

[54] NAVAL COMBAT BOARD GAME
APPARATUS

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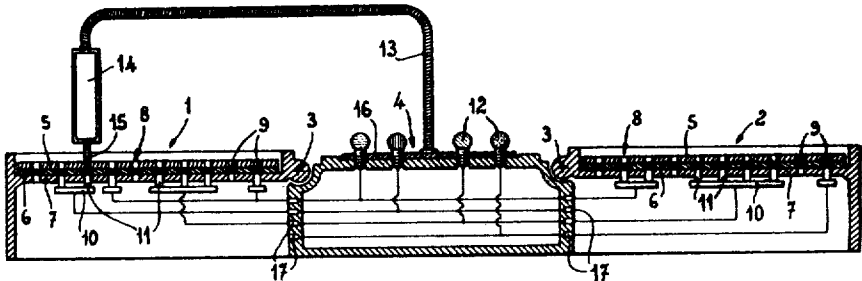
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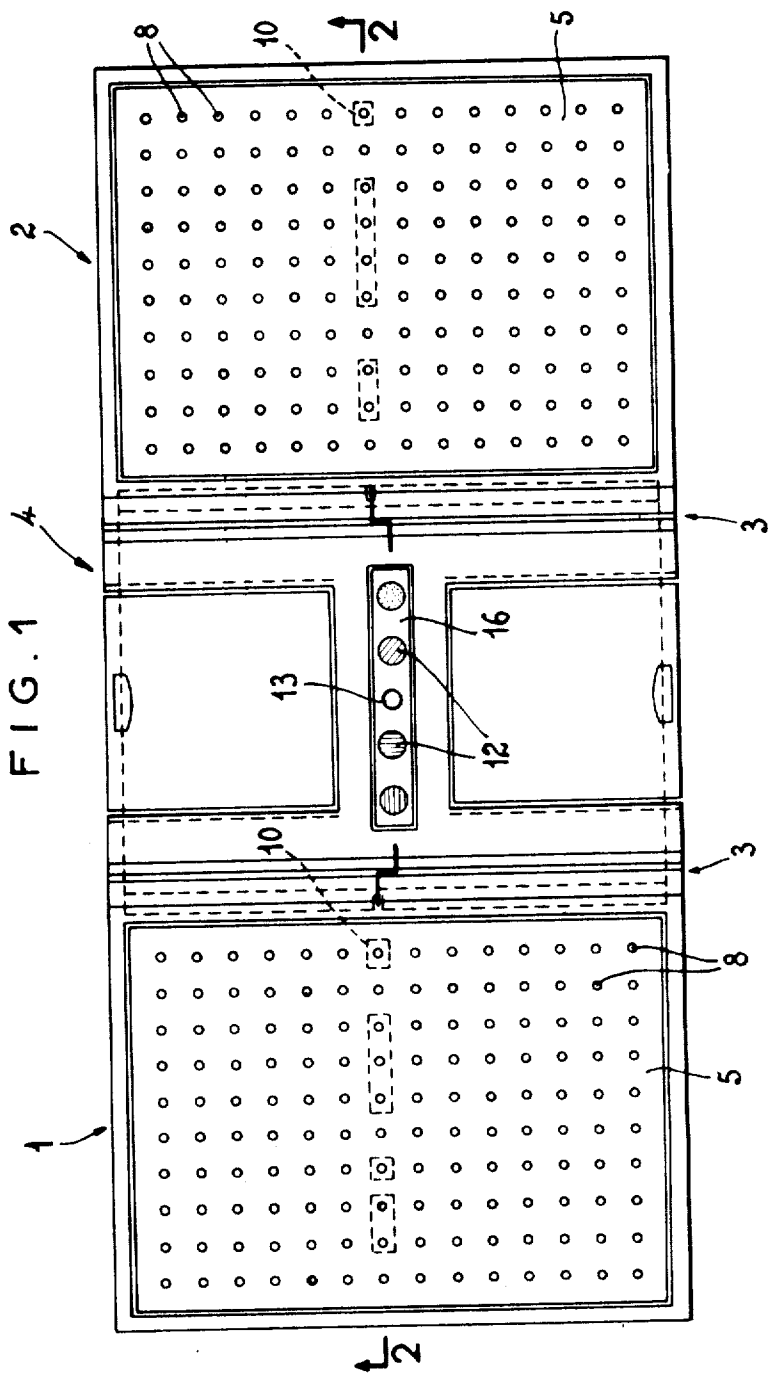
