

[54] EDUCATIONAL SPACE GAME	3,208,185	9/1965	Silvera	273/129 X
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[22] Filed: Aug. 20, 1973	3,648,407	3/1972	Pressman	46/253 P
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[21] Appl. No.: 389,855	3,764,145	10/1973	Schrafft	273/134 AE X

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 [51] Int. Cl. A63f 3/00
 [58] Field of Search.....35/12 C, 45; 273/108, 134 AE, 273/134 AA, 134 A; 46/243 LV, 243 P; 273/1 E

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[57] **ABSTRACT**
 An educational and instructive game for children and adults. The game comprises a game board showing a representation of the earth at the center and about which the moon is rotatable by a motor. The game further includes several space ships which travel orbital tracks for movement between the earth and moon.

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7 Claims, 6 Drawing Figures

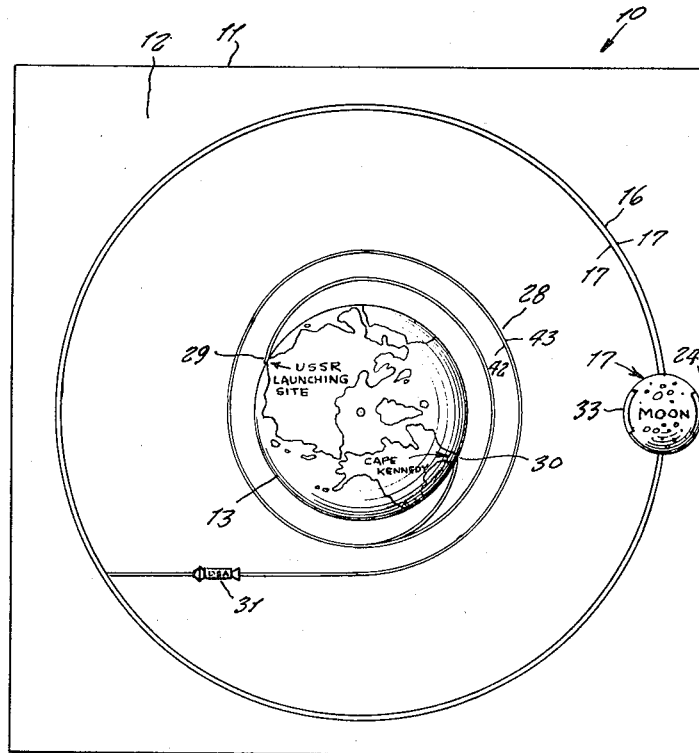


Fig. 1

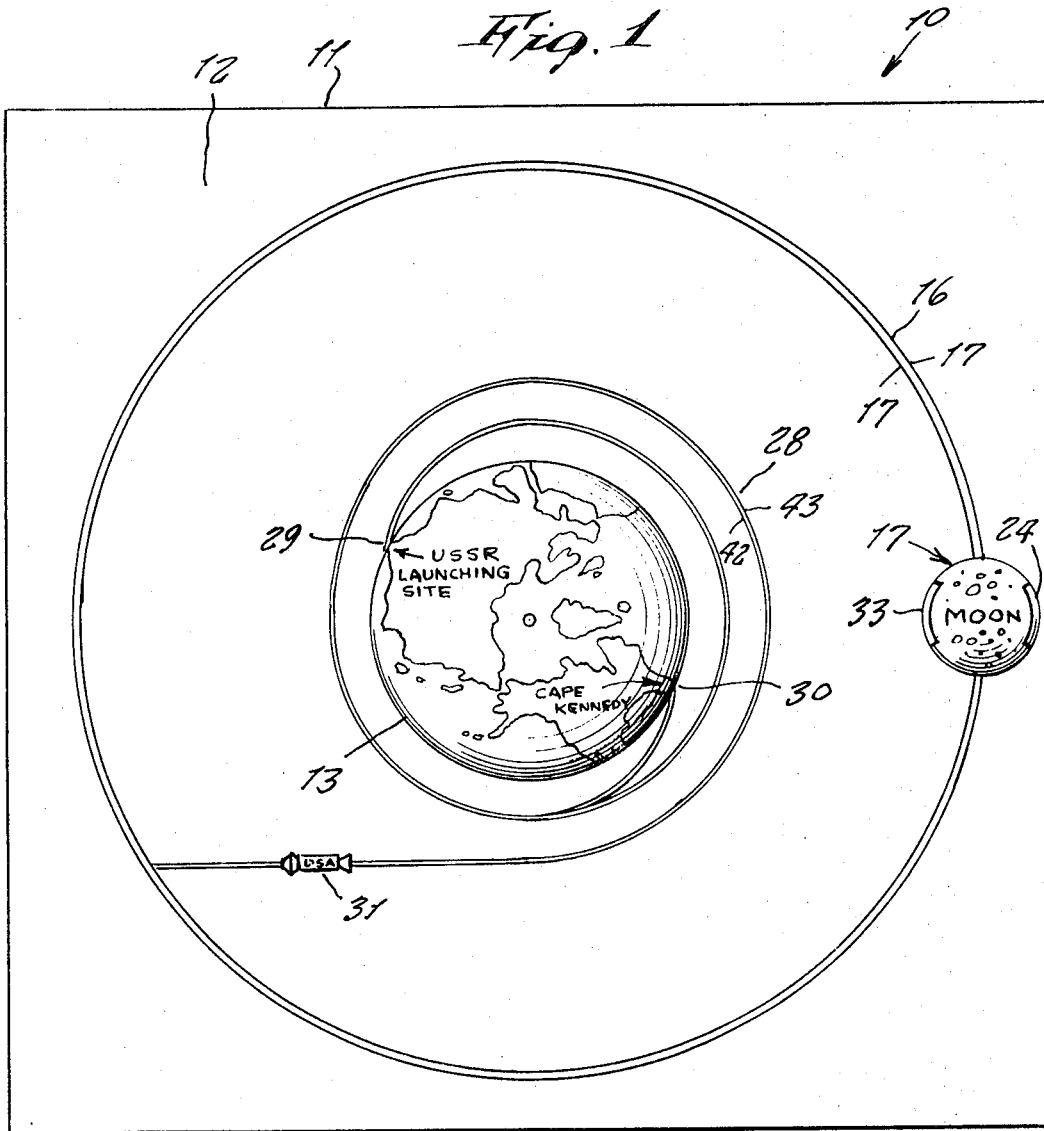
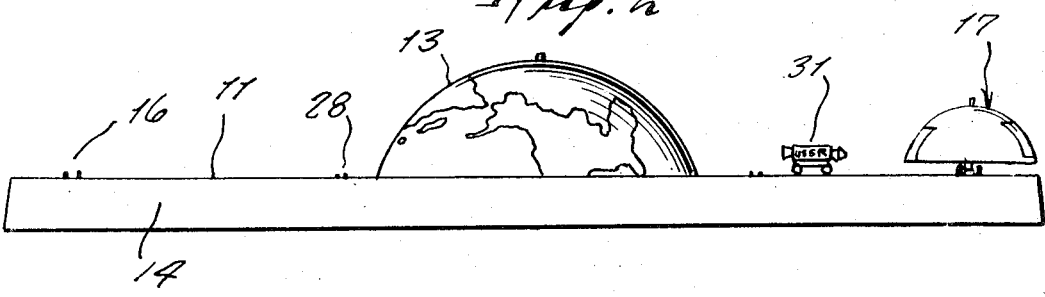
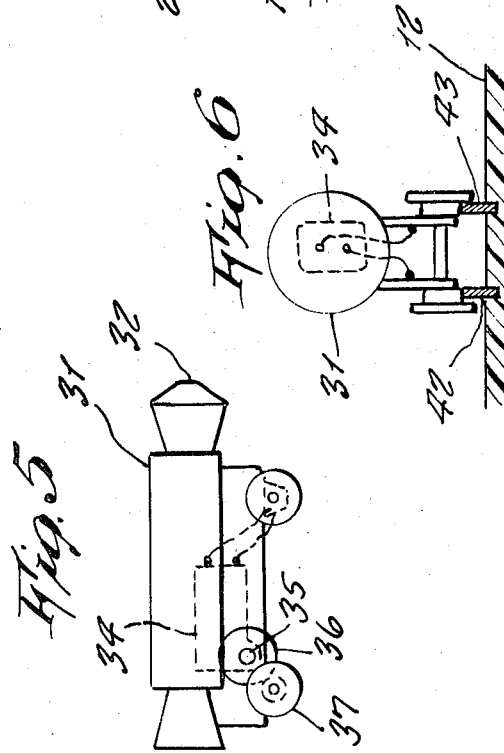
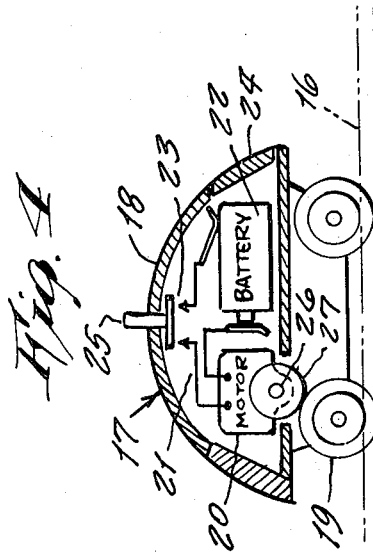
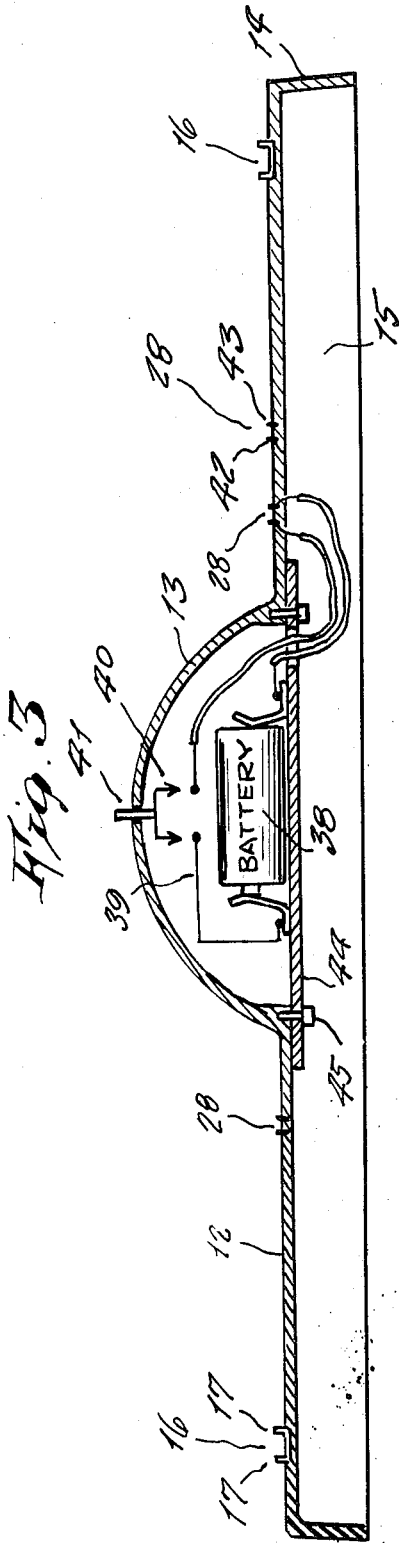


