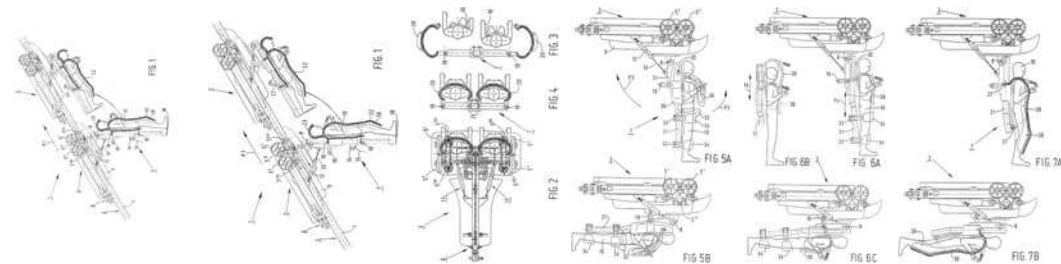
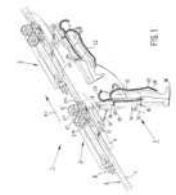


Patent families - 44 results

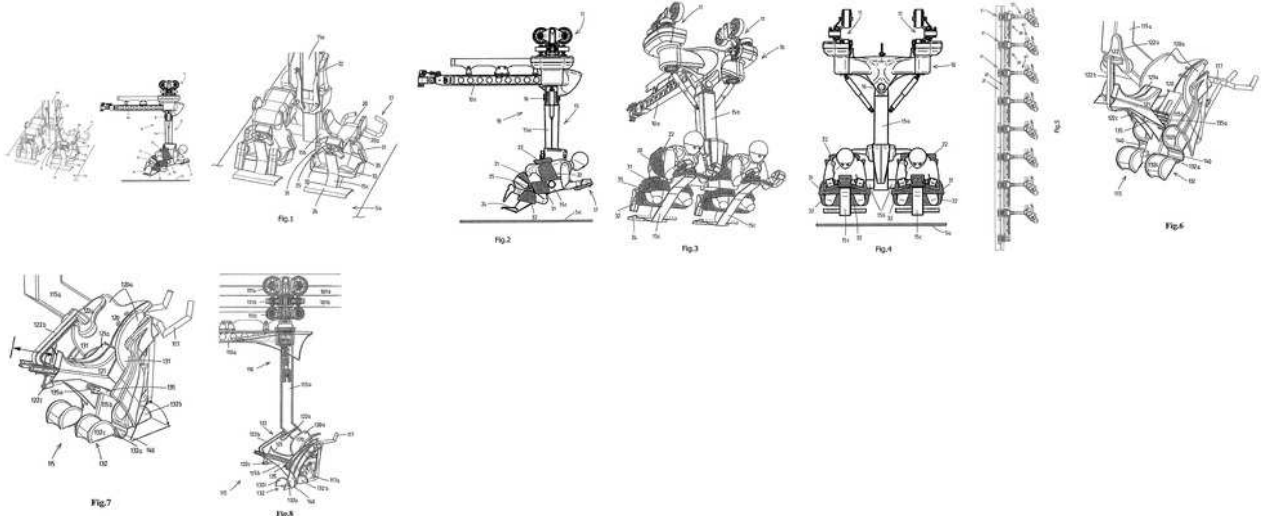
#	Title	Publication number	Publ. date	Applicant/Assignee	
1.	An amusement device and a vehicle suitable for being used in such an amusement device	EP0958013	1999-11-24	VEKOMA RIDES ENGINEERING VEKOMA INTERNATIONAL VEKOMA RIDES ENGINEERING VLODROP VEKOMA TECHNOLOGY	100 %

An amusement device comprising a guide structure forming an endless track, along which a vehicle capable of accommodating at least one person can travel, whereby a person present in the vehicle extends substantially parallel to the track during operation. The person present in the vehicle lies with his back towards the track and with his face directed away from the track. The person's view is not impeded by other vehicles and he can only see the track itself when he turns his head.



2.	A rollercoaster amusement device	EP2175951	2010-04-21	VEKOMA RIDES ENGINEERING	72 %
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A rollercoaster amusement device adapted to provide for the passengers a ride wherein the passengers experience at least a portion of the ride in a racing position, said amusement device comprising: - an endless guide structure (1 a, b) at least comprising multiple curves, - one or more carriages (10) displaceable along said guide structure, preferably each carriage having wheels (11) engaging said guide structure, - a passenger assembly (15) associated with a carriage, said passenger assembly being adapted to accommodate at least one passenger such that said passenger experiences at least a portion of the ride in a racing position, - a station (5a) along said guide structure allowing the passenger to board the passenger assembly. The passenger assembly includes a frame (15a, b, c) that is connected to the carriage, the frame at least being provided with: - a chest support (20), - a back restraining member (22), and - a leg restraining device for each leg, such that in the racing position: - the passenger's head is directed forward, - the passenger's trunk is resting with its chest side on the chest support, - the back restraining member restrains motion of the passenger away from the chest support, - the leg restraining devices each hold the respective leg such that the upper leg is angled downward with respect to the trunk and the leg is bend at the knee so that the lower leg is angled rearward with respect to the upper leg. A leg restraining device for restraining a leg includes: - an upper leg retention member (31) adapted to engage at least the front side of the upper leg, - a lower leg retention member (32) adapted to engage at least the front side of the lower leg, so that the upper and lower leg retention members retain the leg while bend at the knee.



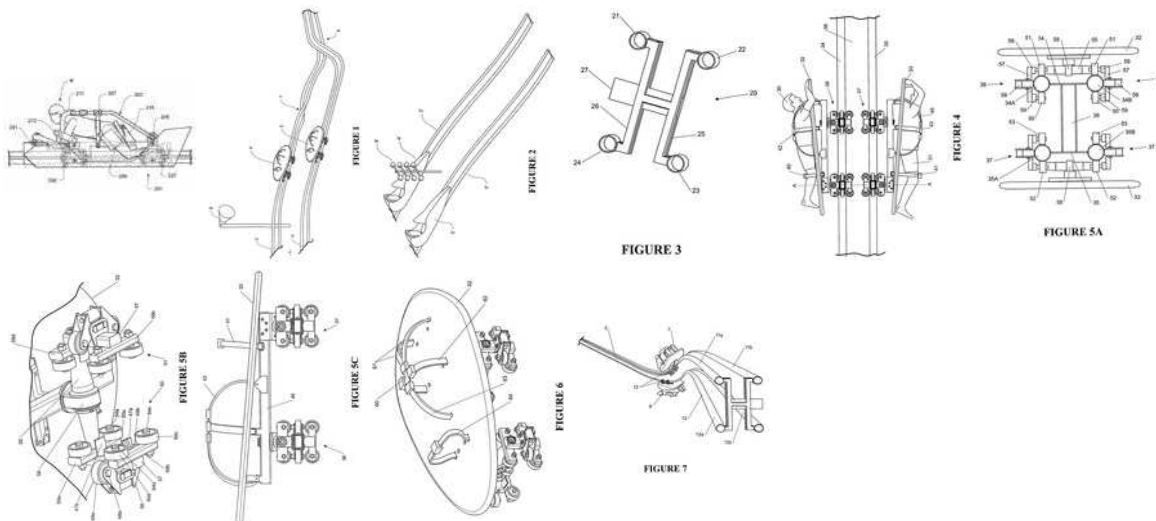
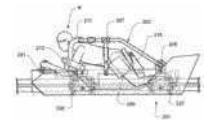
3. Drag racing roller coaster amusement ride and launch system EP1912715

2008-04-23

MANCHESTER SECURITIES

72 %

A drag racing roller coaster amusement ride has at least two sets running rails, each set having at least one running rail and an embark point. At least two carriers (109) are arranged to carry at least one rider on a respective set of running rails with the rider(s) in a substantially prone position. Each carrier is arranged to slidably engage with the respective set of running rails to enable the carriers to traverse the ride. The ride has an indicator (109) to provide a ride commencement indication. A launch system is configured to provide a powered initial motion to each carrier. Each carrier has a ride activator controllable by a rider of the carrier to trigger the launch system to commence the ride for the carrier following the ride commencement indication. Launch systems are also disclosed.



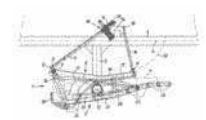
4. Person carrier for amusement rides EP1140307

2001-10-10

HUSS MASCHINENFABRIK

71 %

The invention relates to a person carrier which is mounted on an amusement ride and which supports a single person in a lying position. Said carrier consists of a lower support and a lid which is pivotably connected to the lower support in the front area, near to the head. The lower support and the lid are essentially parallel when the carrier is closed and at an angle to each other when it is open. The invention is characterised in that the support (5) can pivot about a bearing axis (8) which is fixed in relation to the fixing of the person carrier (1) on the amusement ride. Said bearing axis runs parallel to the pivot pin (7) between the support (5) and the lid (6) in an area through which the vertical through the centre of gravity of the occupied person carrier (1) passes when the carrier is closed. The invention is also characterised in that a pull and push mechanism (rod 11) which is linked to a holding device (14) above the lid (6), said holding device (14) being stationary and set back in relation to the bearing axis (8), acts upon one of the support (5) and the lid (6) in the area of the pivot pin (7) between them, in an articulated manner; and in that a control arm (18) is linked by one end to the rear (17) area of the lid (6) and by its other end (at 19) to the holding device (14).



