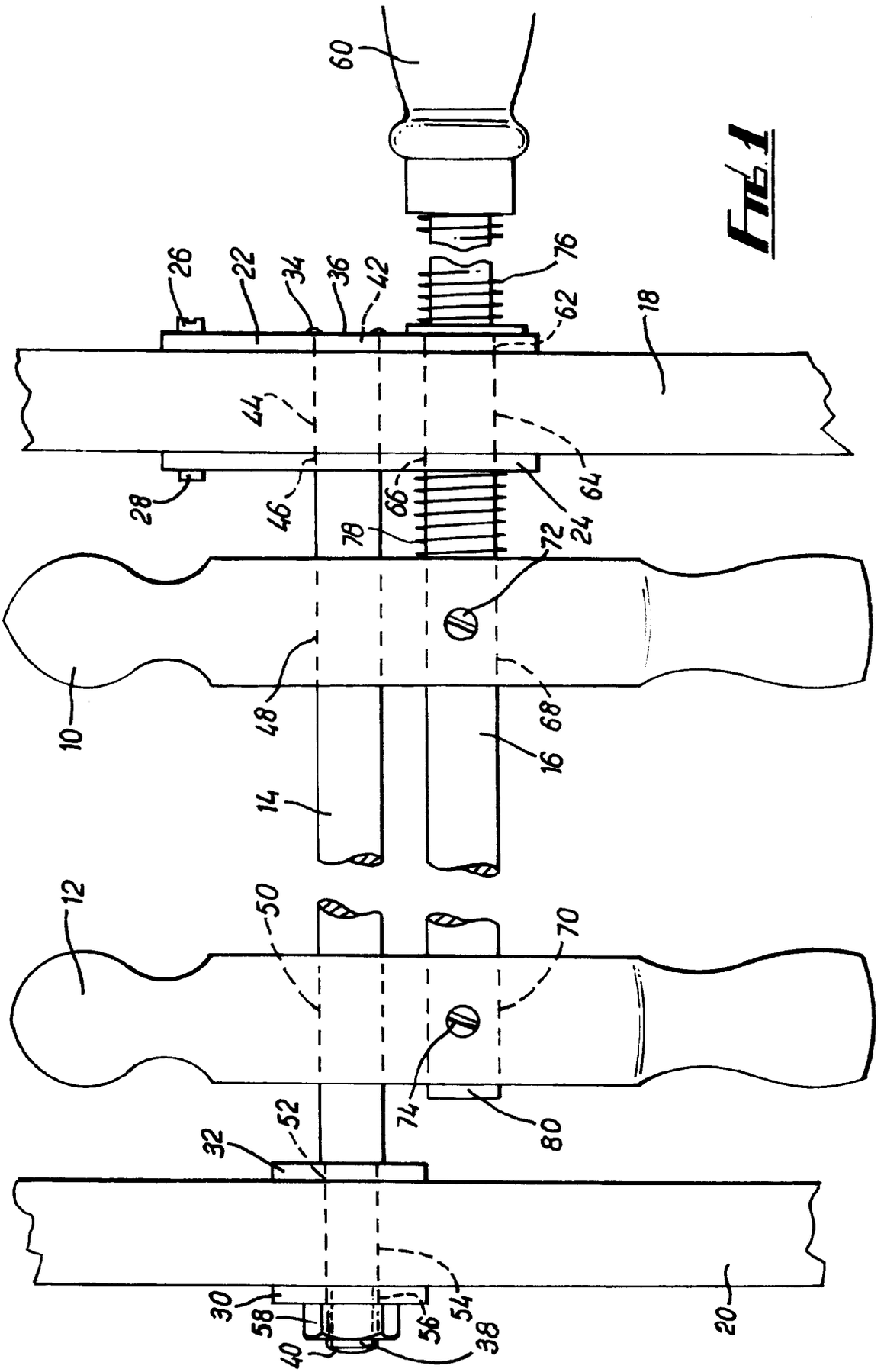
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FIG.1

