United States Patent

Sells

[15] **3,674,273**

[45] **July 4, 1972**

[54] BOARD GAME APPARATUS

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[22] Filed: **April 15, 1970**

[21] Appl. No.: **28,884**

[52] **U.S. Cl.** .....**273/134 AA,** 273/134 AC, 273/134 B, 273/134 C, 273/134 D, 273/134 E, 273/141 R

[51] **Int. Cl.** **A63f 3/04**

[58] **Field of Search** 273/134

[56] **References Cited**

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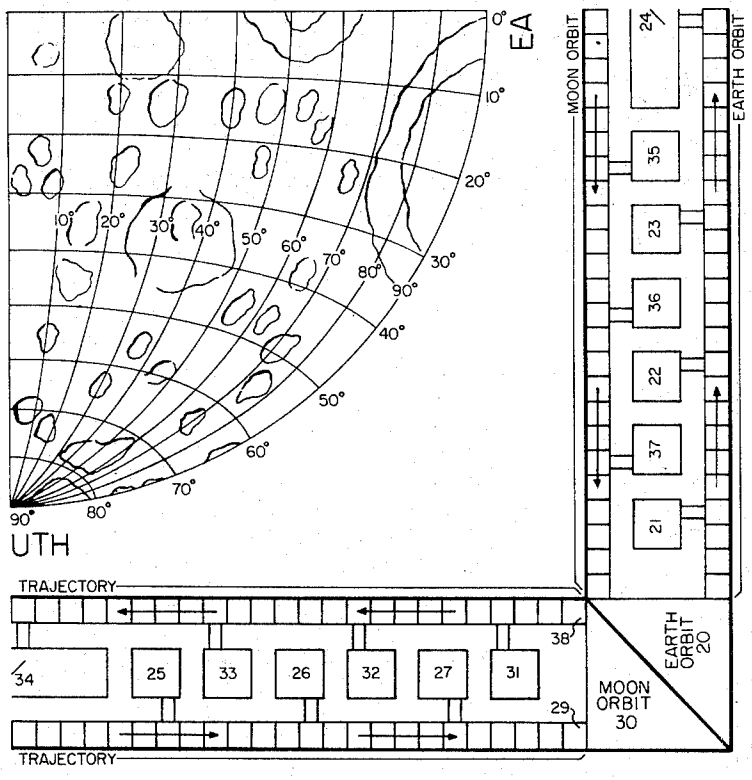
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Primary Examiner—Delbert B. Lowe
Attorney—Robert J. Black

[57] **ABSTRACT**

A game based on space flight and extraterrestrial exploration. A game board having a map of an extraterrestrial body featuring latitude and longitude markings thereon and paths inscribed on the board represent a space flight from earth to the extraterrestrial body represented on the map. Specially marked cards and dice determine place and movement of playing pieces on and over the game board, while a spinner device is utilized by each player to select by chance the latitude and longitude of an individual initial goal. A special slide device used by each player indicates the approximate time for placement of each player's playing piece into initial play on the board.

