

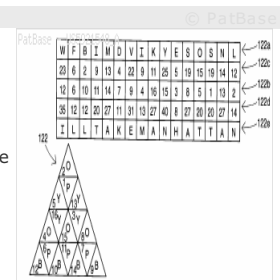
1) Family number: 12071742 (US5921548A)

GEOMETRIC AND CRYPTOGRAPHIC PUZZLE

Abstract: Source: US5921548A Puzzles characterized by one or a number of sets of visually identical, physically interchangeable, rotatable pieces that either contain magnets with varying north/south orientations embedded in their sides and/or have a mark or markings on one or more of their edges and computer versions of these puzzles. The object of the puzzles is to arrange the pieces in predetermined shapes and sequences in such a manner that the sides of the pieces which are in contact with the sides of other pieces have opposite magnetic poles facing each other so that the pieces attract, rather than repel or, if edge markings are used with or instead of magnets, so that adjacent edge markings comply with specified rules. In addition, the pieces may be all visually identical except for differences in edge markings, if any, or, alternatively, there may be several sets of visually identical pieces, e.g., pink pieces, blue pieces, yellow pieces and orange pieces, which together comprise a puzzle set. Because each solution to the puzzle is a particular sequence of the puzzle pieces, that sequence of pieces can be used in various ways to generate cryptographic keys which will enable ciphertext, which accompanies the puzzle, to be decoded. In addition, with some methods of generating cryptographic keys from the sequence of pieces in the solution to the puzzle, partial cryptographic keys are generated before the puzzle is completely solved, enabling partial solutions of the puzzle to be checked to determine if they are correct, thereby simplifying very difficult puzzles and making possible the solution of otherwise virtually impossible puzzles.

Probable Assignee: GOLDBERG MELVIN L

Earliest Publication Date: 19990713



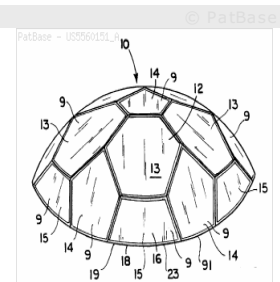
2) Family number: 12314136 (US5560151A)

BUILDING BLOCKS FORMING HEXAGONAL AND PENTAGONAL BUILDING UNITS FOR MODULAR STRUCTURES

Abstract: Source: US5560151A A building structure which contains a hexagonal building unit and a pentagonal building unit joined together by a plug. There are six triangularly-shaped building blocks in the hexagonal unit, and the base angles of these building blocks is from about 60.6 to about 60.8 degrees. There are five triangularly-shaped building blocks in the pentagonal unit, and the base angles of these building blocks is from about 54.5 to about 54.7 degrees.

Probable Assignee: POLYCERAMICS INC

Earliest Publication Date: 19961001



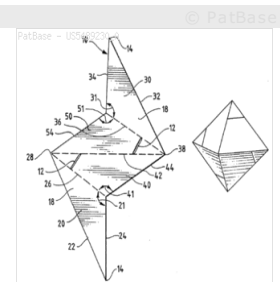
3) Family number: 12376265 (US5489230A)

BLANK FOR CONSTRUCTING TRIANGULAR POLYHEDRA

Abstract: Source: US5489230A A geometric construction set is described having a number of blanks where each blank includes four contiguous triangular sections. The two outer triangular sections each have two edges at the peripheral edge of the blank and the remaining two inner triangular sections having only one edge at the peripheral edge of the blank. Each outer triangular section has a connector that is mateable with a connector on each of the inner triangular sections. The blanks are designed to facially interconnect with other matching blanks allowing the construction of a large variety of triangular polyhedra.

Probable Assignee: GAVULA JR JOHN

Earliest Publication Date: 19960206



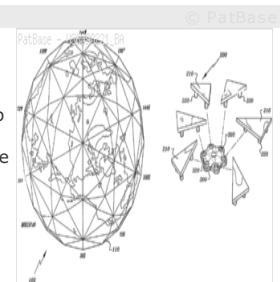
4) Family number: 29929449 (US6398221B)

POLYHEDRON GLOBE PUZZLE SYSTEM

Abstract: Source: US6398221B The polyhedron globe puzzle system of this invention comprises a plurality of scalene triangles with attachment means so as to form a generally spherical body on which is inscribed a world map such that the position of the scalene triangles contains latent and patent information and intelligence about the geography of the world map including but not limited to longitudinal and latitudinal information. The 360 edges of the 240'dron form themselves into 21 circumscribing polygons which, when projected on to a concentric true sphere, become Great Circles.