Fig. 2





EDUCATIONAL SPACE GAME

This invention relates generally to space toys.

An object of the present invention is to provide a novel space game wherein the players must plan accurate movement of a space ship traveling from earth so that it intercepts the position of a moving moon that travels around the earth.

Another object of the present invention is to provide a space game which is of educational and instructive advantage.

A further object of the present invention is to provide a space game that is for adults as well as children who are capable of computing and planning mathematical problems involving travel distance in relation to time.

A still further object of the present invention is to provide a space game which is simple in design, inexpensive to manufacture, rugged in construction and easy to use.

These and other objects will be readily evident upon a study of the following specification and accompanying drawings wherein:

FIG. 1 is a plan view of the game board showing a playing piece in operation thereupon;

FIG. 2 is a side elevation of FIG. 1;

FIG. 3 is a side cross-sectional view taken in the same plain as FIG. 2 and showing the internal construction of the game board;

FIG. 4 is a side cross-sectional view of the moon playing piece shown enlarged;

FIG. 5 is a side elevation view of one of the space ships shown enlarged; and

FIG. 6 is an end elevation view of the space ship to illustrate an electrical drive therefore.

Referring now to the drawings, reference numeral 10 represents an educational space toy or game according to the present invention wherein there is a square configured game board 11 provided with a playing field 12 upon the upper side thereof. The game board is preferably vacuum formed from a sheet of flat plastic so that at the center thereof there is formed an upwardly extending hemispherical protrusion 13. Imprinted on the outer surface of protrusion 13 are indicia representing the land and ocean areas of the earth. The peripheral edges 14 of the game board are downwardly turned as shown in FIG. 3 so as to form a space 15 beneath the game board for containing operative components of the present invention.

Concentrically located around the earth represented by protrusion 13 is a circular track 16. Track 16 includes a pair of upwardly extending rails 17 upon which a playing piece 17a represents the moon. Moon 17a travels a circular path around earth 13 as best seen in FIG. 1. Track 16 is embedded within the game board as best shown in FIG. 3.

Moon 17a comprises a generally hemispherical hollow shell 18 mounted upon two pairs of wheels 19 adaptable for traveling along the rails 17 of the track 16. Within the interior of the shell 18 there is located an electric motor 20 coupled to an electrical circuit 21 having a battery 22 and an electric switch 23. The battery is replaceable through an access door 24 in the shell 18. Switch 23 includes a push button 25 extending out of the top of shell 18. The motor includes a drive shaft 26 on which there is mounted a drive wheel 27 that frictionally engages a rim of one of the wheels 19

so that when the push button 25 is pressed, switch 23 closes and completes the electrical circuit between battery 22 and motor 20. This will provide power for wheel 19 enabling moon 17a to travel along circular track 16 around earth 13. It is apparent that motor 20 has a constant output so that the movement of moon 17a is at all times constant.