4 Claims, 9 Drawing Figures



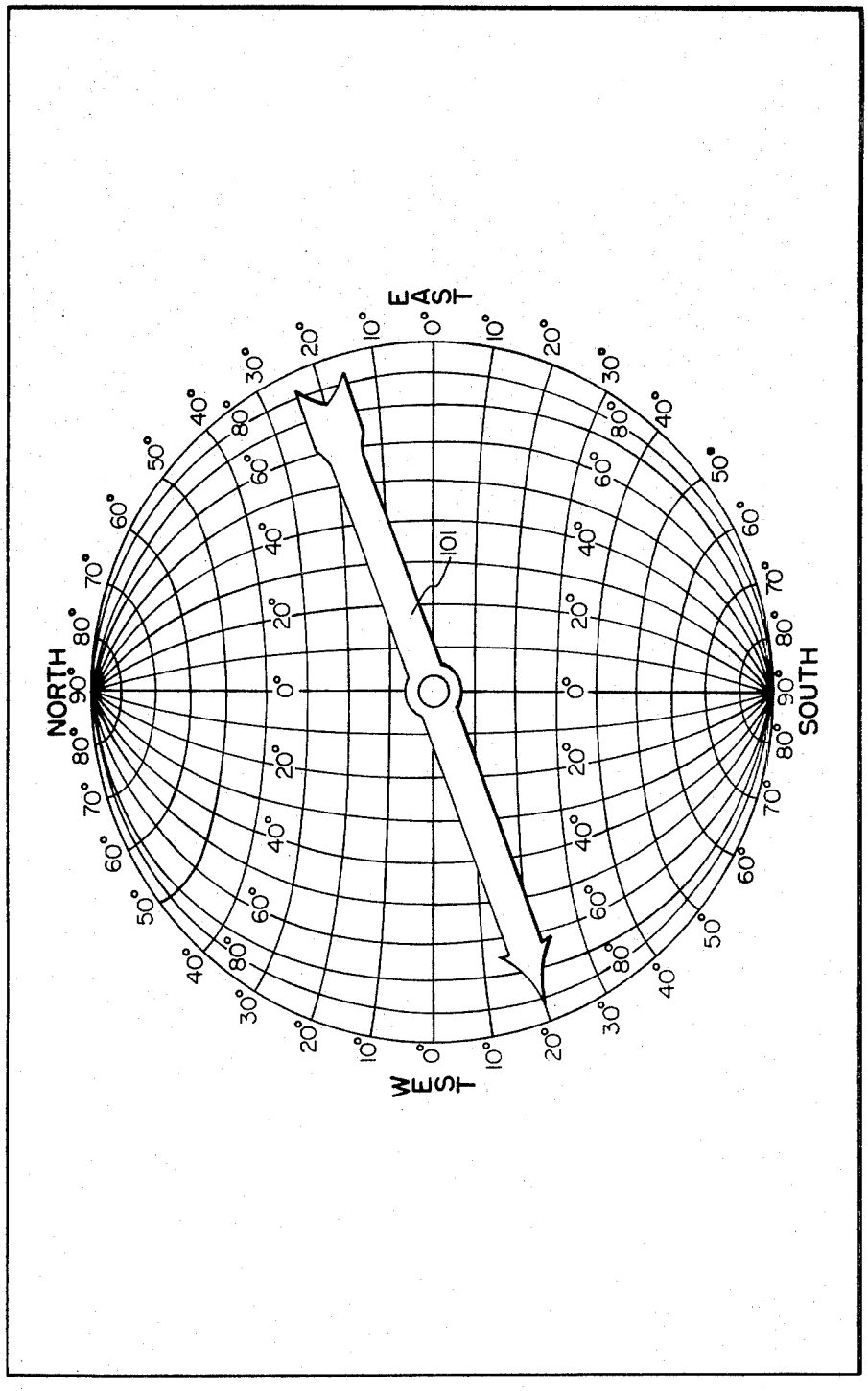


FIG. 1

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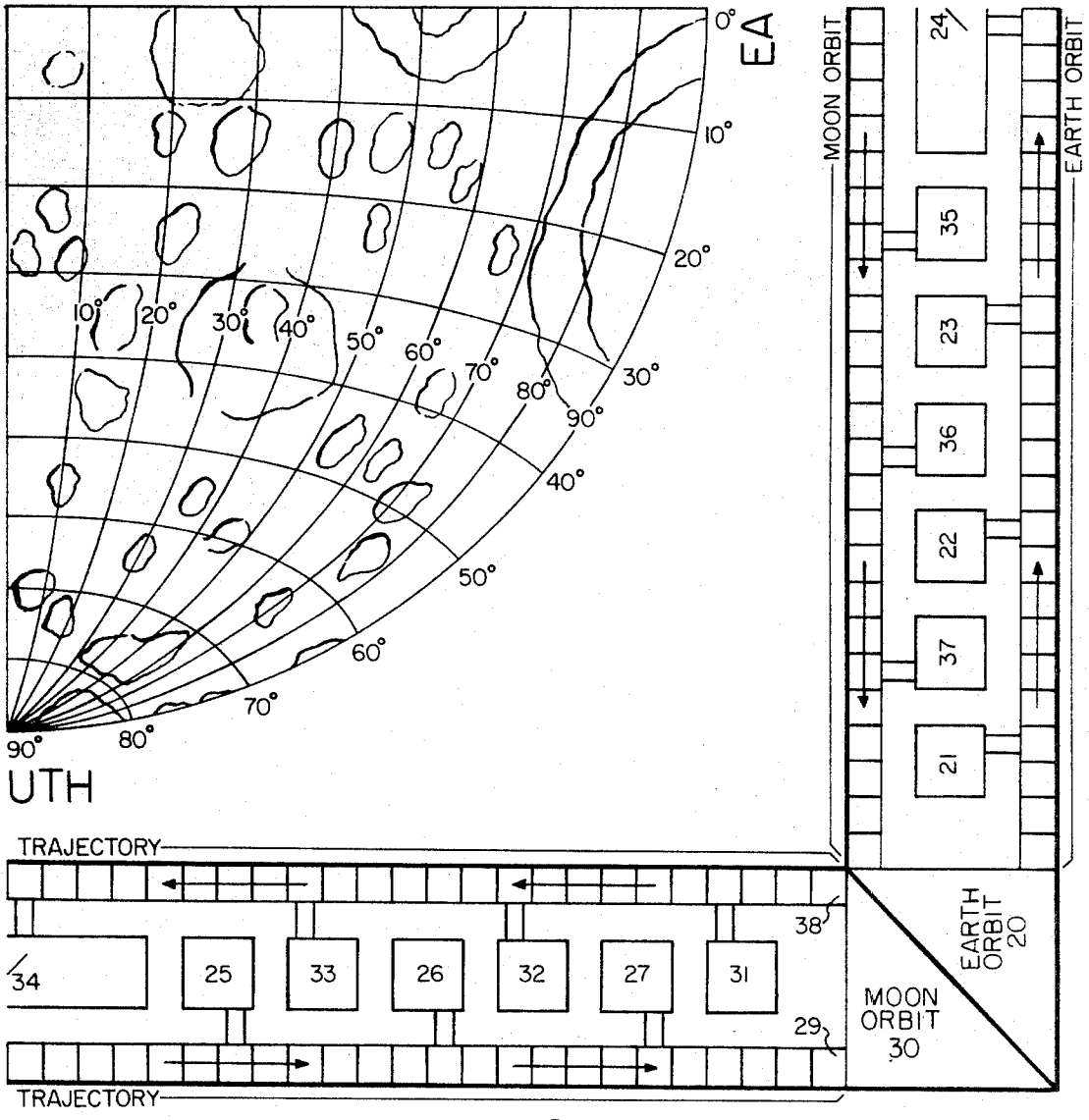