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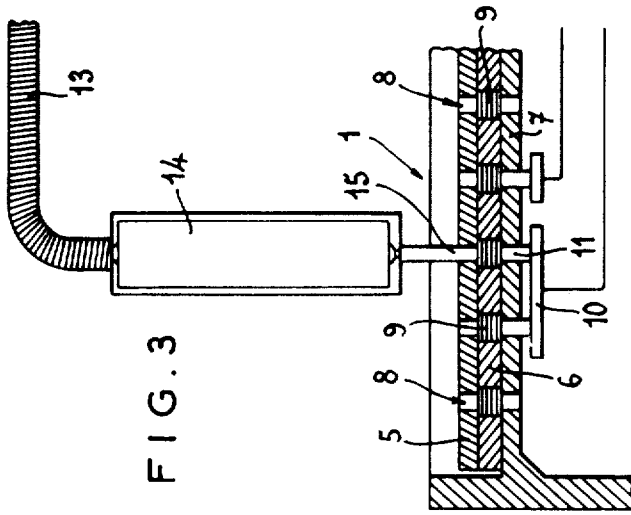
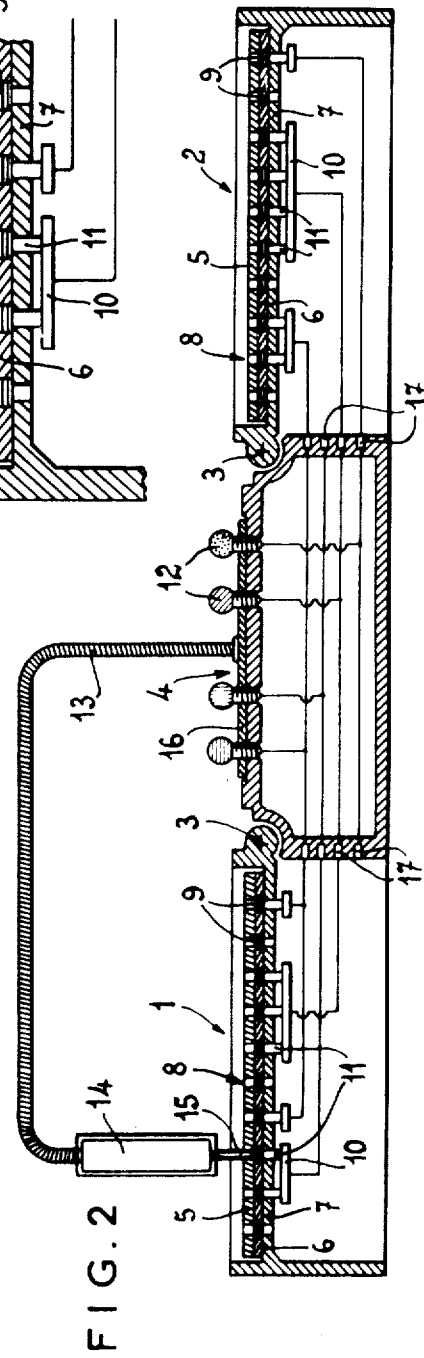
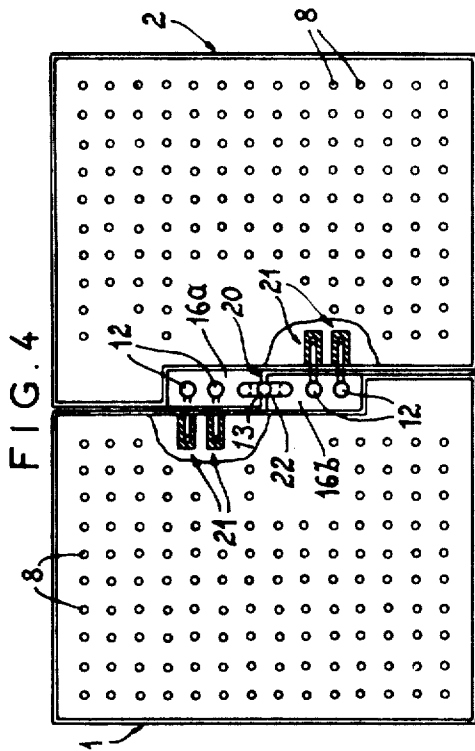
[57] ABSTRACT