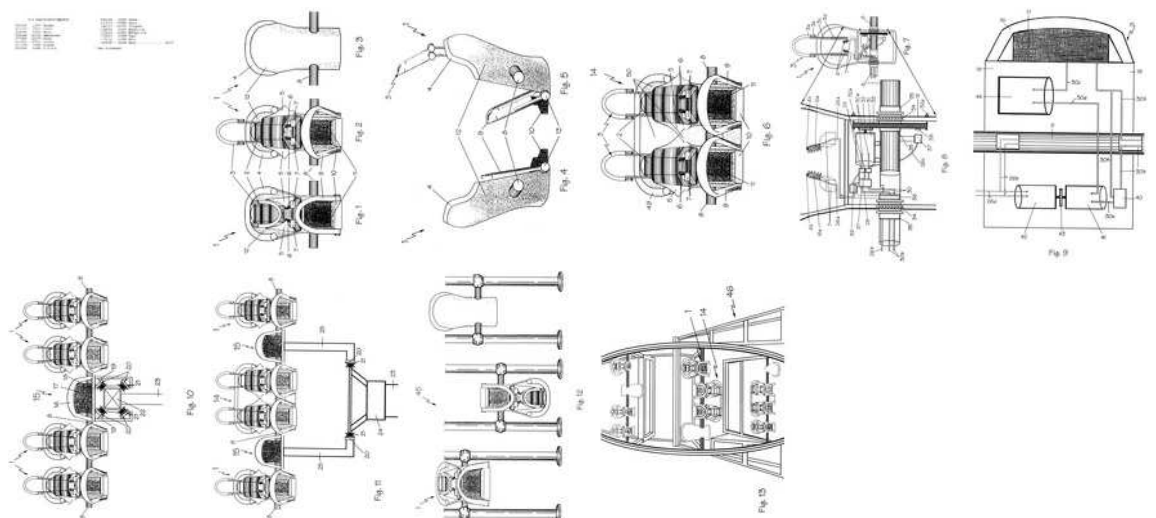
5. Modularized amusement ride and training simulation device US6227121

2001-05-08

METEORO AMUSEMENT

71 %

An amusement device comprising a modularized pod, in which one or more riders sit and are restrained, and which spins under power about a horizontal axis according to the passenger's active control. The riders control the spinning of the pod, either forward or backward, by pressing buttons on the passenger's handgrips located inside the pod. The modularized pod may be used in conjunction with many different types of amusement devices, including, but not limited to roller coasters, carousels, Ferris wheels, virtual reality units, centrifugal tumblers. The modularized pod may also be used in conjunction with flight and space training and simulation units.



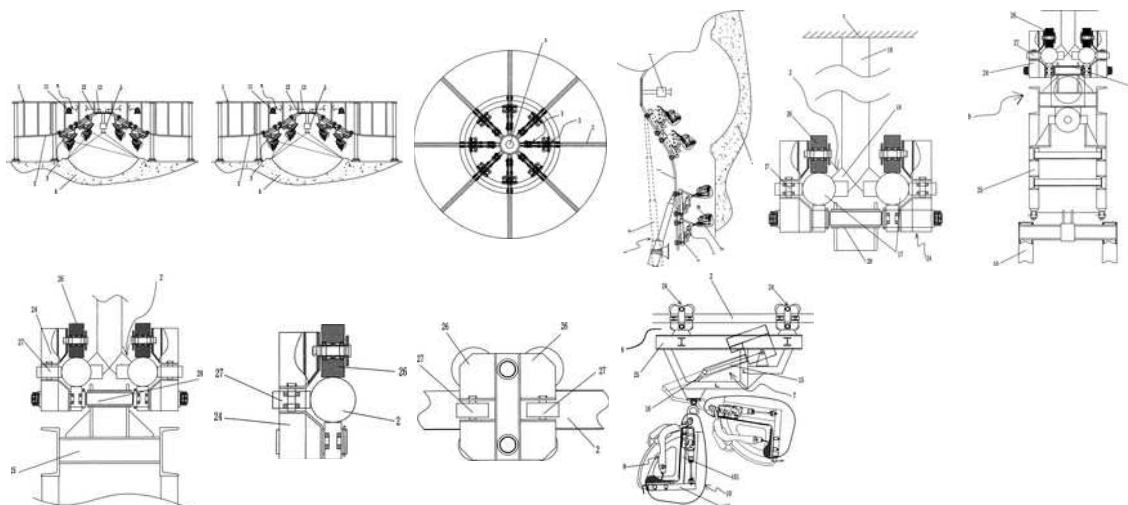
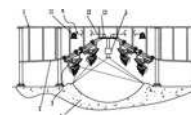
6. Amusement facility for watching films CN101966394

2011-02-09

GOLDEN HORSE SCIENCE & TECHNOLOGY AMUSEMENT EQUIPMENT

71 %

The invention discloses an amusement facility for watching films. The amusement facility comprises a supporting frame (1), a track (2) arranged on the supporting frame (1), a carrier (3) capable of sliding along the track (2) and a driving device (6) for driving the carrier (3) to slide along the track (2); a screen (4) capable of displaying film images is horizontally or obliquely arranged on the ground below the track (2); and the screen surface of the screen (4) is upward. The amusement facility can realize aerial look-down of films, can bring an air flying feeling to passengers, and enables the passengers to experience fresh and exciting of watching the films in the air.



7. Virtual reality system with enhanced sensory apparatus

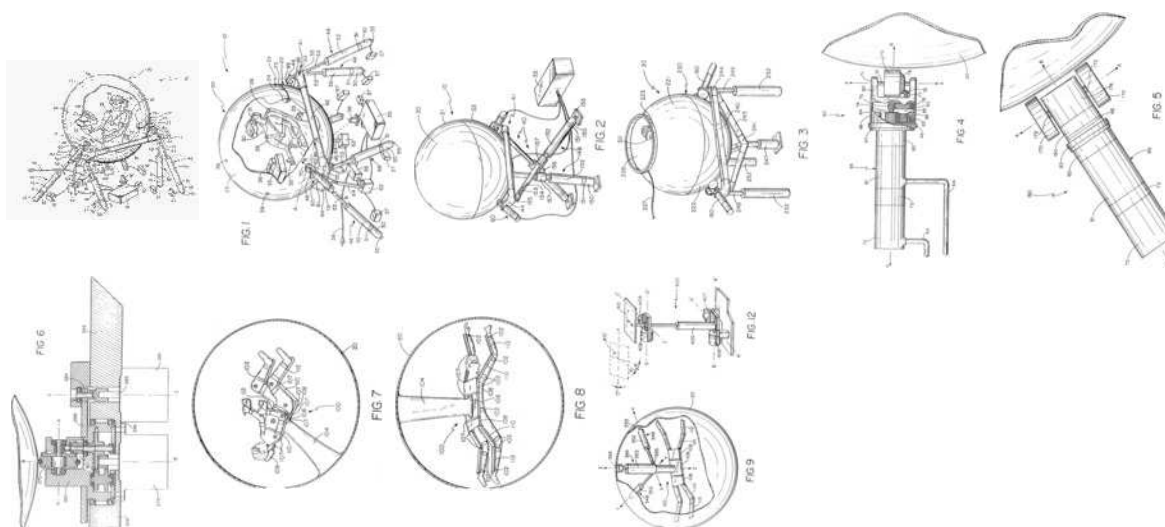
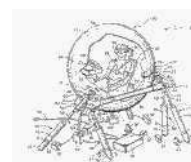
WO95/12188

1995-05-04

CARMEIN DAVID E E
CARMEIN DAVID E. E.
DAVID E E CARMEIN

71 %

A motion simulating device (10) for providing the user full freedom of motion in coordination with the user's senses of sight, hearing, and touch. The motion simulating device (10) consists of a generally spherical capsule (20) supportively abutted by a number of rollers (60, 99). At least one of the rollers is a multidirectional active roller (60) that frictionally engages the spherical capsule (20) causing the spherical capsule to rotate in any direction. The user utilizing the motion simulating device (10) interacts with a virtual reality system to impart the electronic simulation of physical reality and physical input from the device to the user.