A space ship track 28 is mounted upon the upper side of playing field 12 of game board 11. Space ship track 28 is designed to include an orbital portion around earth 13, and a straight portion which then extends in a direction away from the earth 13 and toward track 16 of moon 17a. The space ship track 28 includes two starting positions 29 and 30 each one of which contacts different parts of earth 13 best seen in FIG. 1. Thus, one of these starting positions comprises the USSR launching site while the other starting position represents Cape Kennedy. Both of these starting positions connect to the orbital portion of space ship track 28.

The game includes four space ships, two of which are labeled USA and the others are labeled USSR. In each pair of similarly labeled ships, one is provided with a large magnet embedded in its nose while the other has a small magnet embedded in its nose. This will be seen in FIGS. 5 and 6, wherein a representative space ship 31 is shown. A magnet 32 is disposed in the end of ship 31. Magnet 32 is intended to magnetically engage a metal plate 33 on one side of moon 17a (seen in FIG. 4), when a proper docking is accomplished between the space ship and the moon. The nose cone with magnets separates from the space ship when a successful hit is made. Larger ships with larger magnets retract the original lunar module.

Space ship 31 is relatively small and comprises an electric motor 34 included therein. Motor 34 has a drive shaft 35 on which there is mounted a drive wheel 36 for driving a wheel 37 of space ship 31. Ship 31 travels on space ship track 28. Power to electric motor 34 is accomplished by means of a battery 38 contained under hemispherical earth protrusion 13. Battery 38 is coupled to an electric circuit 39 that includes an electric switch 40. Switch 40 is manually operated by a push button 41 extending out of the top end of earth protrusion 13. Circuit 39 is coupled to each one of rails 42 and 43 comprising space ship track 28, as best seen in FIG. 3. The circular track is a return path for the rocket and especially when a miss is recorded. This prevents the rocket from sitting at the end of the track. The nose of the rocket is long enough to provide separation of the module when a hit is recorded. Small ships have detachable lunar modules, whereas large ships have retrievers. A removable plate 44 is secured by means of screws 45 to the underside of game board 11 permitting replacement of battery 38.

In operative use, it is evident that the players can competitively try to make a perfect movement of their space ship between the earth and the moon. This is accomplished by taking into consideration the distance to be traveled by their space ship in relation to time. The game will be educational and realistic as well as stir the imagination of players in reference to space travel.

While only one embodiment of the present invention has been shown and described, it will be apparent to those skilled in the art that many changes and modifications may be made thereunto without departing from the spirit and scope of the invention.

What is claimed is:

1. A space game comprising:

- a game board;
- a circular track mounted thereon;
- a moon simulating vehicle adapted for placement on said circular track;
- means driving said moon vehicle along said circular track;
- means positioned concentric within said circular track and located centrally on said board for simulating the earth;
- a helically configured electrically conductive track having at least one terminus at said earth-simulating means, and a second terminus at a fixed point on said circular track;
- at least one spaceship-simulating vehicle adapted for placement on said helically configured track; and

driving means, independent of said moon vehicle drive means, for driving said at least one spaceship-simulating vehicle along said helically configured track so that said moon vehicle can be placed on said circular track and caused to traverse the same, and if said spaceship-simulating vehicle is placed at the earth terminus of said helically configured track at the proper time, having traversed the same, it will arrive at the second terminus simultaneously with said moon vehicle.

2. The game as recited in claim 1, wherein said means driving said moon vehicle comprises:
 motor means placed within said vehicle;
 a battery likewise positioned in said vehicle; and
 switch means coupling said motor means and said battery so that a player may conveniently cause

said motor means to drive said vehicle.

3. The apparatus as recited in claim 2, wherein said at least one spaceship-simulating vehicle comprises:

- a miniature wheeled carriage;
- second motor means driving at least one of the wheels of said carriage; and
- electrical pickup means for receiving current from said helically configured track so as to power said second motor means and drive said carriage.

4. The apparatus as recited in claim 3, wherein said means positioned concentric within said circular track comprises an upwardly extending protrusion positioned on said game board, said protrusion including a battery, an electric circuit coupling said battery to said helically configured track and switch means for intermittently opening and closing said circuit so as to provide electric current to said helically configured track.

5. The apparatus as recited in claim 4, wherein said helically configured track comprises a pair of parallel spaced-apart conducting members disposed in a helical configuration and extending from at least one terminus of said earth-simulating means and ending at said circular track.

6. The apparatus as recited in claim 5, wherein said carriage further comprises a magnet positioned on one portion of its periphery, and wherein said moon vehicle further comprises a magnet positioned on its periphery for engaging said magnet of said carriage vehicle.

7. The apparatus as recited in claim 6, wherein the game further comprises a plurality of said spaceship-simulating vehicles some of which are labeled USA, the others of which are labeled USSR.

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