PUZZLE GAME METHOD AND APPARATUS

SPECIFICATION

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates generally to a puzzle game and method of playing same.

RELATED ART

Puzzles are well known and provide entertainment for countless people. One common type of puzzle is a jigsaw puzzle, which often includes an image on a substrate. The substrate is cut up into numerous pieces that are separated from each other. A player or players then arrange the puzzle pieces back together to form the image. Other puzzles can involve the manipulation or arrangement of pieces in various orders.

SUMMARY OF THE INVENTION

The present invention relates to a puzzle game method and apparatus. The puzzle game apparatus includes a plurality of puzzle pieces sized and shaped to be fit together. Puzzle pieces can include one or more indicia. Puzzle pieces can be sequentially fit together. Points can be acquired by matching of indicia in adjacent puzzle pieces.

The method of playing a puzzle game comprises dividing a plurality of puzzle pieces among players, and allowing players to alternate playing pieces by fitting the pieces to other pieces. Players can play pieces with indicia that match indicia on adjacent pieces to score points.

BRIEF DESCRIPTION OF THE DRAWINGS

The foregoing features of the invention will be apparent from the following Detailed Description of the Invention, taken in connection with the accompanying drawings, in which:

FIG. 1 is view of a portion of a puzzle having puzzle pieces fit together;

FIG. 2 is a view of a puzzle having pieces with indicia thereon;

FIG. 3 is another view of a puzzle having pieces with indicia thereon;

FIG. 4 is another view of a puzzle having pieces with indicia thereon;

FIG. 5 is another view of a puzzle having pieces with indicia thereon wherein a plurality of symbols can be on a single puzzle piece;

FIGS. 6A, **6B,** and **6C** show puzzle games with geometric puzzle pieces; and

FIGS. 7A and **7B** show puzzle pieces with textured faces that could be created by embossing or debossing.

DETAILED DESCRIPTION OF THE INVENTION

The present invention relates generally to a puzzle game and method of playing same. The game includes a plurality of pieces that can be fit together but are initially placed in a pile, which could be positioned within a box top, a tray, or elsewhere. The pieces could include edge pieces having one or more straight edges, and central pieces which may have non-linear shapes on all sides. The pieces could have game play information or indicia thereon such as one or more symbols or icons thereon. For example, a particular piece could have a single symbol thereon, or a piece can have multiple images thereon such as one symbol on each of a plurality of sides of the piece. As shown in **FIG. 1**, the pieces **20** could have symbols such as a star **30**, an oval **32,** or a rectangle **34**. The symbol could comprise virtually anything such as an image, mark, geometric shape, letter, number, line, color, etc. Indicia could be placed on some or all of the pieces in a particular game. Indicia could be applied to pieces in various ways including printing, embossing, debossing, etc.

Two or more players can play against each other as they attempt to complete a puzzle. Some of the puzzle pieces may only fit in one place within the puzzle (as with a traditional puzzle), while other pieces may be able to be placed in multiple places in the puzzle. Different types of pieces may have point values associated with them and the players can build on their point totals by stringing together chains of pieces in the puzzle while trying to block the other player(s) from doing the same.

Each player may start with a certain amount of pieces, which could include a certain amount of edge pieces. For example, the game could include three hundred pieces and each player could start with twenty pieces, of which ten pieces could be edge pieces. The initial

pieces that each person receives could be obtained by the sequential drawing of pieces by each player, or one player could deal the pieces out to all of the players, or otherwise. Players may draw pieces during this initial setup phase until they have ten of each type of piece (e.g. edge pieces and central pieces) and they could throw extras back as they choose. The amount of pieces a player has comprises that player's reserves.

During play, each player in turn draws or selects pieces from the pile of pieces. In some aspects of the game, pieces may be drawn blind or a player may look at the pieces in the pile from a distance, but not sufficiently to ascertain indicia associated with the pieces, if any, and then the player could reach into the pile pull out a piece.

Players can keep track of score on a score track on the bottom of the puzzle box using either objects they provide or cardboard markers provided in the puzzle box. Alternately one or more score sheet pages can be included in the box, along with a rule sheet. Scoring can be done by tallying points obtained by a player on each turn or in any other manner as the case may be.