8. Method for operating a device, in particular of a ride, a transport means, fitness equipment or the like

EP3632520

2020-04-08

VR COASTER

FAOEL COASTER GAMEBAHA

MACK RIDES

VR COSTE



70 %

A method for operating an amusement ride includes at least one vehicle which moves along a route and accommodates at least one passenger. By means of an amusement-ride-specific computer program, a virtual reality corresponding to a journey of the vehicle is generated and is represented on a head-mounted display associated with the passenger of a vehicle in accordance with the position of the vehicle on the route, and in accordance with the position and/or the orientation of the head-mounted display. The amusement-ride-specific computer program is executed on a mobile terminal of the passenger which comprises a communication interface. Alternatively, the amusement-ride-specific computer program is executed on an apparatus which is firmly connected to the vehicle and is designed to connect with the head-mounted display of the passenger. Further, an amusement ride, in particular to a roller coaster, carries out the method above.
(From US9839857 B2)

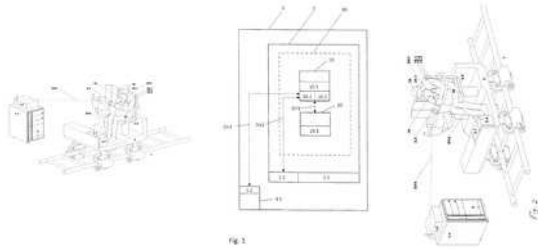
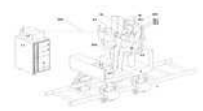


Fig. 1

9. Seat for amusement rides

EP3483010

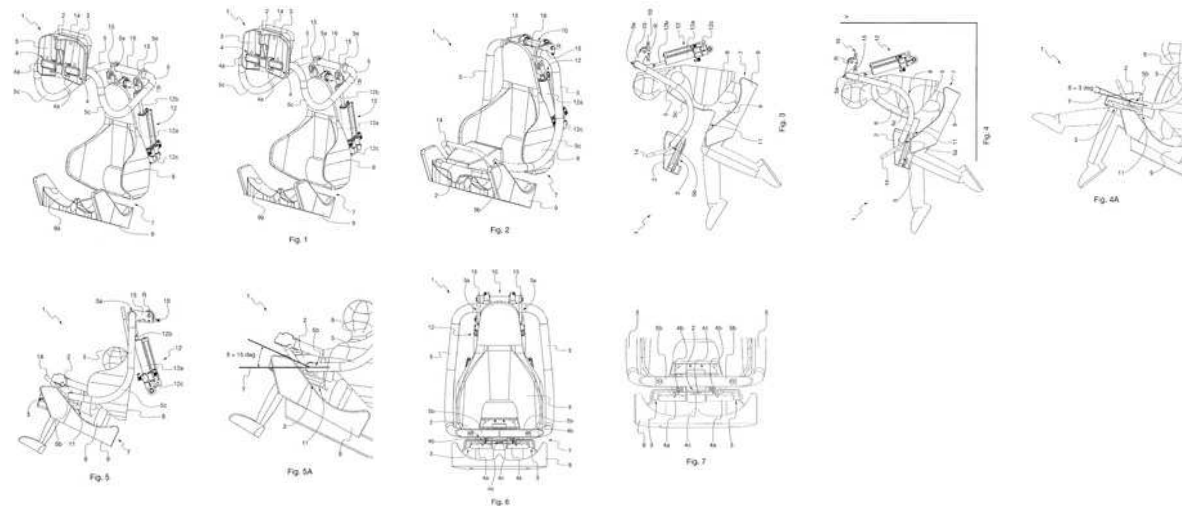
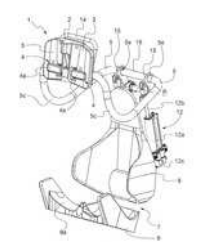
2019-05-15

ANTONIO ZAMPERLA



70 %

It is disclosed a seat (7) for an amusement ride, preferably a roller coaster, comprising at least one restraint device for securing at least one passenger on said seat (7) characterized in comprising at least one sensor (20, 21, 25) to detect the presence of at least one passenger (6) on said seat (7). A vehicle (V) and an amusement ride, preferably a roller coaster, comprising said at least one seat are also disclosed.



10. Amusement ride

EP2253362

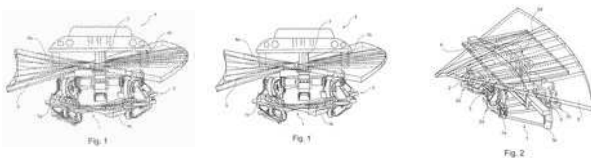
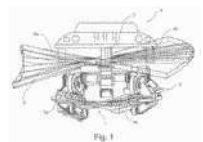
2010-11-24

MAURER SÖHNE

MAURER SOEHNE

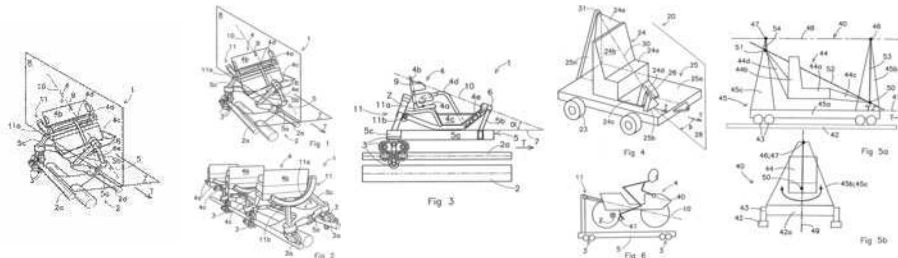
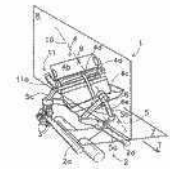
70 %

The fun ride has a driving route (1) and a chassis (2) arranged along the driving route in a movable manner. The driving route has a mounting device for mounting a motor-driven vehicle (4) on the chassis. The mounting device is arranged on the chassis. The driving route has a guide device for a guided movement of the chassis along the driving route.
(From EP2253362 A1)



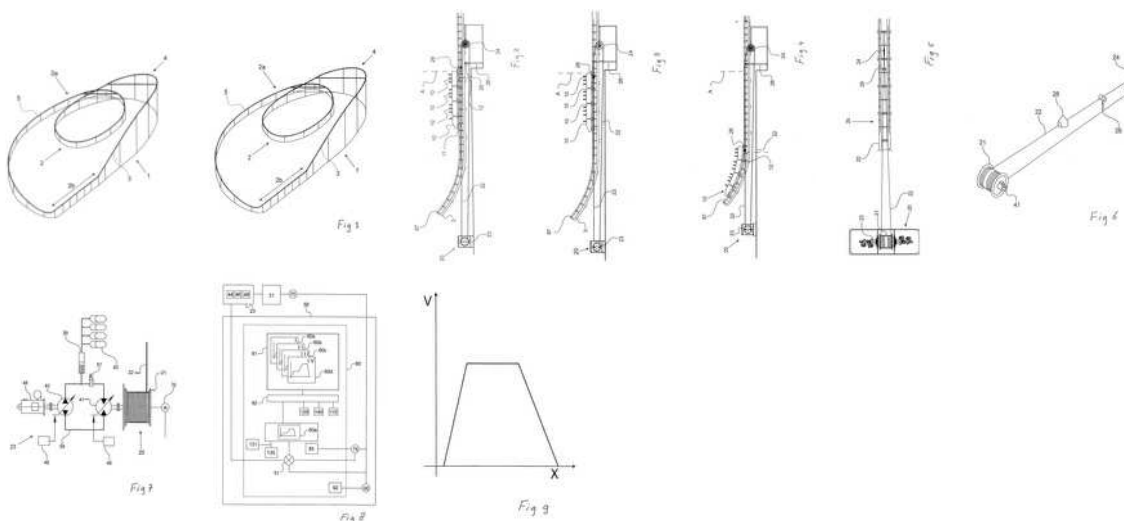
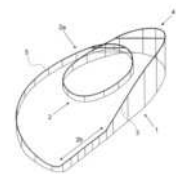
11. **Vehicule for an amusement device** WO2007/055572 2007-05-18 **VEKOMA RIDES ENGINEERING** 70 %

A vehicle for an amusement device comprises a seating section with one or more seating places for one or more passengers, and a conveyance section designed to move forward in a direction of conveyance, preferably along a corresponding (endless) conveyor track of the amusement device. At least one bearing is provided between the conveyance section and the seating section, which bearing defines an axis of rotation about which the seating section of the vehicle is movable. The conveyance section comprises a first imaginary plane which extends parallel to the direction of conveyance, the axis of rotation lying in a second imaginary plane which extends substantially perpendicularly to the first imaginary plane, which axis of rotation forms an angle with the first imaginary plane.



12. **An amusement ride installation** EP1789153 2007-05-30 **VEKOMA RIDES ENGINEERING** 70 %

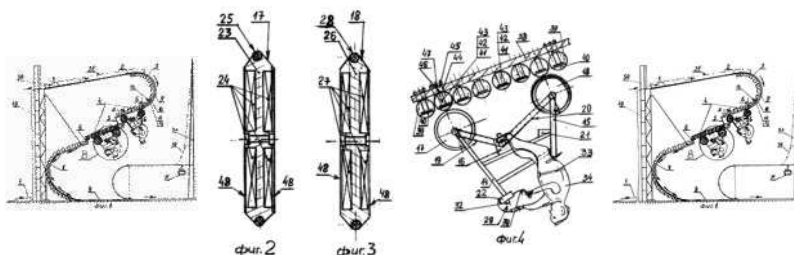
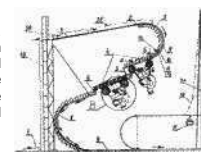
An amusement ride installation has at least one passenger carrier adapted for supporting one or more passengers, and a launch system for launching the at least one passenger carrier. The launch system has a launch guide structure supporting and guiding the at least one passenger carrier to be launched along a launch path, a drive means providing a variable drive speed, and drive means-carrier connection means, including at least one mechanical connecting member, e.g. a cable, providing a temporary mechanical connection between the drive means and the at least one passenger carrier to be launched. The launch system is adapted to accelerate said at least one passenger carrier from a starting position along said launch path until at least a predetermined terminal launch speed has been reached by said at least one passenger carrier, where after said passenger carrier is disconnected from said connecting member and said at least one passenger carrier travels further along the amusement ride path.