Probable Assignee: GRAHAM JOHN ALEXANDER

Earliest Publication Date: 20020604



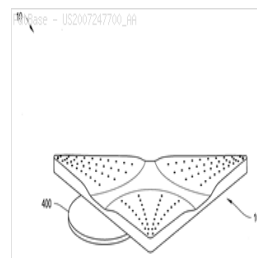
5) Family number: 35577613 (US2007247700A)

SYSTEMS AND METHODS FOR SENSORY STIMULATION

Abstract: Source: US2007247700A The invention relates generally to cognitive stimulation apparatuses and systems, and methods of manufacturing the same. In certain exemplary implementations the invention provides an at least partially transparent, pliable gel having an optical property, such as brightness or color, and a circuit for delivering electromagnetic radiation to the gel to modify the optical property. Under certain conditions, modifying the optical property can stimulate a user's visual and other senses to help improve cognitive development and functionality.

Probable Assignee: ISPACE ART LABS LLC

Earliest Publication Date: 20070823



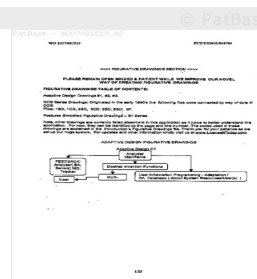
6) Family number: 34894143 (WO07081519A2)

GENIUS ADAPTIVE DESIGN

Abstract: Explore interesting inventions inside, conceived by our genius idea generator. Discover history's most effective method in conceiving novel uses for existing electronic technology. License huge domains of intellectual property from the invention directory our system helped develop. The searcher can find one of our interesting inventions in this patent application via our LicenseItToday.com, etc. Call our California Headquarters 1-707-428-5000. View invention ideas, plus 100+ variations adapted for end user target markets. LicenseItToday.com fills out exclusive international license agreements valid up to December 2026. It saves time and money creative LP. over any other documented creative thinking process. Licensees seek outputted patents using our or their pat attorneys. Royalties can start when profits begin. Or you can buy the affordable I.P. rights. Proof is in tryingit out. Discover amazing inventions inside today.

Probable Assignee: INNOVATION INST LLC

Earliest Publication Date: 20070719



7) Family number: 70158375 (CO20160001498A)

APARATO Y SISTEMA CONSTRUCTIVO DE ESTRUCTURAS ESPECIALES AUTO-SOPORTADAS APPARATUS AND CONSTRUCTIVE SYSTEM OF SPECIAL STRUCTURES SELF-SUPPORTED (MACHINE TRANSLATION)

Abstract: Source: CO20160001498A Aparato formado por piezas con ensambles machihembrados y el sistema para construirlas. Las piezas tienen la forma que resulta de la integración de métodos de geometría computacional con procedimientos de diseños geométrico de estructuras espaciales que aproximan la esfera y otras superficies cuadráticas. El aparato y el sistema constructivo se pueden utilizar en una variedad de aplicaciones que va desde nuevos rompecabezas tridimensionales, hasta estructuras complejas satelitales y construcciones espaciales auto-soportadas que no requieren herramientas para su ensamble. Apparatus formed by pieces with tongue and groove assemblies and the system to build them. The pieces have the shape resulting from the integration of methods of computational geometry with geometric designs that approximate the sphere of space structures quadratic and other surfaces. The apparatus and the construction system can be used in a variety of applications ranging from new three-dimensional puzzle, to complex structures and self-supported spatial constructions that do not require tools for assembly.

Probable Assignee: GAMBOA FAJARDO HERMOGENES

Earliest Publication Date: 20180228

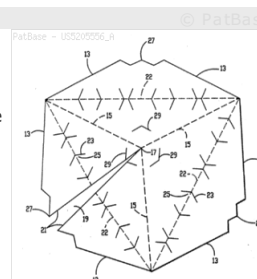
8) Family number: 11135135 (US5205556A)

GEODESIC GLOBE PUZZLE

Abstract: Source: US5205556A A geodesic globe formed of identical overlapping and interlocking specific geometric configuration segments formed of a bendable material which can be folded and interlocked whereby if the pieces are printed with portions of a map of the world they form a puzzle which can be assembled into a globe.