A game apparatus for playing "naval combat" with electrical responses has two invertible trays with parallel and orthogonal rows of corresponding holes on both faces. The holes are intersected by contact studs. Plug-in connectors representing ships, having as many pins as the number of shots needed to sink the ships are plugged into the holes in the lower faces to provide an electrical connection with the various studs. Each plug-in connector is connectable through a flexible conductor or a printed circuit to an electric bulb of color corresponding to the class of ship. A finder is formed by a flexible cable connecting a probe and a battery to a common ground for the bulbs. When the probe inserted into an upper hole contacts a stud which is connected to a light bulb through a plug-in connector underneath, the bulb is lit. Circuit-scrambling means may be included.

4 Claims, 4 Drawing Figures







NAVAL COMBAT BOARD GAME APPARATUS

The present invention relates to games and more particularly to a game apparatus for playing a game of the "naval combat" type having electrical responses.

The game of "naval combat" is played by two players who have each positioned, without the knowledge of the other, and according to two coordinates, various imaginary ships of which each has at his disposal the same number of ships of corresponding value.

Generally, this game is played on paper, upon which squares are drawn, written markings consisting of crosses representing the shots fired.

Various realizations of this type of game have been developed with responses which are given verbally and which must be recorded.

It is an object of the present invention to provide an improved apparatus for playing a game of the "naval combat" type enabling, in reliable manner, the automatic and visual observation of the result of imaginary bombardments.

This game apparatus is, to this end, essentially characterized in that it consists of two trays having openings or holes arranged in parallel and orthogonal rows with contact studs situated in coincidence with these holes and intersecting them. Removable male plugs or plug-in connectors representing ships and comprising as many pins as the ship requires shots on target to be sunk are provided, these connectors being plugged into the lower faces of each of the aforesaid trays to connect to corresponding light bulbs of the various studs. Each of these plug-in connectors is connected by a flexible conductor or by a printed circuit to the contact terminal of a small colored electric bulb. Additionally provided is a finder constituted by a flex bearing an electric battery connected to a common terminal of the aforesaid small bulbs and a contact which has to be introduced through any one of the holes of the upper face of the two trays to come into contact with the corresponding stud, so that a circuit is closed and the corresponding lamp is lit when this finder is placed in contact with a stud which, itself, is in contact with one of the pins of the plug-in connectors representing ships.

The fleet of each of the players can be composed of any number of pieces, such as: four submarines, a torpedo boat, a destroyer, a battleship, an aircraft carrier, and, possibly, a mobile base, each of these pieces comprising a number of pins corresponding to its value.

For the pieces comprising a fairly large number of pins, the plug-in connector which represents them may be of modifiable shape, such as can be provided by hinging, thereby to complicate detection by the other player.

In order that the invention may be more fully understood, several embodiments of the invention are described below purely by way of illustrative but nonlimiting example, with reference to the accompanying drawing in which:

FIG. 1 is a plan view of one embodiment of the invention:

FIG. 2 is a view in sectional elevation along the line 2—2 of FIG. 1;

FIG. 3 shows on a larger scale, a detail of a part of a tray from the apparatus of FIGS. 1 and 2; and

FIG. 4 is a plan view of a simplified embodiment.

Referring to the drawings, the game apparatus is composed of two trays 1 and 2 hinged at 3 on opposite sides of a central part or support member 4.

Each tray is constituted by three partitions or panels, 5, 6 and 7, of insulating material, provided with a series of perforations or holes 8, arranged in parallel and orthogonal columns and/or rows with metallic studs 9 intersecting the holes at the middle of each of the same.