13. **Attraction** RU2264838 2005-11-27 **Savinovskij Vitalij Georgievich** 70 %

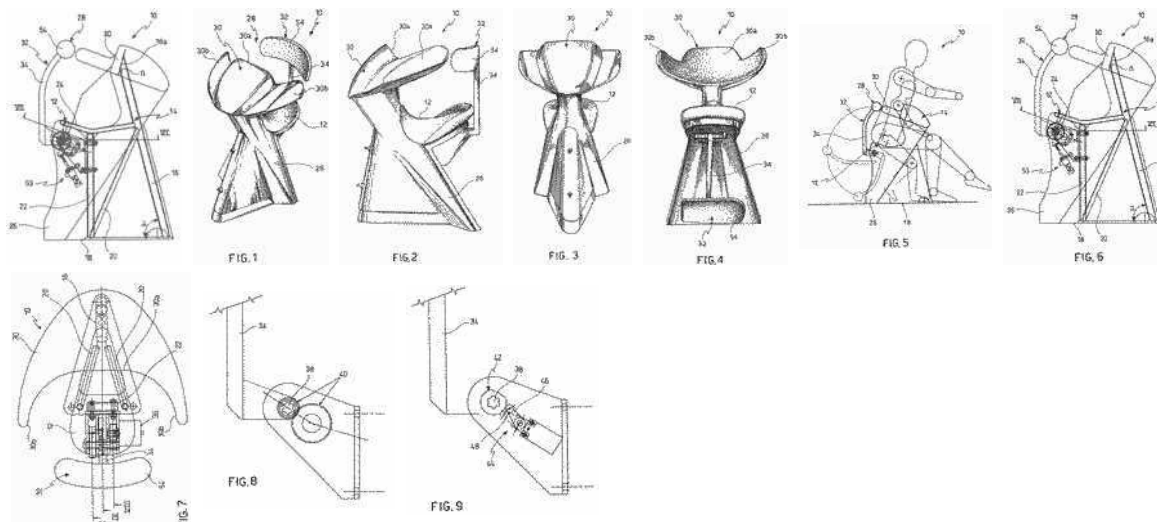
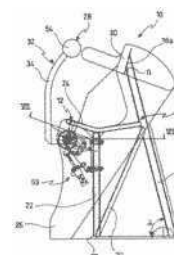
FIELD: entertainment industry, in particular, performance equipment for parks or rooms.
SUBSTANCE: attraction comprises entrance platform and trace made in the form of steel sheet arranged at predetermined height. Magnet is mounted above steel sheet. Attraction also comprises automobile movable along said trace with its wheels down. Trace consists of three platforms following one another from the top to the bottom, with first platform being made in the form of descending outer surface of semi-cylinder, second platform in the form of inwardly oriented inclined linear part with downwardly directed steps of height equal to 0.3-2.0 the diameter of vehicle wheel, and third platform in the form of descending inner surface of semi-cylinder. Vehicle is, for example, motorcycle having drive for both wheels, each of said wheels being made in the form of steel disk circumferentially embraced with tire of, for example rubber ring. Electromagnets are circumferentially mounted laterally of vehicle steel wheels, with electromagnet poles being arranged for repulsion from trace. Electromagnets are controlled from control panel arranged, for example, on control surface. Motorcycle moves over trace from the top to the bottom from first platform to subsequent platforms and onto ground.
EFFECT: increased entertaining effect and simplified construction.

16 cl, 4 dwg



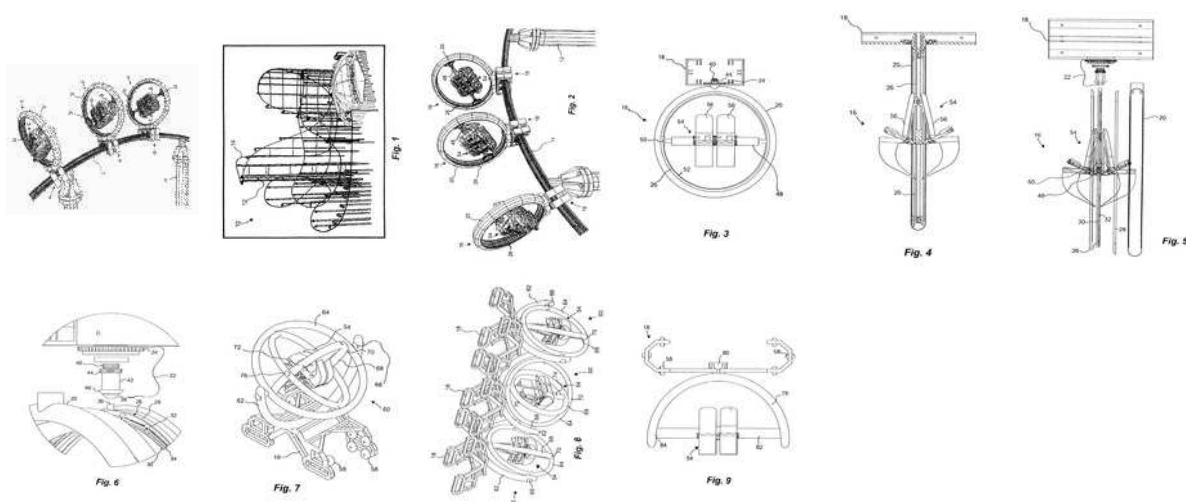
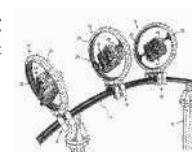
14. [Seat for amusement apparatus](#) US20070270230 2007-11-22 [ANTONIO ZAMPERLA](#) 70 %

A seat for amusement apparatus, unusually suitable for allowing the user to adopt a new position on the apparatus, comprising a support and means for immobilising the user on the support. The immobilising means comprise at least one support in front of the user and opposing means suitable for acting on the user's back. The opposing means comprises an arm which can move between a lowered position in which the user can sit down on the support and a raised position in which one end of the arm abuts against the user's back.



15. [Amusement ride](#) EP1494771 2005-01-12 [THRELKEL, DAVID V.](#) 70 %

An amusement ride, such as a roller coaster (10) or vertical tower track ride (106), includes an attachment assembly (18,110) movably connected to a track system (14,108). A vehicle assembly (16,112) is connected to the attachment assembly (18,110) and includes a seat assembly having at least one rider seat (56,120). The vehicle assembly (16,112) is coupled to the attachment assembly (18,110) and configured such that the seat assembly is capable of fully rotating about first and second, and preferably even third axes independent of the track system.



16. Amusement device

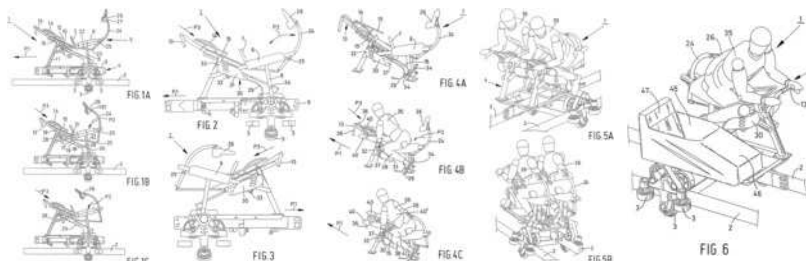
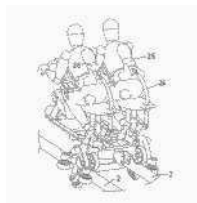
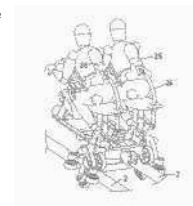
WO2004/073818

2004-09-02

VEKOMA RIDES ENGINEERING

70 %

The invention relates to an amusement device comprising a track-like guide construction (2), along which at least one vehicle (4) is movable in a direction of transport. The vehicle comprises a holder (5) for a person, which holder comprises at least a back support (26) and a seat (6). The back support can be positioned against a person's back, with the person's back including an acute angle with the guide construction, seen in the direction of transport, under the influence of the back support.



17. Fairground motor cycle roller coaster comprises form of a tandem-seat motor cycle with a horizontal-locked surrounding safety frame for two persons

DE20217754

2003-02-13

SCHAEFER PETER

70 %

A roller coaster vehicle has the form of a tandem-seat motor cycle with a horizontal-locked surrounding safety frame for two persons. The safety frame adjusts automatically to individual body dimensions. (From DE20217754 U1)



18. Safety device for a fairground attraction

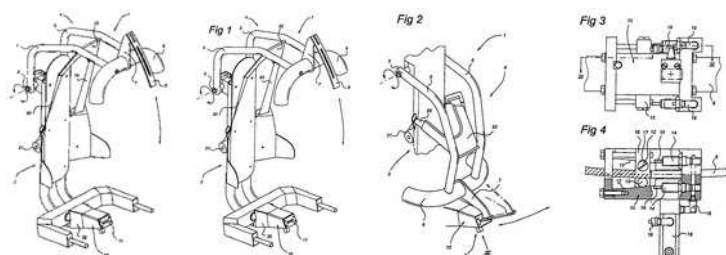
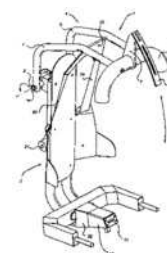
EP1245459

2002-10-02

COBRA BEHEER

70 %

A safety device for a construction in which people are able to sit and with which movements can be executed, for example for an attraction for a fairground or an amusement park, comprises a base that can be fixed to the construction, a restraint that at one end is pivotably connected to the base and that can be moved between a lifted-up position such that the person is able to sit down in the construction or to leave the latter, and a safety position in which the person is secured in the construction, as well as locking means for locking the restraint in the safety position. The locking means have a locking component that is located at the end of the restraint that faces away from the end where the restraint is pivotably mounted.