Play starts with any two connected pieces placed out together. The connection between the pieces could be matching symbols adjacent sides of the pieces, correspondingly shaped sides, or some other connection. Once two pieces are placed, other pieces may be placed in a connected relationship to the cluster. **FIG. 2** shows a puzzle that includes a plurality of pieces **20**, some of which have symbols thereon, namely, rectangles **34**, triangles **36,** and circles **38**. Scoring can be done on an equal point basis for adjoining icons. In such a scoring system, the player playing rectangles would have a score of 4. Alternatively, the game could be played where any player can play any piece, so one or more players could have a portion of the 4 points associated with the rectangles. Further, increased points could

be awarded for building connected pieces, e.g. the first rectangle played is worth 1 point, the second is worth 2 points, etc. In another aspect, play could begin with the playing of a single piece.

A sample scoring scheme, which could be contained on a score sheet, might be as follows:

Placing 1 piece: 1 point;

Placing a line of three of the same symbol: 3 points;

Placing a piece that completes a square pattern of one of each of the 4 symbols: 3 points; and

Placing 3 pieces: 5 points (possible higher scoring for additional amounts of pieces).

Points can be scored in other ways in different aspects for the game. For example, points could be scored by creating sequences that could vary, or that are scored on adjacent or sequential pieces, or based on symbols placed adjacent each or on symbols placed remote from each other.

FIG. 3 shows a puzzle game where points could be awarded for placing symbols adjacent other symbols. Scoring could occur by awarding points for each symbol in a certain row. **FIG. 4** shows a puzzle game where a row of rectangles **34** on pieces **20** was blocked from continuing on by a column of triangles **36**. As shown in **FIG. 5**, puzzle pieces **20** could have multiple symbols on them and allow for scoring in multiple ways. For example, forming patterns of different shapes could result in increased points. As shown, a piece **21** carries two icons or symbols, namely a rectangle icon **34** and a circle icon **38**. The piece **21** could be played anywhere, but scoring can be maximized by playing it to match with a rectangle on an adjacent piece, and with a circle on another adjacent piece.

Play rotates with each player drawing pieces each turn (e.g. one piece, two pieces, etc.) and using as many of their reserve pieces as possible. When a player has less than a specified amount of pieces in reserve, e.g. ten pieces, the player may be required to throw in their reserve pieces, mix up the pile (for example by shaking up the pieces in the box top), and draw out a set number of pieces (e.g. twenty pieces) quickly without studying the pieces or carefully looking at the indicia thereon, to form a new reserve group.

The game ends when the puzzle is complete, or when a pre-set score is reached, or otherwise as may be the case in various aspects of the game.

As an optional catch-up mechanism, a player that falls behind and that plays three or more pieces, may be allowed to draw again and take one or more additional turns.

In a game with a large amount of pieces, for example, an 800 piece game, a player could be required to take a larger amount of pieces on each turn, for example, ten pieces. The player could play any of those pieces that can be played, retain some amount of pieces in reserve, for example two pieces, and place the remainder in a separate pile. The score could be tracked on a separate piece of paper that may or may not be included with the game. Players could alternate turns (except where a player gets additional turns) until the pieces have all been selected. Then the pile of unused pieces can be placed back into the box or tray and the process can be repeated for a second round (and subsequent rounds if desirable). More than two players could play this version (or any other version) of the game. Each player could have only up to a pre-set amount of reserve pieces, for example 20 pieces, and could be required to throw pieces back if they have more than twenty pieces at the end of any turn.

As the game is played, the players work to achieve victory by achieving scoring combinations based on the puzzle game play information in accordance with a set of game rules. In some cases the game rules could allow pieces of the puzzle to be moved or positionally changed. Pieces can be played to inhibit an opponent from scoring by placing pieces in blocking positions. In some cases, players may be allowed to trade puzzle pieces. The puzzle pieces of the puzzle could have intrinsic game relevance in accordance with a set of game rules wherein, for example, an edge piece may be worth 1 point, a central piece may be worth 2 points, and a piece with a certain symbol or certain color may be worth 3 points.

The puzzle pieces may have a tessellated pattern composed of a horizontal series of connecting tabs where each horizontal piece has the same tab functionality as each other horizontal piece in the row. The same could be true for vertical pieces. Further, the vertical positioning for a row could be interchanged, resulting in varying configurations of the completed puzzle. A puzzle piece could have symmetry such that when placing it on a flat surface and rotating it some amount, for example 180 degrees or some other amount, could result in it being in a position with an identical interlocking tab functionality as the original position.