0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
EA
UTH
MOON ORBIT
EARTH ORBIT
24
35
23
36
22
37
21
TRAJECTORY
34
25
33
26
32
27
31
38
29
MOON ORBIT 30
EARTH ORBIT 20
TRAJECTORY

FIG. 2

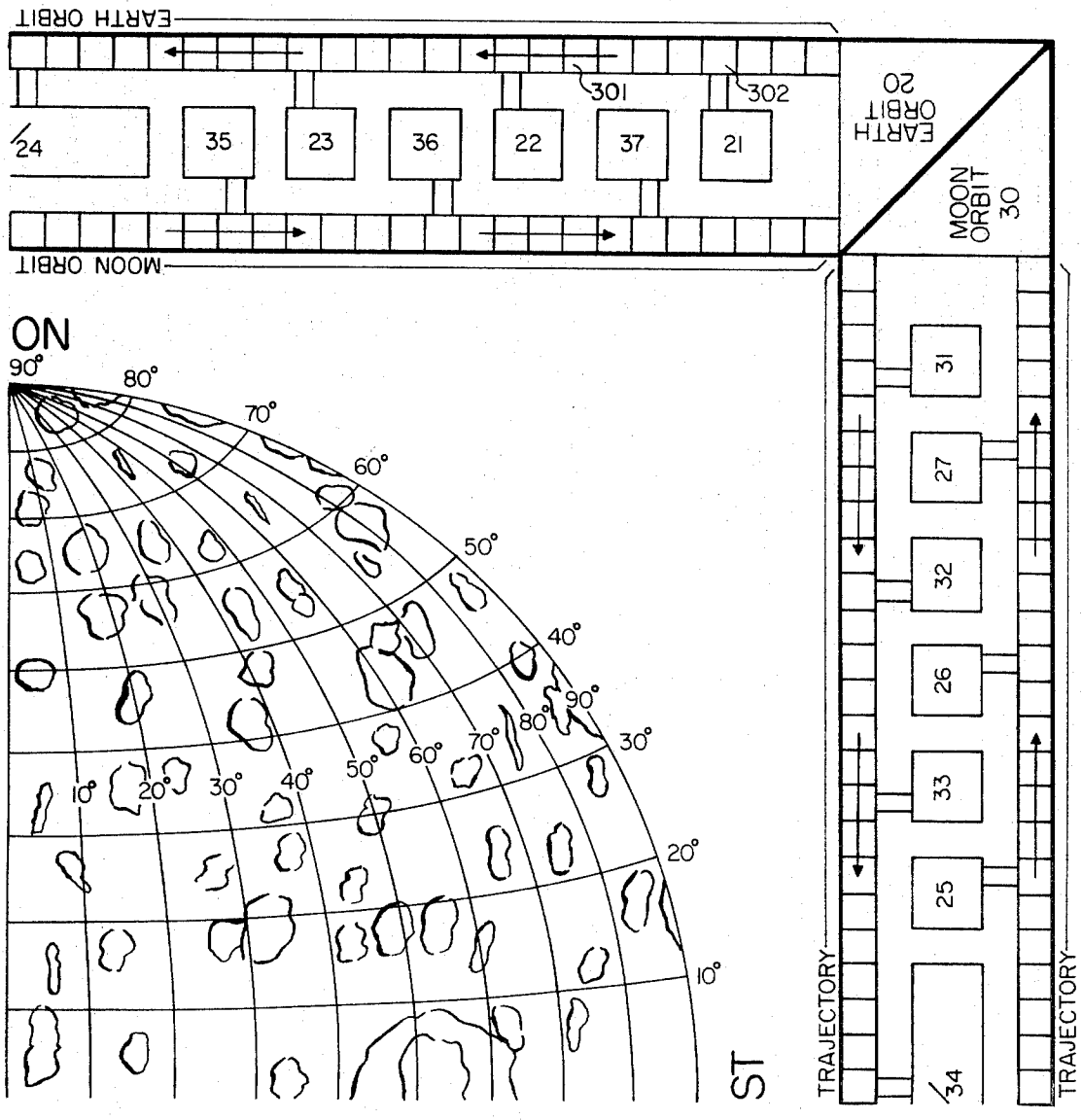

EARTH ORBIT
301
302
24
35
23
36
22
37
21
EARTH ORBIT 20
MOON ORBIT 30
MOON ORBIT
ON
90°
80°
70°
60°
50°
40°
30°
20°
10°
ST
31
27
32
26
33
25
34
TRAJECTORY
TRAJECTORY