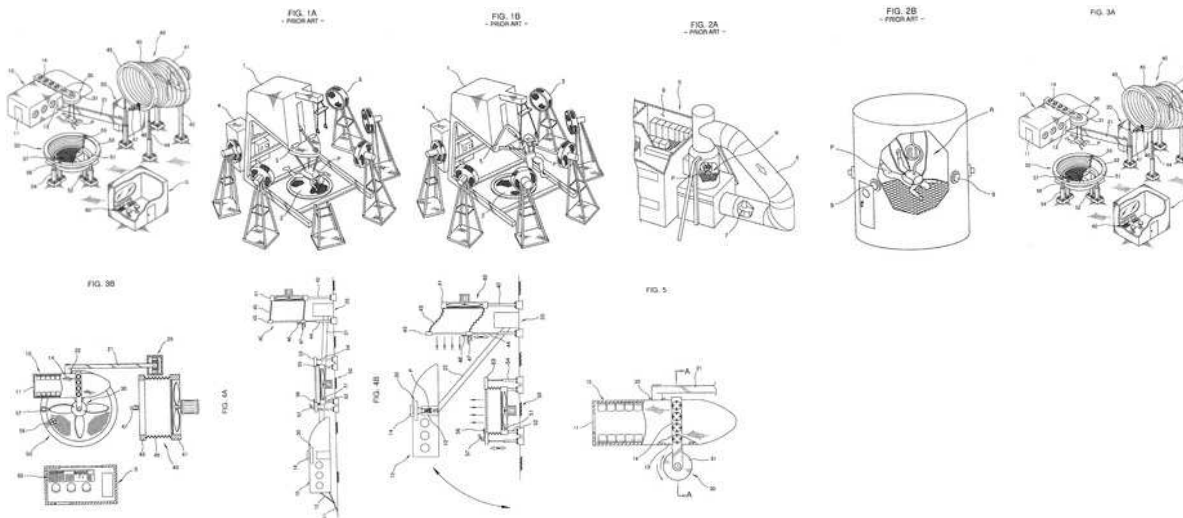
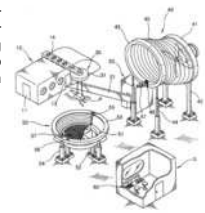
19. Skydiving simulator and skydiving training process using the same

2002-10-03

LEE SUNG TAE
LEE, SUNG-TAE
PARK BYUNG HO
PARK, BYUNG HO

70 %

The object of this invention is to provide a skydiving simulator and a skydiving training process using the simulator, which simulates the environment and other conditions for purposes of skydiving training as if a skydiver performed a real skydiving process from the step of riding in an airplane to the step of landing on the ground. This simulator consists of a model fuselage (10), a rotary hanger unit (30) supporting a skydiver having jumped from the fuselage, and two fan units (40, 50) horizontally and upwardly forcing air currents into an open simulation space into which the skydiver jumps from the fuselage. Wind velocity sensors (46, 56) sense the velocities of the air currents from the two fan units, and CCD cameras (47, 57) produce images of the skydiver during the training process, and a central control unit (CCU, 60) controls the simulator and the process in real time.



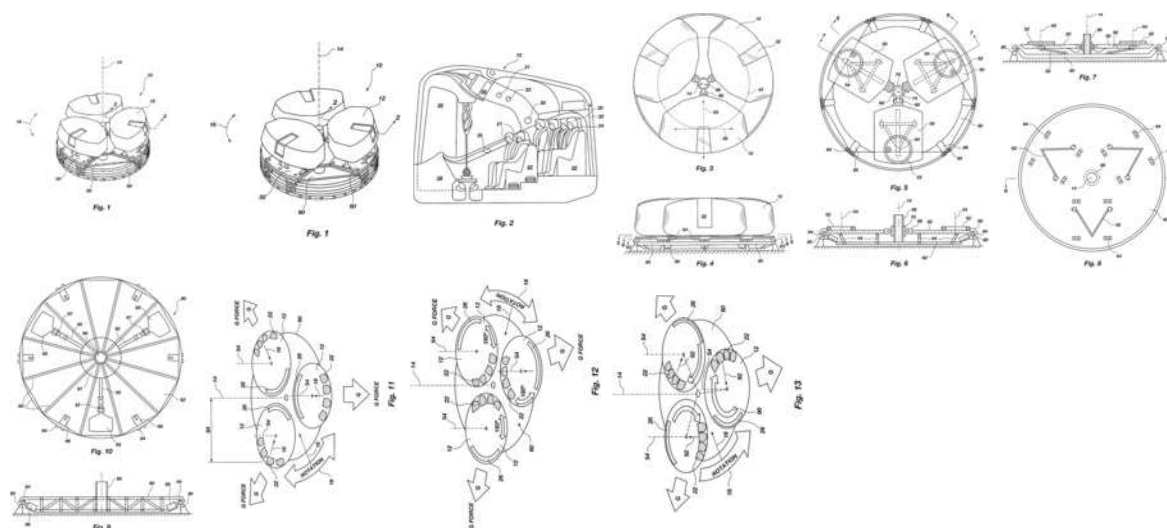
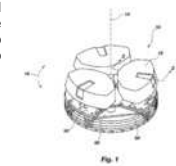
20. Sustained g-force centripetal acceleration apparatus and method

2000-03-28

HALFHILL ROBERT

70 %

A centripetal acceleration movement apparatus includes a base support having a rotatable portion rotatably disposed about a first axis. A plurality of carrying pods are attached to the rotatable portion of the base support and are positioned remotely with respect to the first axis for carrying at least one passenger. A rotating device is provided for rotating the rotatable portion of the base support about the first axis and thereby causing the attached carrying pod to (i) orbit the first axis along an orbital movement path and (ii) apply a centripetal force to the at least one passenger. A motion picture device is provided for producing a motion picture display confined to orbital movement with the carrying pods in a manner sufficient to enable the motion picture display to be viewed by a seeing passenger being carried by the carrying pods. The apparatus may also include variable balancing means for counter-balancing the carrying pods about the first axis responsive to changes in position of the center of mass of the carrying pods, to thereby maintain the center of mass substantially coincident with said first axis.



21. Amusement ride

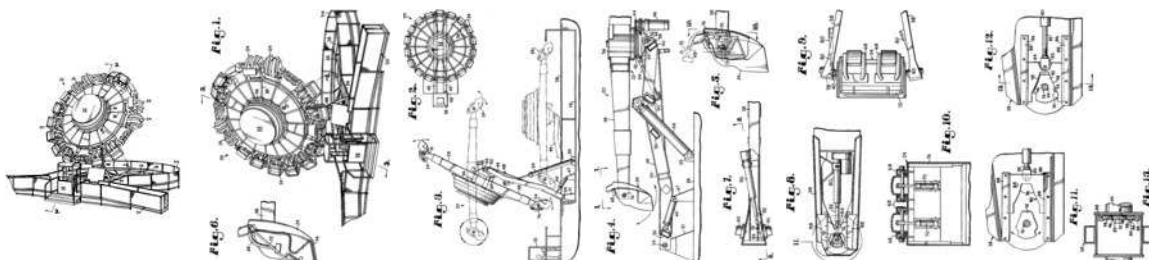
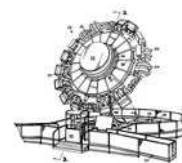
US5688178

1997-11-18

CHANCE INDUSTRIES

70 %

An amusement ride is provided in which passengers can be simultaneous subjected to three different types of movement. A circular motion is provided by the circular rotation of the head which mounts the passenger seats. A tilting motion is provided by mounting the head for tilting movement as it rotates in the circular path. The third type of motion is provided by mounting the passenger seats so that they rotate about an axis tangential to the circular path in which they travel.



22.

Amusement park ride with adjustable thrill level

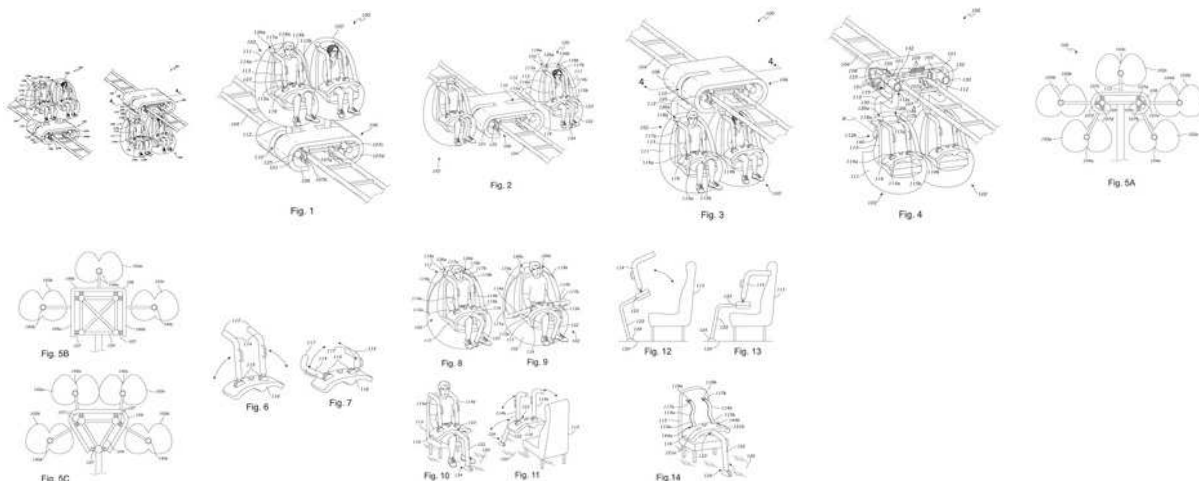
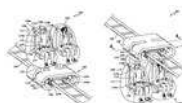
US9486135

2016-11-08

FRAM ERIC

69 %

An amusement park ride having a car with seating options above a track, below the track or adjacent to the track such that a rider may experience different thrill levels depending on the position of the car in relation to the track. The car may have a swiveling arm to position the car above, lateral to, or below the track. Alternatively, ride may have multiple cars arranged above, lateral to, or below the track for the rider to choose which position to ride in. In lieu of or in addition to the car seating options, the may have adjustable shoulder restraints that allow the rider to use the shoulder restraints or not. The shoulder restraints may be flexible or rigid, but rotatable from an upright configuration to a sideways configuration.