Probable Assignee: VOLUNTEERS OF AMERICA BAY AREA

Earliest Publication Date: 19930427



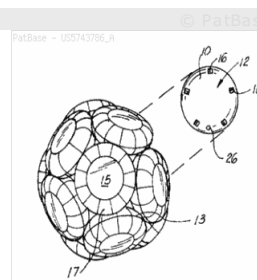
9) Family number: 11583261 (US5743786A)

BALLOON FACE POLYHEDRA

Abstract: Source: US5743786A A system for releasably joining balloons and the like to form a structure, novelty, educational, or play item. The present invention comprises a modular system of inflated cells having connection members placed about each cells periphery, said cells configured to form various polyhedral shapes. The preferred embodiment of the present invention teaches the utilization of generally ellipsoidal balloons of a non-elastomeric material, such as MYLAR, each said ellipsoid forming a cell, and being configured to selectively engage neighboring balloons to form generally radial or other multi-celled structures. While the preferred embodiment of the present system contemplates the utilization of hook and loop fasteners, such as VELCRO, for joining the cells, alternative modes of releasable attachment are also contemplated such as adhesives, ties, tape, and shrink wrap. The present system in effect creates a double-walled structure (which walls may be inflated) which utilizes an attachment configuration which provides for enhanced structural integrity, as well as diversity and flexibility in terms of the alternative configured structures and items which may be fabricated utilizing the present system. An alternative embodiment of the present invention contemplates a multi-celled, releasably joined inflatable structure which may be assembled in such a manner as to form a cushion and simulate an explosive impact, upon a user falling or jumping upon same.

Probable Assignee: BAFADDESIGN LLC

Earliest Publication Date: 19980428



PLURAL ELEMENT COMPOSITE MATERIALS, METHODS FOR MAKING AND USING THE SAME

Abstract: Source: US2007259598A The invention provides composite materials comprising a shape change element and an optical change element, which elements undergo a change in response to an applied stimulus. Also provided are objects that include the subject shape changing materials, as well as methods of making and using the same.

Probable Assignee: SEGAN IND INC

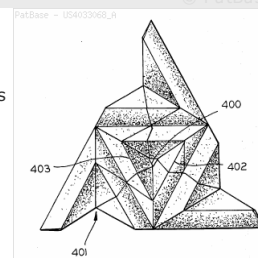
Earliest Publication Date: 20050331

STRUCTURAL MODULE

Abstract: Source: US4033068A A folded structural module form includes an oppositely disposed pair of points and interior pockets which enable adjacent modules to be put together to make a geometrical form by slipping the points of one module into the pockets of another module. By varying the numbers of modules used, the manner in which they are inserted, and by use of other assembly techniques, a great variety of different structures may be produced. The modules and the forms produced thereby are useful as educational devices, scientific models, decorations, furnishings, toy, and construction units.

Probable Assignee: SKILLMAN JACK J

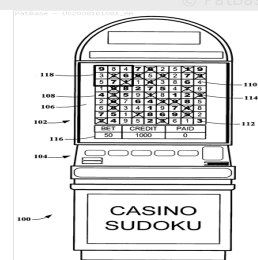
Earliest Publication Date: 19770705

**SUDOKU-TYPE GAMING ACTIVITY**

Abstract: Source: US2008161081A Providing a Sudoku-type gaming experience to a player involves presenting a playing field having a plurality of geometrically linked cells. The playing field has one or more pay regions each including a predefined number of cells of the plurality of cells. Within each of the cells a symbol selected from a plurality of symbols is presented, and a monetary award is provided to the player based on at least one of the pay regions having no two cells with the same symbol

Probable Assignee: KING SHOW GAMES INC

Earliest Publication Date: 20080703

**GAMING MACHINE, APPARATUS AND METHODS**

Abstract: Source: US2015325078A A gaming system for operating a game of chance, more particularly a gaming machine having a player interface with interactive display, a processor with memory, instructions in memory, and a graphics modelling engine operative cooperatively with a kinematics engine and random number engine, such that the gaming machine is adapted to display randomized motions for a plurality of virtual gamepieces, termed here "selectable objects", each selectable object having a concealed "embedded element" that is revealed during gameplay. The instructions are configured to execute an initialization stage, a transitional stage, a transformational stage with spatial randomization, and a play stage in which a player selects a subset of the gamepieces from a virtual gameboard. The game is resolved by determining a game outcome based on the number of instant win lottery numbers and non-random supplemental indicia matched by a player, and awarding a prize to motivate further play.

Probable Assignee: ALSIP BRUCE

Earliest Publication Date: 20151112

**EMBEDDED TRANSFORMABLE NANOFILAMENTS IN MULTILAYER CRYSTALLINE SPACE FOR PHOTOVOLTAIC CELLS AND METHOD OF FABRICATION**

Abstract: Source: US2008236656A The invention pertains to the use of nanotechnology in photovoltaic (PV) cells. The apparatus is comprised of a multilayer crystalline media within which are embedded adaptive nanofilaments. The system efficiently emulates the natural process of photosynthesis and includes an efficient storage capability. A method of fabrication of the components and the apparatus is also disclosed.

Probable Assignee: SOLOMON RES LLC

Earliest Publication Date: 20080529