As shown in **FIGS. 6A, 6B,** and **6C**, the puzzle could be in form of a square or rectangle or other shape, and the puzzle pieces comprising the puzzle could similarly be square, triangle or other shape, and have minimal or no tab attachment. As such, the puzzle pieces forming the larger image could comprise 4 or 9 or some other number of smaller puzzle pieces **50**, **60**, and **70**. The pieces **50**, **60,** and **70** could have symbols therein such as rectangles **34**, triangles **36**, and circles **38**. The sub-squares or pieces might be fit together

or attached with a single connector or might just be positioned adjacent to the other squares forming the larger picture. As such, the square puzzle pieces **50** could be placed in a fashion resulting in a scrambled final image, and/or the square puzzle pieces **50** could be placed in a fashion resulting in a scrambled final image and then moved around during the game to unscramble the image.

A game board could be used with the puzzle game that could show placement positions for the puzzle pieces used in the puzzle game. The placement positions could be shown by indications or restrictions on where certain pieces may be placed. The game board could contain scoring modifiers or values for use in a puzzle game. The game board could be modified by the players before or during the play of a puzzle game.

The puzzle game could include indicia, such as colored lines, embedded in an image or on a border, that could include the game information and which could contribute to scoring methods under the game play rules. The indicia could comprise data in the form of small letters, numbers, symbols, shapes printed or embossed on the puzzle pieces, which could contribute to scoring when placed to form the puzzle under the game play rules. A color element could additionally contribute to scoring methods. As shown in **FIGS. 7A** and **7B**, the pieces **80** could have raised features **82** or indented features **84** that are utilized in the game play, which could be visible from an angle or a certain perspective, but would not have any other visual element that would detract from the image, therefor looking at the puzzle straight-on would typically show a normal image. Data could be incorporated into an image on the puzzle pieces **80** in a hidden fashion, such as by a printing or embossing or debossing processing process or otherwise. The data could be visible when looked at carefully, in certain lighting, or with certain user worn accessories or viewing aids, such as

colored lens glasses. The puzzle game could have specific locked starting positions that can then be built upon during game play.

In an aspect of the game, players can modify or change puzzle pieces prior to the start of the game or as the game is being played. For example, players can mark symbols, change symbols, impart symbols to pieces that had no symbols, add additional symbols to pieces already having symbols, or otherwise modify pieces. The modifications can be made with marks, stickers, or in other ways. The modifications could be permanent or temporary.

The puzzle game could also be in the form of an electronic game, and electronic puzzle piece images can be played by the players. In an electronic form, the game can be played by a single player against a computer. The game could take place on a local electronic device such as a tablet, a smart phone, or other computing device. The game could be played by players in remote locations over a computer network. Puzzle pieces can be rotated with the puzzle piece image orientation remaining in the same orientation, or placement of a piece may alter the tab configuration of remaining pieces that have not yet been placed in the puzzle. Puzzle piece game information could be revealed when pieces are placed on the board, such that game information for a puzzle piece is only known when the piece is played.

The puzzle game play could include extra puzzle pieces that can be available for certain puzzle positions, each containing different game play elements. In such a case, the original puzzle pieces may be primary puzzle pieces while the extra puzzle pieces may be secondary puzzle pieces. The extra pieces could form a duplicate or similar puzzle, or a smaller separate image. Accordingly, a puzzle could be provided in multiple copies: a first copy with no indicia on the pieces; a second copy with a first indicia on the pieces; a third

copy with a second indicia or multiple indicia in each piece; etc. Accordingly, the puzzle could be completed using a piece for a given location that has no indicia, first indicia, etc. As such, there would be multiple ways of completing the puzzle depending on which of multiple pieces a player played at a particular location. Multiple layers of a puzzle can be made available, with each layer having different game play elements. In such a case, each layered puzzle could be identical and each identical piece could have different elements of game play. The puzzle game could include two puzzles with identical patterns but different images, with one puzzle being stacked on the other puzzle during stages of the game.

The puzzle game could include puzzle pieces having a receptacle capable of holding a marker object such as a stick. These marker sticks may be inserted into the puzzle pieces during the game to indicate control, scoring, or other information in accordance with a set of game play rules. Receptacles of various sizes could be provided that are capable of holding various marker objects. Differing subsets of the markers may interact with some or all of the puzzle pieces in accordance with a set of game play rules.

Having thus described the invention in detail, it is to be understood that the foregoing description is not intended to limit the spirit or scope thereof. What is desired to be protected is set forth in the following claims.

CLAIMS

What is claimed is:

1. A puzzle game comprising:

puzzle pieces sized and shaped to be positioned together; and

indicia on one or more of the puzzle pieces;

wherein puzzle pieces with matching indicia can be sequentially interconnected by players to score points.