23.

Suspended load carrying system

EP3212038

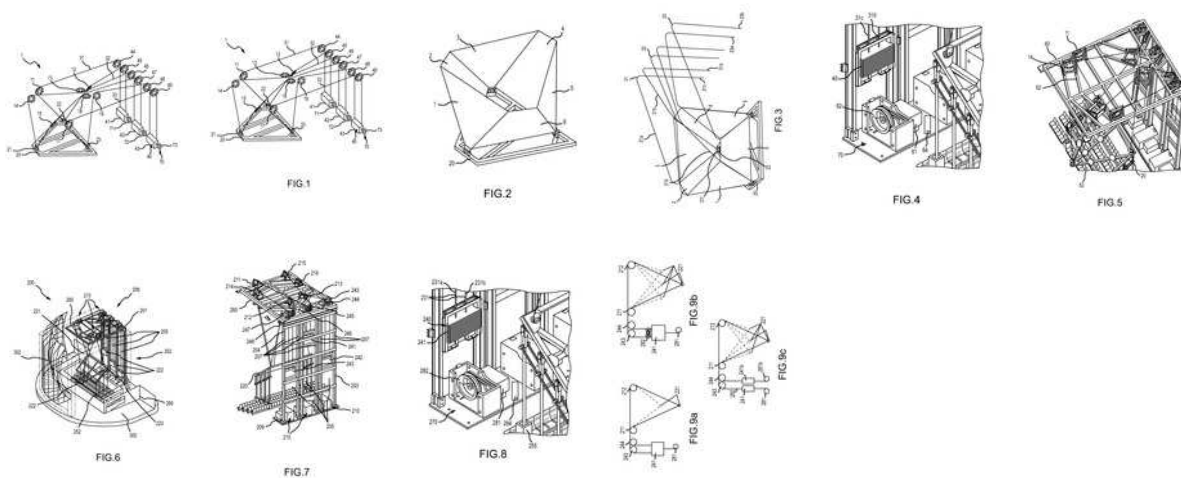
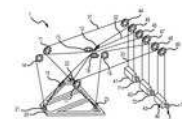
2017-09-06

OCEANEERING INTERNATIONAL

69 %

(EP3212559)

Various embodiments of load carrying systems comprise a load supporting frame comprising three or more connection points and an associated set of lifts configured which define six separate triangles defining separate planes configured to brace against surge, sway and yaw with respect to a support frame, such as unintended or unwanted surge, sway and yaw, while allowing intended and/or desired surge, sway and yaw.



24. A motion device

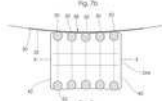
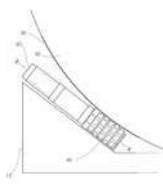
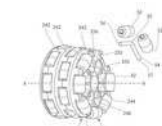
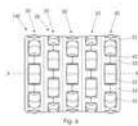
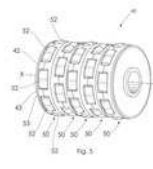
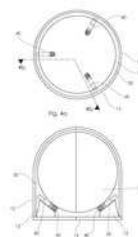
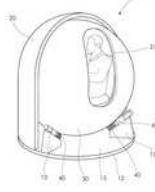
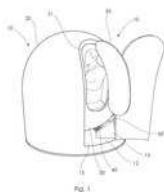
WO2015/039167

2015-03-26

SYNFLYT

69 %

The present invention relates to a motion device, such as a flight simulator, including a frame including a plurality of roller assemblies mounted thereto and an at least partially rounded body supported on the roller assemblies. The roller assemblies are operable to contact an external surface of the body and to allow movement of the body in a pitch direction, a yaw direction and a roll direction relative to the frame. In an embodiment one or more of the roller assemblies are selectively drivable to controllably drive the movement of the body in the pitch direction, the yaw direction and the roll direction relative to the frame. The above mentioned embodiment of the invention is advantageous in that it provides for motion (i.e. rotation) of the body in the pitch, roll and yaw directions to be driven in a controlled fashion, which could include a desired direction such as the pitch, roll or yaw direction, a desired speed of rotation of the body and a desired acceleration of the body.



25. Inverted simulation attraction

US20130017893

2013-01-17

RIDE & SHOW ENGINEERING

69 %

A system for patron movement and entertainment comprising a track, and at least one vehicle engaged with and positioned below the track, capable of carrying at least one patron in a passenger portion and moving along the track. Each vehicle preferably includes a motion base between the track and the passenger portion, and a turntable between the track and the motion base for rotating the passenger portion in the yaw direction, and particularly for directing the patron's viewpoint toward desired show elements.

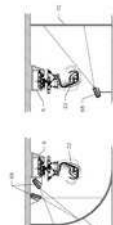
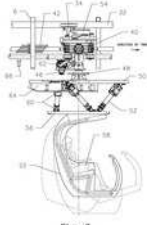
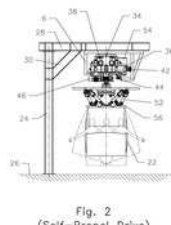
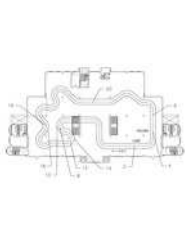


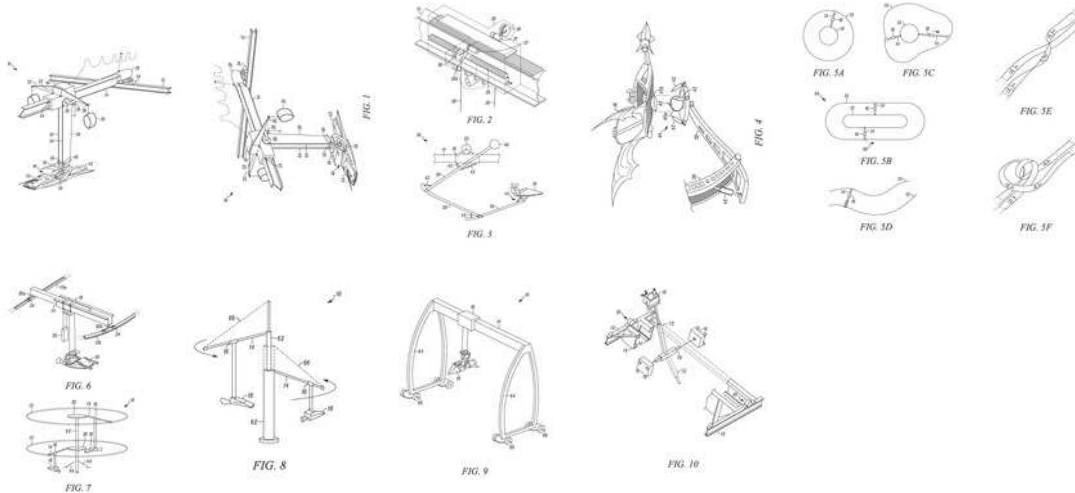
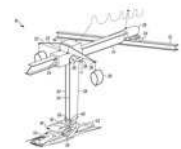
Fig. 4
(CCV Drive)

Fig. 2
(Self-Propel Drive)

Fig. 3
(SP Drive)

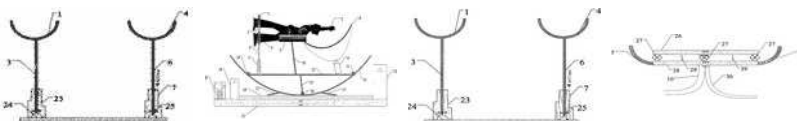
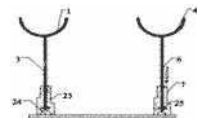
26. Methods and systems for multi-dimensional motion US20120312186 2012-12-13 SHASHA DENNIS WHITTAKER MICHAEL JOHN 69 %

An apparatus includes: a fixed primary anchoring element, a beam mount movably connected to the primary anchoring element, a beam connected to the beam mount, a vessel mount movably connected to the beam, a vessel connected to the vessel mount, the vessel being movable along at least a vertical axis, and a control unit within the vessel. The control unit is configured to accept control input from a passenger within the vessel and transmit at least one control signal to cause the beam to move relative to the primary anchoring element, the vessel mount to move relative to the beam, and the vessel to move relative to the vessel mount independently.