The various pieces representing the ships to be located and sunk by the opposite player are composed of plug-in connectors of metal designated at 10, each comprising a number of pins 11, corresponding to the size and/or value of the ship, such as for example, one for a submarine, two for a torpedo boat, three for a destroyer, four for a battleship, five or six for an aircraft carrier, and so forth.

Each of these plug-in connectors is connected by a flexible conducting wire or a printed circuit with the central stud of a small electric bulb 12, these bulbs being of various colors according to the nature of the ships to which they are allocated.

The apparatus comprises, in addition, fixed on its central part 4, a flex 13 carrying a small electric battery 14 of very low voltage of which one of the terminals is connected to a contact 15 and the other to a plate 16 which constitutes the common terminal of all the bulbs 12. The transmission of electrical current between this battery 14 and the aforesaid common terminal 16 can be insured either through the flex 13 itself if it is an electrical conductor, or by a wire placed inside it.

This flex, with its equipment, is used alternately by the two players as the finder element.

Each of the players places his ships, without the knowledge of the other player, under one of the trays, and then changes sides. Each of the players then commences, by means of the finder element, an attempt to locate the system set up by the other player. Each of the players thus fires in turn one or several shots consisting of the introduction, into one of the holes of the tray that he is inspecting, of the contact 15 of the finder. When this contact is introduced into a hole in which is located, on the other face, a pin of one of the plug-in connectors, an electrical circuit is closed by the corresponding stud, and the bulb 12, to which this pin is connected, is illuminated.

After each shot, that is to say, after each introduction of the contact 15 of the finder into one of the holes of the tray, the player places in this hole a reference marker to organize his next firing.

To increase the difficulty of the game, there can be arranged in the circuits connecting the plug-in connectors to the bulbs, plugs 17 enabling scrambling of these circuits by changing the connections.

The plug-in connectors 10, representing ships, can be placed in such a manner so as to be close or juxtaposed while always giving separate responses. As indicated above, certain of the aforesaid plug-in connectors can be deformable.

In the embodiment of FIG. 4, the central part 4 is eliminated, the two trays 1 and 2 being coupled to one another. To this end, the plate 16 is divided into two parts 16a and 16b borne respectively by the aforesaid trays 1 and 2. The connection between these two trays is obtained mechanically and electrically by male and female plugs 21, connecting with the bulbs 12. This connection is reinforced by a double plug or jumper 22, which jumps gap 20 and bears the flex 13 of the finder and which connects the ground terminals of the bulbs 12.

I claim:

1. A naval-combat game apparatus comprising in combination: two trays each having a top face and a bottom face, the faces of each tray being provided with arrays of aligned holes arranged in parallel rows and columns, intermediate contact studs supported between the two faces of each tray, said contact studs being placed to coincide with the said holes and intersecting the same at their centers, plug-in connecting means representing naval vessels, each said plug-in connecting means including a number of electrically connected pins representing a vessel and corresponding in number to the number of target hits required for sinking such vessel, all of the pins being of the same length, said length being sufficient to permit said pins to engage said studs, said pins being insertable into the holes in the bottom face of the said trays so as to provide an electrical connection with selected studs, electric bulbs of different colors connected to said plug-in connecting means, a bus connecting said bulbs in common; and a finder comprising a flexible feeler including an electric battery connected at one terminal to said bus, said finder including a contact connected to the other terminal of said battery and which can be inserted selectively through the holes in the top faces of the trays to contact one of said studs whereby the corresponding bulb lights up if the stud is in contact with one of said plug-in connecting means.

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2. A game apparatus according to claim 1 wherein each of the trays is open at the bottom to facilitate placing the plug-in connecting means in position on the lower faces of the trays.

3. A game apparatus according to claim 1 comprising a central support member in which said bus is mounted, each of said trays being hinged to said central support member, said bulbs being mounted on said central support member.

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4. A game apparatus according to claim 3 comprising a jumper and wherein said bus is constituted by a ground plate including two parts mechanically and electrically connected to each other by said jumper, said jumper being connected to the said finder.

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