FIG. 3

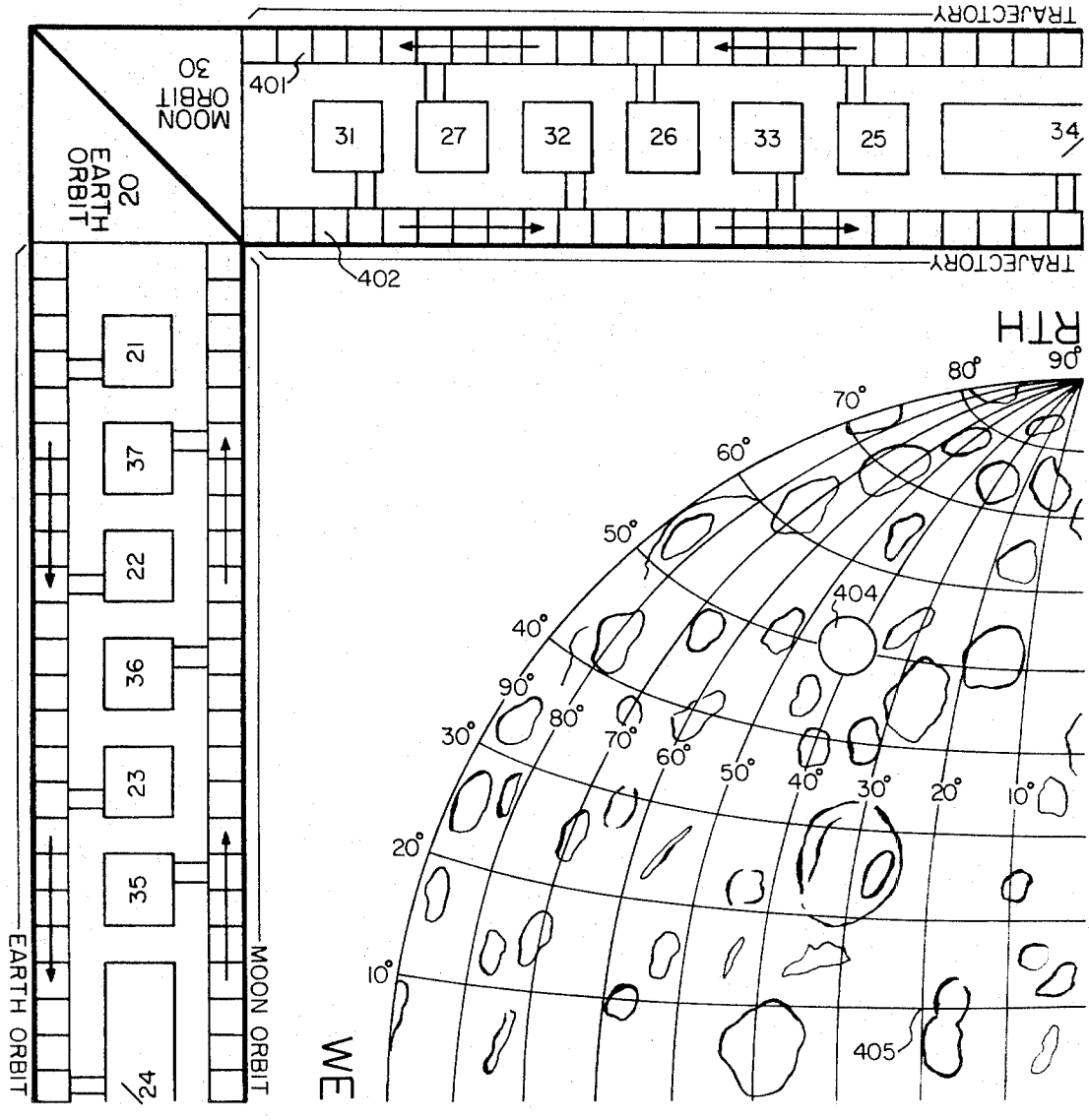

TRAJECTORY
MOON ORBIT 30
EARTH ORBIT 20
401
31
27
32
26
33
25
34
TRAJECTORY
402
21
37
22
36
23
35
24
EARTH ORBIT
MOON ORBIT
RTH
WE
90°
80°
70°
60°
50°
40°
30°
20°
10°
404
405