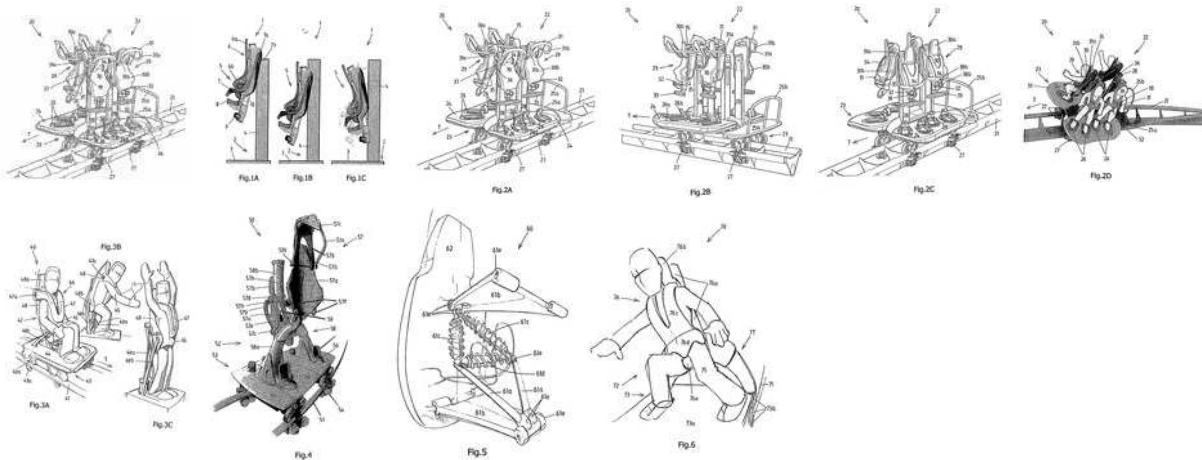
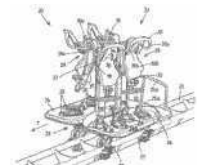
27. Virtual sea roaming system based on cognitive interaction technology and its operating method CN101058033 2007-10-24 UNIVERSITY OF SCIENCE & TECHNOLOGY BEIJING 69 %

The invention discloses a virtual ocean roaming system based on cognition interactive technique and the operation method, belonging to virtual ocean roaming technique. The system comprises data control server, simulation thrash machine and level control board. The whole system is fixed on rubber floor, the left side is data control server and right side is virtual server. The spherical cap three-dimensional motion device is installed on aluminum plastic board, and is equipped with vertical motion orbit and horizontal motion orbit, one stainless steel board with strengthened keel is connected with orbit directly, and the servo generator on the vertical and horizontal motion orbit can drive stainless steel board to move vertically. The simulation thrash machine is fixed on one side of steel board, horizontal control board is located in the middle of steel board, and the spherical cap three-dimensional projection screen and projecting apparatus are fixed on the other side of steel board. The invention is characterized by simple structure, convenient operation and low cost.



28. Amusement ride device EP2024045 2009-02-18 VEKOMA RIDES ENGINEERING 69 %

Amusement ride device, comprising a track and at least one carriage, which carriage is moveable along the track in a transport direction. The carriage comprises a transport part which engages on the track, at least one platform that allows to support the feet of at least one passenger, and at least one passenger torso restraint engaging on the torso of the passenger for safely supporting the passenger. The transport part comprises one of the passenger torso restraint or the platform to support the passenger, while the other is connected by connecting means to the transport part. The connecting means are designed to allow the passenger to perform movements during the ride while being restrained by the torso restraint, wherein the torso restraint performs a movement with respect to the platform during said movements of the passenger.



29.

Foveated display system

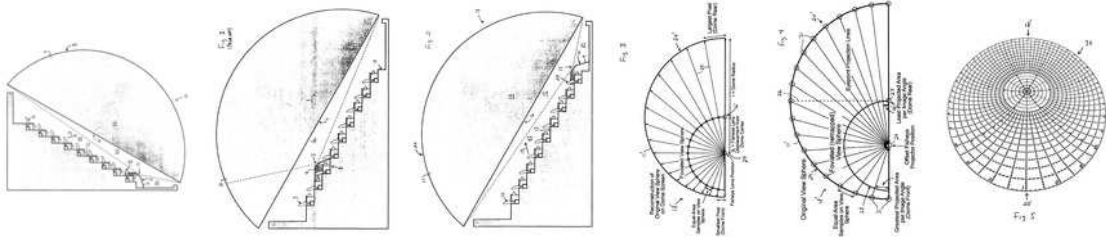
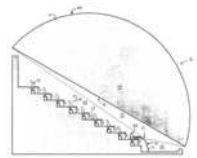
WO2004/010681

2004-01-29

SPITZ

69 %

An improved theater geometry which is capable of providing improved image resolution and improved image contrast over prior systems is achieved with a unique projection geometry and image re-mapping technique. The projected image is provided with a continuously variable image resolution and brightness over the surface of a preferably dome-shaped screen (11) which is to receive the image, concentrating the resolution and the brightness of the image within the central field-of-view of viewers (23) that are unidirectionally seated in the theater (10), and sacrificing resolution and brightness toward the outside edges of the viewers' field-of-view. The result is a more efficient use of available projector (14) resolution and brightness, an increase in the number of quality seats available in the theater (10), and an enhanced image contrast due to reductions in the light which is scattering from image elements to the rear of the screen (11).



Number of pixels
On standard 1024x768 monitor as viewing
1024 x 768 pixels

30.

Motion base

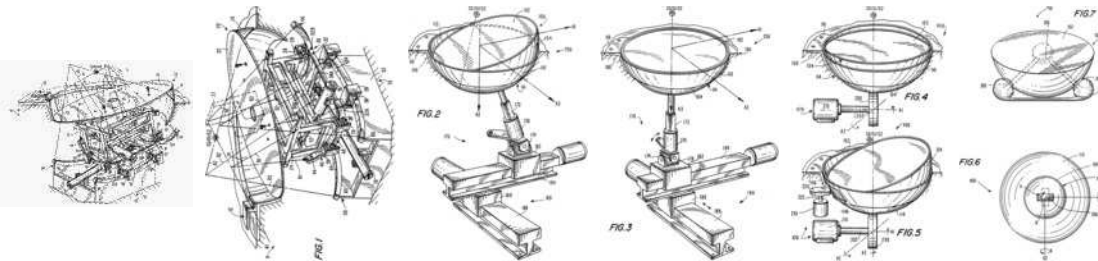
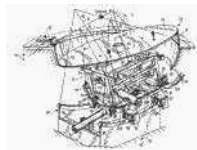
US5551920

1996-09-03

DISNEY ENTERPRISES

69 %

A motion base for an apparatus for subjecting a user to sensory experience is provided. The motion base has a motion generator for moving a platform about at least one axis of rotation. The platform supports the user such that the user's center of gravity is substantially coincident with the center of rotation of the platform. The active elements of the motion generator are separate from the elements that support the weight of the apparatus and the user.



31.

Rotating simulator and body holding apparatus therefor

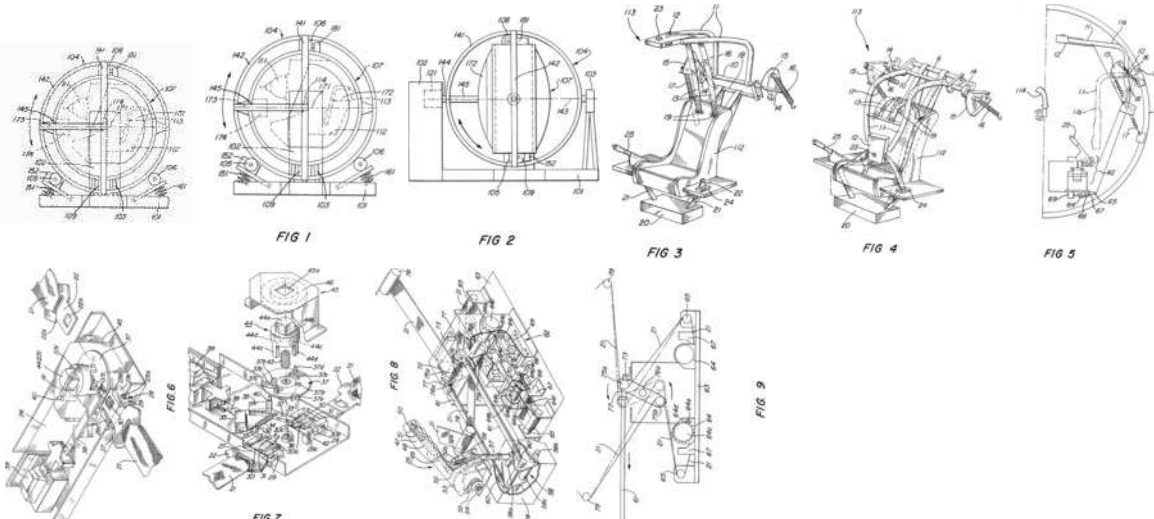
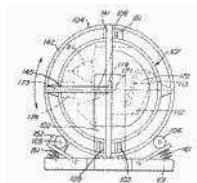
US5489212

1996-02-06

SEGA

69 %

Disclosed is a simulator includes a substantially circular outer frame pivotally mounted on a base; an outer frame-driving tire which is pressed against an outer side of the outer frame by means of a spring disposed on the base and is adapted to drive the outer frame; an inner frame formed in a maneuvering seat and pivotally supported between opposing portions of an inner peripheral wall of the outer frame; and an inner frame-driving tire which is pressed against an inner side of the outer frame by means of a spring disposed within the inner frame and is adapted to drive the inner frame. Also disclosed is an occupant holding apparatus for use in the simulator.