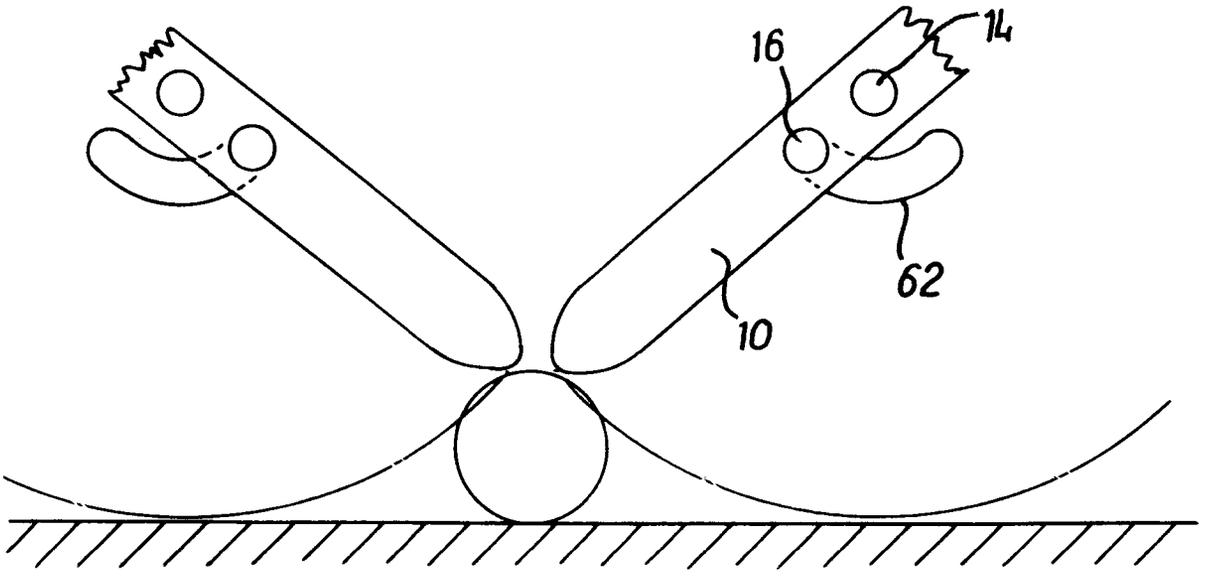

FIG. 2

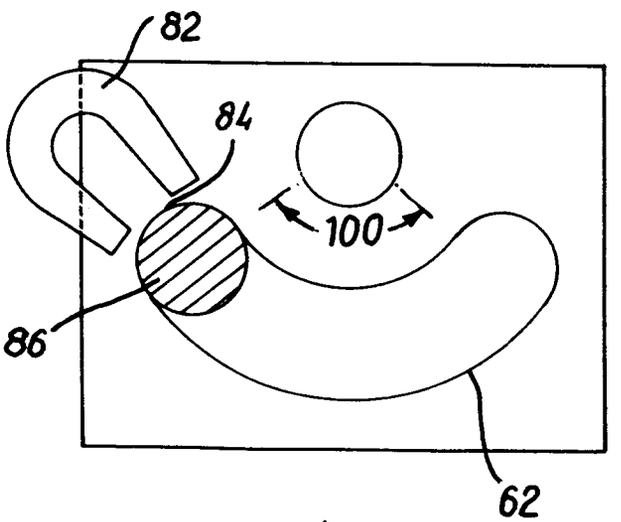

FIG. 3

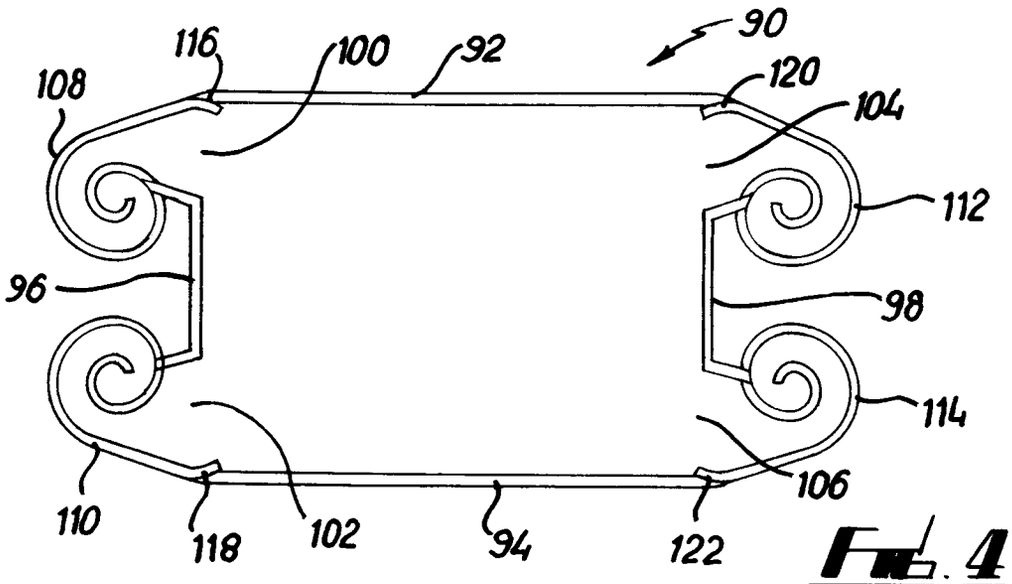