FIG. 4

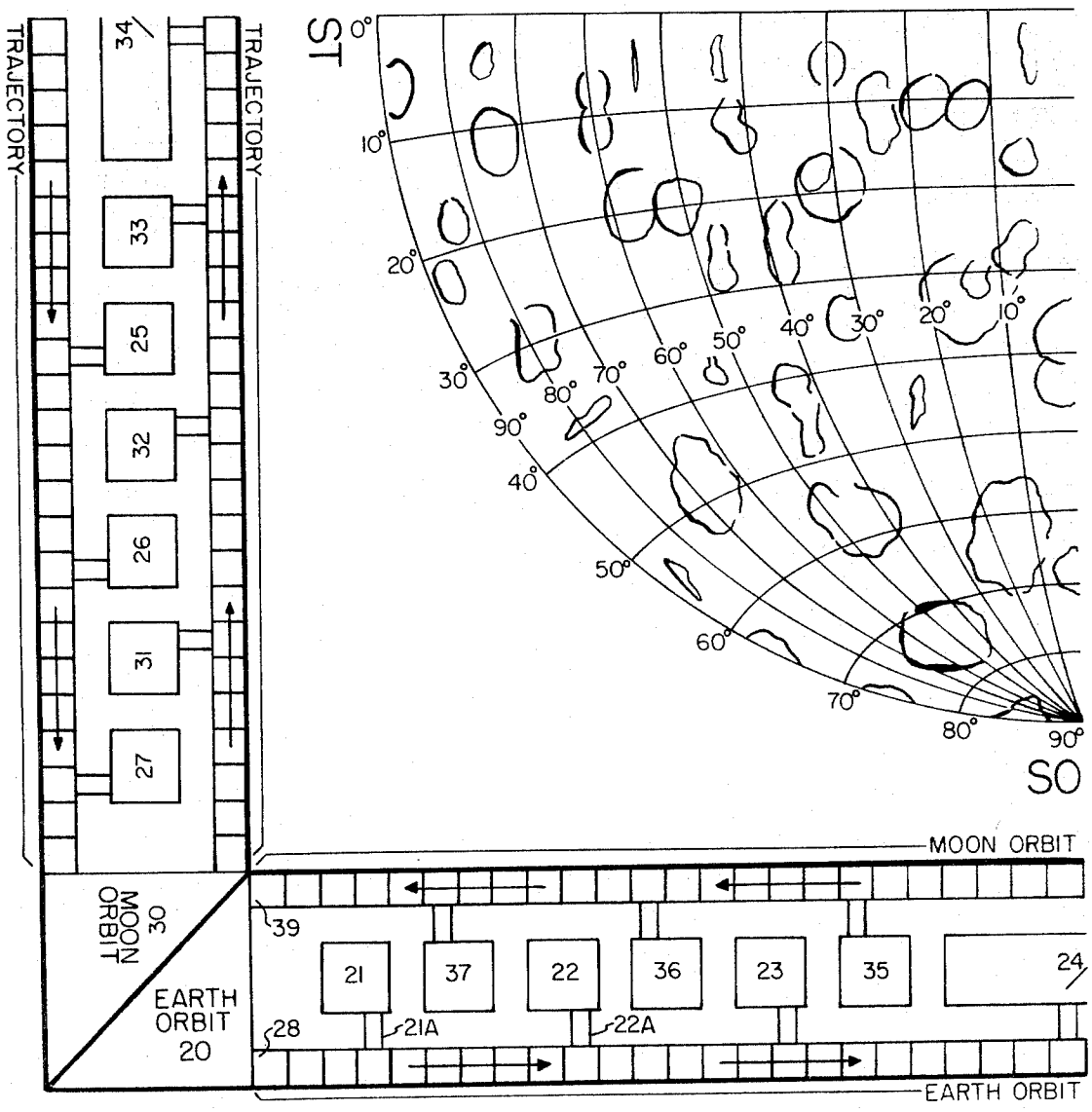

TRAJECTORY
TRAJECTORY
34
33
25
32
26
31
27
ST
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
10°
20°
30°
40°
50°
60°
70°
80°
90°
SO
MOON ORBIT
MOON ORBIT
30
EARTH ORBIT
20
39
21
37
22
36
23
35
24
28
21A
22A
EARTH ORBIT

FIG. 5

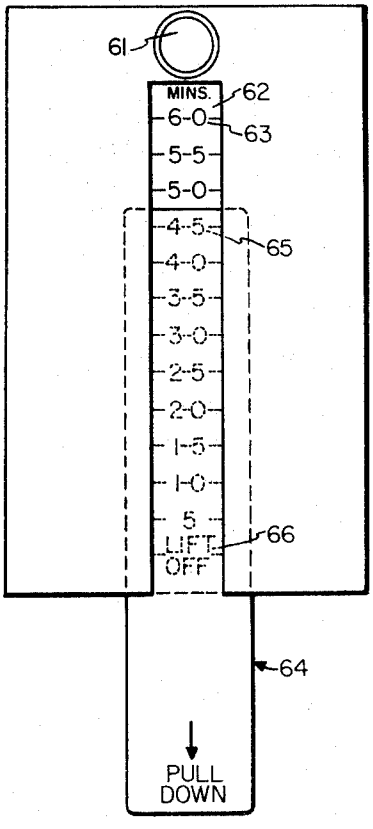


FIG. 6

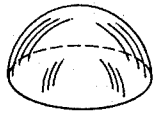


FIG. 10

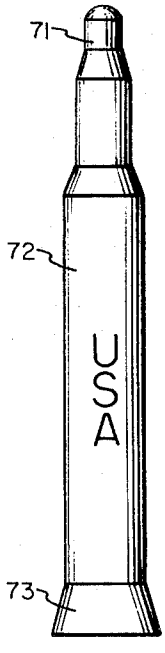


FIG. 7

PROCEED WITH COUNTDOWN 5 MINUTES

FIG. 8

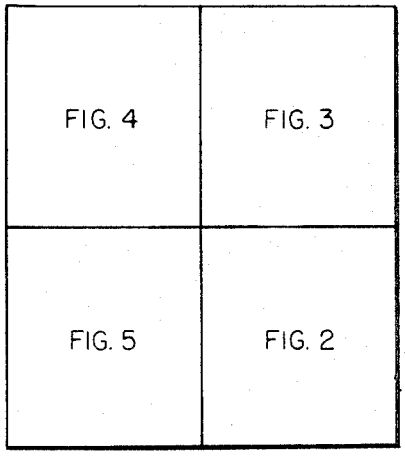


FIG. 9

BOARD GAME APPARATUS

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a game, and more particularly to a game based on the interest present in space flight and extraterrestrial exploration.

2. Description of the Prior Art

Board type games similar to that of the present invention are well known. Some games involving certain aspects of space travel and exploration have also become known. An example of this game is disclosed in U. S. Pat. No. 3,373,995 to J. A. Fors issued on Mar. 19, 1968.

SUMMARY OF THE INVENTION

The invention pertains to a game that is both educational and entertaining and differs from games heretofore known. The game is played upon a game board on which a graphic representation of an extraterrestrial body is shown as being the Moon, associated with the planet Earth. Superimposed upon the graphic representation of the Moon are latitude and longitude lines and the conventional degree markings usually associated with such lines. North, east, south and west directions are also shown around the edge of the game board on which such graphic representation is present; and define four playing areas. Each playing area is representative of an earth orbit trajectory and a moon orbit trajectory and includes a number of barriers associated with each trajectory. Each of the four playing areas may be played upon by one or two players. Thus any number of players from two to eight may enjoy the present game at a given time.