2. The puzzle game of claim 1, wherein the indicia comprises one or more symbols.

3. The puzzle game of claim 2, wherein the one or more symbols are positioned at one or more edges of the of the puzzle pieces.

4. The puzzle game of claim 1, wherein the indicia comprises at least one of a color, a line, a letter, and a number.

5. The puzzle game of claim 1, wherein the indicia is embossed on the puzzle pieces.

6. The puzzle game of claim 1, wherein the indicia is debossed on the puzzle pieces.

7. The puzzle game of claim 3, wherein two different symbols are positioned on a puzzle piece.

8. The puzzle game of claim 1, wherein the puzzle pieces have straight edges.

9. The puzzle game of claim 1, wherein the puzzle pieces have one or more edges that are nonlinear.

10. The puzzle game of claim 9, wherein the puzzle pieces have tessellated edges.

11. The puzzle game of claim 10, wherein some or all of the puzzle pieces have identical shapes.

12. The puzzle game of claim 10, wherein the tessellated edges include tabs.

13. The puzzle game of claim 10, wherein the puzzle pieces have symmetry allowing for rotational positioning with identical tab positioning.

14. The puzzle game of claim 1, further comprising a game board.

15. The puzzle game of claim 14, wherein the game board identifies puzzle piece positions.

16. The puzzle game of claim 14, wherein the game board includes one or more scoring modifiers.

17. The puzzle game of claim 15, wherein the game board includes game board indicia thereon.

18. The puzzle game of claim 15, wherein the game board indicia is positioned on a border around the game board.

19. The puzzle game of claim 1, wherein the indicia is hidden.

20. The puzzle game of claim 19, wherein the indicia can only be viewed from certain perspectives.

21. The puzzle game of claim 19, wherein the indicia can only be viewed with a viewing aid.

22. The puzzle game of claim 14, wherein the game board is modifiable by the players.

23. The puzzle game of claim 1, wherein the puzzle pieces include receptacles for holding markers.

24. The puzzle game of claim 1, wherein the puzzle pieces are primary puzzle pieces and the puzzle game further comprises secondary puzzle pieces that can include additional game play elements.

25. The puzzle game of claim 24, wherein the secondary puzzle pieces are matching in shape to the primary puzzle pieces.

26. The puzzle game of claim 24, wherein the secondary puzzle pieces are shaped to be positioned together to form a completed puzzle different from the primary puzzle pieces.

27. The puzzle game of claim 24, wherein the secondary puzzle pieces can be interconnected on top of the primary puzzle pieces as another layer.

28. The puzzle game of claim 27, wherein multiple layers of puzzle pieces can be formed.

29. The puzzle game of claim 28, wherein each layer of puzzle pieces includes different game play elements.

30. A puzzle game comprising:

a computing device with a display;

images of puzzle pieces generated by the computing device on the display, the puzzle pieces sized and shaped to be positioned together; and

indicia on one or more of the puzzle pieces;

wherein puzzle pieces with matching indicia can be sequentially interconnected by a player to score points.

31. A method of playing a game having puzzle pieces comprising:

dividing a plurality of puzzle pieces among players, a subset of the plurality of puzzle pieces having one or more indicia thereon and having one or more surfaces for positioning together with other puzzle pieces;

allowing players to alternatingly play puzzle pieces by positioning puzzle pieces together with other puzzle pieces having matching indicia; and

awarding points to players for positioning puzzle pieces together having matching indicia.

32. The method of claim 31, wherein a player can play multiple puzzles pieces in a turn wherein the pieces are positioned together with pieces that include matching indicia.

33. The method of claim 31, wherein a player picks up one or more pieces at the end of the player's turn.

34. The method of claim 31, wherein the puzzle pieces are played on a game board.

35. The method of claim 34, wherein the game board includes indicia thereon and a player is awarded points for matching the indicia on the puzzle pieces with the indicia on the game board.

36. The method of claim 31, wherein additional points are awarded when a player plays a puzzle piece having multiple indicia that match the indicia on a plurality of other puzzle pieces that the played piece is positioned adjacent with.

37. The method of claim 31, wherein a player can modify the indicia on a puzzle piece as the game is being played.

38. The method of claim 37, wherein the indicia is modified by placing a sticker on a puzzle piece.

39. The method of claim 35, wherein the indicia is hidden and the method further comprises using a viewing aid to view the indicia.