FIG. 4

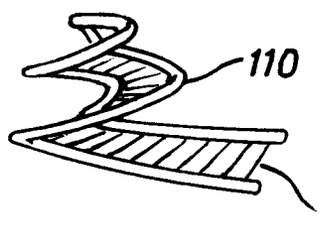

FIG. 5

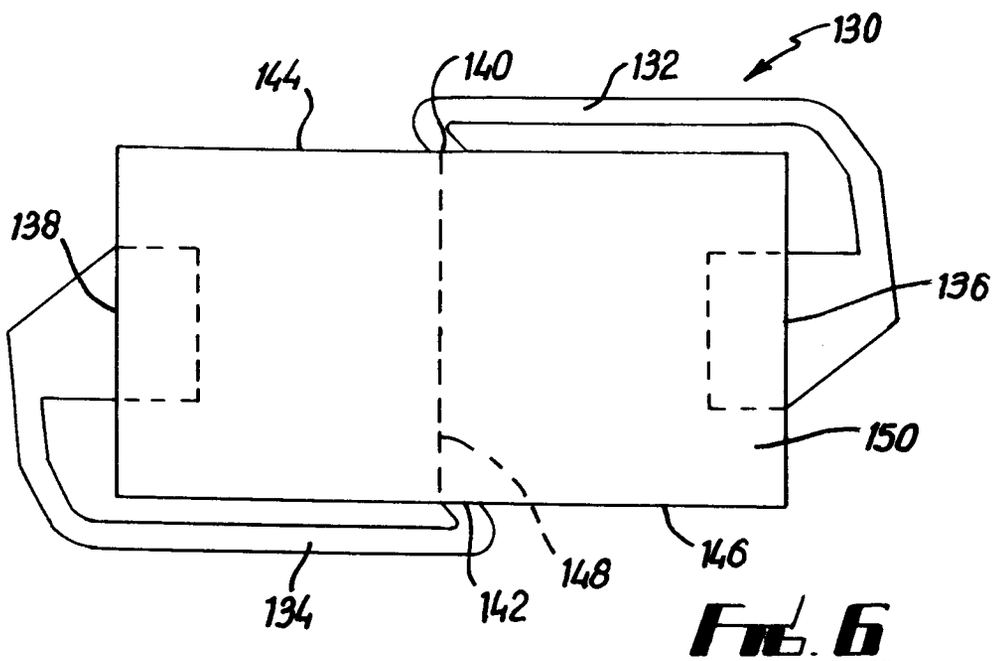

FIG. 6