Each player is also equipped with a recording device I have designated a "timeorameter" launch pad. This is a slide type device and indicates the time until "liftoff" required for a particular player of the present game. A small space vehicle of plastic or similar material is also employed as a playing piece by each player. Also included is the moon colony marking disc. This is a small marker of bubble or igloo shape about the size of a small coin. Also involved in playing the game are a deck of cards, the legends thereon indicating information relative to liftoff of a player's space vehicle. A spinner is utilized to determine the latitude and longitude of the locations of each player's space landing site and the moon colony or common objective on the graphic representation of the extraterrestrial body. A pair of dice are utilized to determine movement of the space vehicle through earth and moon trajectories as well as movement of a portion of the space vehicle, designated a moon crawler, across the moon map to the selected space colony site, and finally return to the space vehicle.

Initially players sequentially draw cards from the above described deck of cards to determine the time at which their space vehicle will lift off and be placed into earth orbit. Indications of the time remaining before liftoff are recorded on the "timeorameter"slide device utilized by each player. When the liftoff position is reached by a first player on his "timeorameter" slide, he places his space vehicle in earth orbit. The others continue to draw cards as their turn occurs so they, too, may place their vehicle in space orbit. Each time a player who has placed his space vehicle in earth orbit shakes the dice when his turn occurs, he utilizes the count to advance his space vehicle through the earth orbit toward moon orbit. The first player to reach moon orbit operates the spinner referred to above to determine the site of the moon colony, placing a marker at the appropriate location. After this he again utilizes the spinner to locate his space vehicle landing site, placing his vehicle at that location. Additional moves, based on the shake of the dice, are then employed to move the moon crawler portion of the space vehicle towards the colony. Other players follow in like manner. The first player reaching the colony site is declared the initial winner of the space race.

After this another feature of the game enters with each player using the dice to move his moon crawler back to his space vehicle, attaching the moon crawler to it and then employing the "timeorameter" and cards to liftoff to moon orbit. The dice are then used to move the space vehicle through the moon orbit and return to the beginning earth orbit station to complete the game. The first player, obviously, to reach this point is declared the winner of the entire game.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a drawing of a computer spinner for use in playing a game in accordance with the present invention.

FIGS. **2**, **3**, **4**, and **5** taken in combination are a drawing of a game board for use in playing a game in accordance with the present invention.

FIG. **6** is a drawing of a "timeorameter" slide device for use in playing a game in accordance with the present invention.

FIG. **7** is a drawing of a space vehicle utilized as a playing piece in playing a game in accordance with the present invention.

FIG. **8** is a drawing of one of a deck of cards used in playing a game in accordance with the present invention.

FIG. **9** indicates the manner in which FIGS. **2**, **3**, **4**, and **5** are placed to form a game board for use in playing a game in accordance with the present invention.

FIG **10** is a drawing of a marker utilized to indicate an individual player's initial goal used in playing a game in accordance with the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring first to the drawings, the following equipment is used to play the game according to the present invention.

A game board as shown in FIGS. **2**, **3**, **4**, and **5** taken together and arranged as shown in FIG. **9**. The game board includes a graphic representation of an extraterrestrial body upon which latitude and longitude lines as well as orientational directions are indicated. On each side of the game board are 50 spaces extending from an earth orbit space **20** located at each player's left to a moon orbit space **30** located at each player's right, and an additional 50 spaces are included running from the moon orbit space on each player's right to the earth orbit space **20** located at each player's left. Arrows indicating direction of movement are shown on these spaces. Between these spaces which have been designated earth orbit spaces and moon orbit spaces are a plurality of boxes designated **21** through **27** inclusive and **31** through **37** inclusive.

Boxes **21** through **27** are designated outgoing trajectory barriers and are inscribed as follows:

Box **21** — Incorrect trajectory return to earth orbit,

Box **22** — Cosmic barrier, go back **5** spaces

Box **23** — Space rendezvous wait at Cosmodrome, lose one turn,

Box **24** — Excellent launch proceed to Midway Cosmodrome, rest and refuel, lose one turn.

Box **25** — Severe solar flares, return to Cosmodrome.

Box **26** — A — O.K. proceed **4** spaces,

Box **27** — Correct target profilator, lose one turn.

The return trajectory barriers **31** through **37** inclusive are inscribed as follows:

Box **31** — Meteorites ahead, go back **5** spaces

Box **32** — A — O.K. move ahead **5** spaces

Box **33** — Midway Cosmodrome

Box **34** — Return to Midway Cosmodrome

Box **35** — Space rendezvous, lose one turn

Box **36** — Cosmic barrier, go back **5** spaces

Box **37** — Adverse weather in receiving area, lose one turn.

Similar designations are present in the game board areas located on all four sides of the game board. That is to say each player has a similar earth and moon orbit and similar trajectory barriers in his playing area.

Each player also has a "timeorameter" launch card as shown in FIG. **6**. This is a device made of plastic, cardboard or the like, and includes a slide portion **64**, that when pulled in a "downward" direction reveals characters such as **63** that in-

dicate a number of minutes remaining before a launch. Initially each player's playing piece is placed on the launchpad area of the "timeorameter."

Also included is a deck of **42** "timeorameter cards," a sample of which is shown in FIG. **8**. This deck includes **42** cards carrying various inscriptions as follows:

Twelve cards bear the inscription "Proceed with countdown **5** minutes,"

Twelve cards carry the inscription "Proceed with countdown **10** minutes,"

Four cards carry the inscription "Proceed with countdown 15 minutes,"

Two cards carry the inscription "Proceed with countdown 20 minutes,"

Two cards carry the inscription "Hold, lose one turn,"

Ten cards carry the inscription "Hold."

Each card may additionally carry a preliminary phrase dealing with space vehicle operation, such as "Low Fuel Pressure," "Cloud Cover," etc.

Each player is also provided with a playing piece representing a space vehicle as shown in FIG. **7**. Each vehicle may carry distinctive identification such as a legend indicating a country of origin, or be of a particular color in order that one space vehicle may be told from the other. Each space vehicle has a main portion **72** and a base portion **73** and is designed to be placed in an upward position and moved across the earth and moon orbit spaces of the game board. Also included is a space crawler portion **71** which is removable from the space vehicle.

Also required for the present game is a computer spinner as shown in FIG. **1** made of cardboard, plastic or similar material having a rotatable spinner portion **101**, which spins on a background having both latitude and longitude markings. A space colony marker (FIG. **10**), which may be a small disc or bubble (igloo) type, of plastic or metal is also required. In addition a pair of special dice are required for play of the game. Each die has markings from one through four and two blank sides. Thus, the maximum count available to each player who shakes the dice is a count of eight.

Understanding of the present game can best be acquired by reference to the following description of the play and reference to the aforementioned drawings as follows:

Initially the game board as shown in FIGS. **2**, **3**, **4**, and **5** inclusive (arranged as shown in FIG. **9**) is placed between two to eight players. For purposes of the present description the play will be described as limited to four players who shall be designated as Players **1** through **4** inclusive. No. **1** shall be considered as being seated adjacent the NORTH marking on the game board, Player **2** adjacent to the EAST marking, Player **3** adjacent to the SOUTH marking and Player **4** adjacent to the WEST marking.

Each player places a "timeorameter" launch pad as shown in FIG. **6** in front of him with the slide portion **64** positioned so that the figure 60 minutes (**63**) is visible above the slide portion. Each player then chooses a space vehicle such as that shown in FIG. **7** in a manner acceptable to all players, each player placing his space vehicle on his "timeorameter" in the area designated as the Prelaunch Console **61**. The space vehicle remains in this location until such time as placed into Earth orbit on the game board.

The 42 "timeorameter" cards (like the sample shown in FIG. **8**) are then shuffled after which the cards are placed face down between the players. Starting with the dealer, each player draws a "timeorameter" card in sequence, following a clockwise progression. Each player then moves the slide portion **64** of his "timeorameter" in a downward direction in accordance with the instructions indicated on the drawn "-timeorameter" card. For example assume that Player No. **1** shuffled the "timeorameter" cards. After completing the shuffle he would draw a "timeorameter" card. This card, by way of example, might carry the indication, "Proceed with countdown 5 minutes". Player No. **1** would then move slide portion **64** of his "timeorameter" to show 55 minutes on the slide indicator portion **62**. Player No. **2** would then draw a card, which by way of example might carry the legend "Hold." Player No. **2** accordingly would not move his "timeorameter" slide.

Each player continues to draw "timeorameter" cards in sequence and position his "timeorameter" slide depending on the instructions indicated on the drawn cards until such time as the "timeorameter" indicator gauge shows "Liftoff," **66**. Any card drawn in excess of time left on "timeorameter" constitutes liftoff.

When the first player's "timeorameter" slide shows liftoff, **66**; that player places his space vehicle on the Earth orbit Area **20** associated with the beginning of the play. The earth orbit area for Player No. **1** for example is designated as earth orbit **20** in FIG. **3**, that for Player No. **2** is designated as earth orbit **20** in FIG. **2**, etc.

As each player reaches the liftoff condition and places his space vehicle (like that shown in FIG. **7**) into earth orbit he shakes the two dice that are included as part of the playing equipment. The player then moves his space vehicle along the near or lower group of spaces following the direction of the arrows shown the number of spaces shown by the count on the faces of the dice.

Obviously certain players will be still drawing cards while others are shaking dice. However, the play still continues in a clockwise direction with each player taking his turn in sequence, drawing cards or shaking dice as required.

Returning now to the player who has placed his space vehicle on the earth orbit space **20** at the left of his playing area, and assuming that this player is Player No. **1** who is playing at the area adjacent to the designation North which appears in FIGS. **3** and **4** of the accompanying drawings. Assuming now that Player No. **1**'s first throw of the dice has shown a count of eight, he will move his space vehicle eight spaces along the earth trajectory from his left to right, earth trajectory being the near spaces. Player No. **1** will place his space vehicle on the space designated **301**.

As may be observed the space vehicle passed through space **302** which is one of those mentioned previously as being a trajectory barrier. If the player had shaken the dice and had a count of four indicated his space vehicle would have been placed on space **302** associated with trajectory barrier **21**. As noted previously the inscription associated with this barrier is "Incorrect trajectory, return to earth orbit." The player would thus be obliged to return his space vehicle to the EARTH ORBIT beginning space **20** of FIG. **3**.

In a manner like that described above, each player moves his space vehicle from his left to right from the beginning earth orbit space **20** associated with the side of the playing board on which he is playing through the earth trajectory spaces toward the moon orbit space **30** on his right. Movement, of course, from left to right is based on the count shown on the faces of the dice. Each time a player's space vehicle lands on one of the trajectory barriers, the player is obliged to follow the instructions thereon, whether the action indicated is a penalty or a bonus.

When more than **4** players play the present game, no space vehicle can occupy the same space as another vehicle. A player landing on a space already occupied must return to the last barrier box space passed. Also, when utilizing the spinner to determine a landing site, as described in the following, no space vehicle may occupy the same landing site as another. The player who selects an already selected landing site loses a turn and then operates the spinner of FIG. **1** again to select a landing site.

Assume now that the space vehicle of Player No. **1** is on space **401** of FIG. **4** and that on his next opportunity to shake the dice Player No. **1**'s indicated count is **5**. Player No. **1** will advance his space vehicle to Moon Orbit Space **30** of FIG. **4**. Any count in excess of spaces left constitutes reaching Moon orbit.

At this time, the first player to reach Moon orbit uses his turn to utilize the spinner of FIG. **1** and locate the Moon colony location and the landing site of his space vehicle. As

other players reach Moon orbit, they in turn each use the spinner to determine their respective landing sites. The moon colony site and each player's landing site are determined by spinning the spinner portion **101**, which revolves in a conventional manner, with the arrow tip portion stopping and pointing toward the latitude or longitude portion indicated on the computer spinner of FIG. **1**. The designated location is noted first in terms of degrees of either north or south latitude, after which the computer spinner is reoperated to determine the east or west longitude also in degrees.

After both latitude and longitude locations are determined each player places his space vehicle at the juncture of the indicated latitude and longitude lines on the game board (as determined by the computer spinner).

If, for example, Player No. **1**'s first spin of the computer spinner indicated a location of 50° north latitude, and the second spin of the computer spinner a location of 40° west longitude, Player No. **1** would place the space colony marker (FIG. **10**) at the location indicated as **404** in FIG. **4**.

Player No. **1** now operates the spinner twice more. First to determine the latitude, and secondly the longitude, of his landing site. Assume these to be 10° north and 20° west. At the juncture of these lines (FIG. **4**) Player No. **1** places his space vehicle **72**. At this time, Player No. **1** would remove the moon crawler portion **71** of his space vehicle and when his turn comes, he shakes the dice to determine the movement of his moon crawler **71** toward the moon colony site. His space vehicle **72** remains at this juncture. If Player No. **1** rolls an odd number with the dice, he must move in a north-south direction or east-west direction, not a combination of both directions. If, however, an even number is rolled with the dice, the player may move in a north-south or an east-west direction or a combination of north-south and east-west directions, or not move at all at his option. Travel along the latitude or longitudinal lines must end at the moon colony site on an exact count of the dice. Diagonal moves are prohibited. No moves can go outside the globe. If movement is close to the edge, and Player No. **1** shakes an **8**, he must move away from the edge.

For example, if No. **405** on FIG. **4** would represent Player No. **1**'s landing site, and No. **404** on FIG. **4** would represent the moon colony site, a roll of **6** would place Player No. **1**'s moon crawler No. **71** on the moon colony. If, however, he had rolled a **7**, he would have to move in a westerly or northerly direction in a straight line; and on his next turn begin his return crawl toward the moon colony. Only even numbers can move in a combination of north-south and east-west directions.

As each player lands in moon orbit, he follows the sequence outlined above for determining his landing site by operating the computer spinner shown in FIG. **1**. Each player than shakes dice in his turn to move his moon crawler **71** toward the moon colony, No. **404**. The above outlined rules pertain to all players.

The first player to get his moon crawler **71** to the moon colony site No **404** wins the moon colonization race and may be declared the winner of the colonization race. Normally, however, the game is played as a two-step race, with the winning of the colony as only the first leg of the race. The race rules remain the same, each player attempting to move his moon crawler **71** back to his space ship at location **405** by the count of the dice. His crawler is attached to space ship **72** and then during his turn he draws "timeorameter" cards to determine liftoff to moon orbit **30** and back to earth by way of the moon trajectory shown with arrows from Moon Orbit Space **30** to Earth Orbit Space **20**. It is at this point where the earth orbit originally began. The first player to reach this location is declared the winner of the entire game. Naturally, the player's movement through the various barrier spaces affects his return trip and the time involved to move his space vehicle from its location of entry at Moon Orbit Space **30** to the Earth Orbit Space **20**.

I claim:

1. A game playable in accordance with a predetermined set of rules including, a game board comprising a graphic representation of an extraterrestrial body thereon, latitude and longitude markings on said representation, a plurality of playing areas each divided into at least two major segments further divided into a plurality of spaces; a plurality of playing pieces including one playing piece for each player of said game; a plurality of timing devices each comprising a base portion inscribed with a plurality of time division markings in decreasing order, and movable slide means; a plurality of playing cards, each inscribed with one of a plurality of instructions which may be interpreted in accordance with said rules as instructions for operation of said timing devices; said cards selected by individual players according to chance; said movable slide means operated in accordance with said rules and interpretation of the instructions on said playing cards to sequentially expose said markings, whereby exposure of the final marking serves as an indication that a player's playing piece may be placed on said board; and means operated by one of said players to select by chance a latitude and a longitude which may be used to locate an area on said graphic representation of an extraterrestrial body.

2. A game as claimed in claim **1** wherein said playing pieces each comprise: at least two separable portions.

3. A game as claimed in claim **1** wherein a portion of said spaces comprising each of said major segments are each individually inscribed with additional information pertaining to the advancement of said playing pieces over said spaces, through said segments.

4. A game as claimed in claim **1** wherein said means for selecting a latitude and a longitude comprise: a spinner device superimposed on a graphic representation of a globular body including longitudinal and latitudinal markings.

* * * * *