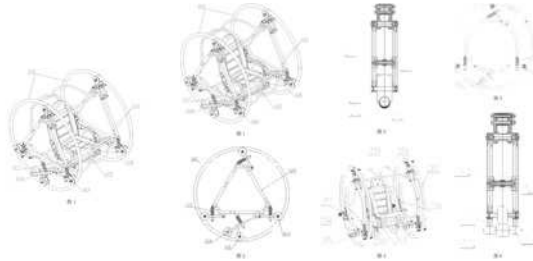
32. Manned rolling two-wheeled vehicle and operation method therefor WO2018/041148

2018-03-08

QINHUANGDAO TWO TIGER TECHNOLOGY

68 %

A manned rolling two-wheeled vehicle and an operation method therefor. The manned rolling two-wheeled vehicle comprises two side vehicle rims (101) and an inner frame device (102); the inner frame device (102) is rotatably provided between the two side vehicle rims (101); the inner frame device (102) is mounted thereon with a driving motor (104) which is connected to the inner frame device (102) by means of an elastic support mechanism so as to drive the inner frame device (102) to independently rotate relative to the two side vehicle rims (101); the inner frame device (102) and the two side vehicle rims (101) are connected by means of movable limiting devices (103); and the inner frame device (102) is mounted thereon with a safety seat (105). The manned rolling two-wheeled vehicle drives, by means of the rotation of the driving motor (104), the inner frame device (102) to rotate relative to the side vehicle rims (101), causing the center of gravity of the inner frame device (102) to shift, and then causing the side vehicle rims (101) having a ring-shaped structure to roll, and thus causing the manned rolling two-wheeled vehicle to move as a whole, finally achieving functions such as moving forward, moving backward, turning, rotating in place, and rolling, increasing the riding enjoyment of a rider.



33. Drift racer

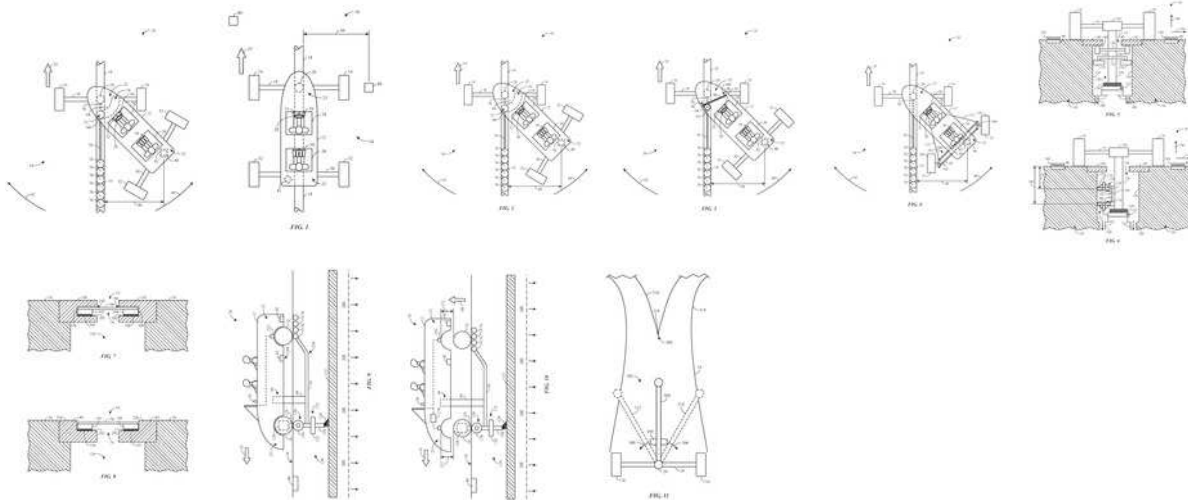
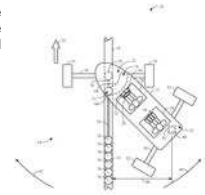
EP3294429

2018-03-21

UNIVERSAL CITY STUDIOS

68 %

A ride assembly includes a passenger vehicle having front wheels, rear wheels, a motor, and a steering wheel, where the front and rear wheels are disposed on a surface, the motor is configured to provide power to the front wheels to propel the passenger vehicle, and the steering wheel is configured to adjust a position of the rear wheels and enable the passenger vehicle to drift, a track forming a trough in the surface, and a bogie hingedly coupled to the passenger vehicle, where the bogie is disposed in the trough, and where the bogie is configured to direct movement of the passenger vehicle along the track.



34. Simulator dynamic seat

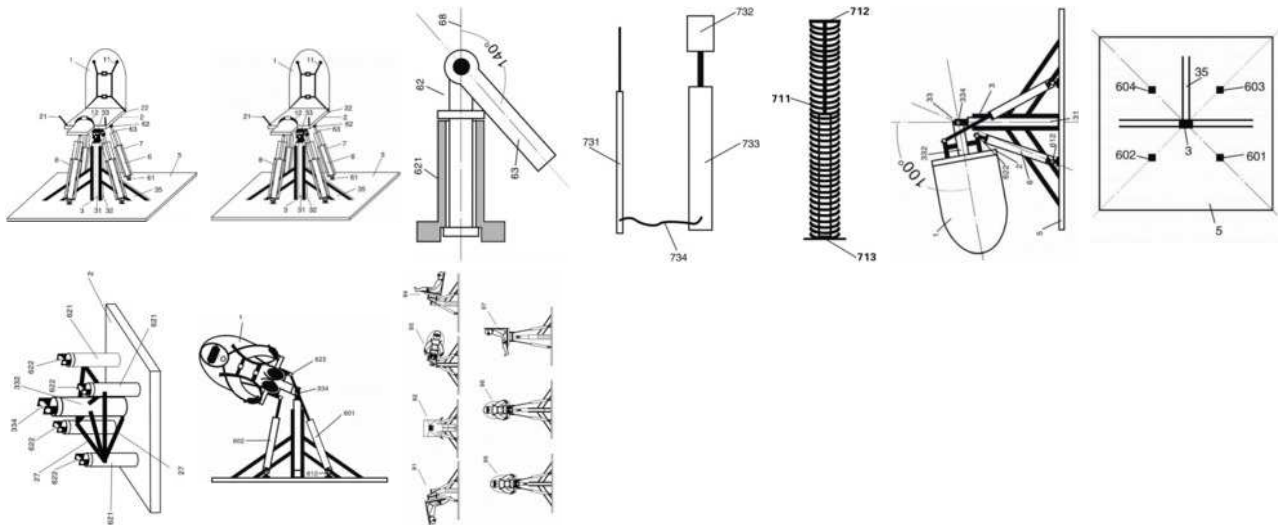
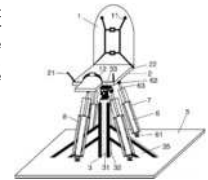
CN106031566

2016-10-19

LI CHENG

68 %

The invention relates to a simulator dynamic seat in film videos and games, wherein a plurality of universal lifting cylinders capable of rotating according to the seat requirement are supported between a bottom frame and a seat fixation frame, the load is reduced through a gravity canceling device, and a balance frame reinforced by a metal beam or metal plate matches with a deep cross shaft coupling with an extension pipe so as to make the dynamic seat achieve the safe and large inclination angle. According to the present invention, the simulator dynamic seat has characteristics of low cost, energy saving, and high film and action synchronization, and can safely achieve the anteversion, hypokinesia, left wing or right wing rotation inclination angle of 100 DEG C, such that the head of the people sitting on the seat inclines toward the bottom so as to increase the somatosensory authenticity and increase the stimulation degree.



35. Multi-dimension flying movement-sense simulation riding device capable of travelling

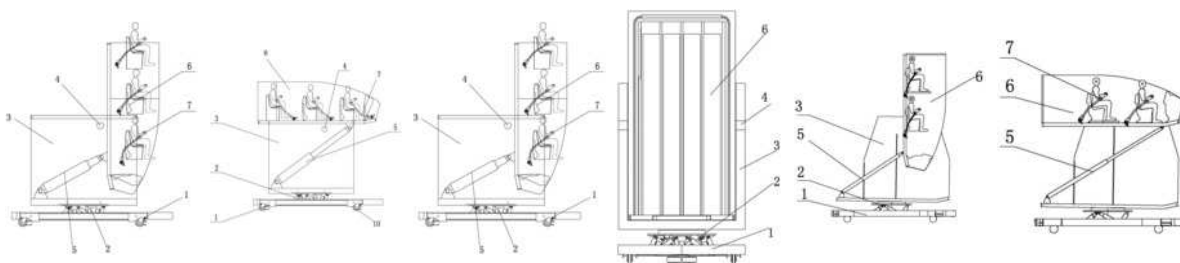
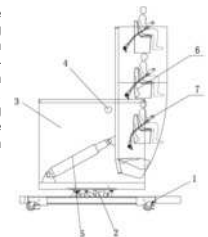
CN105126360

2015-12-09

DALIAN WANDA

68 %

The invention discloses a multi-dimension flying movement-sense simulation riding device capable of travelling. The multi-dimension flying sensation simulation riding device capable of travelling comprises a self-travelling device, a multi-freedom-degree movement-sense platform, a linkage frame structure, a movement-sense base cabin rotating shaft, a movement-sense base cabin rotation driving device, a movement-sense base cabin, a seat rotating device and a safety pressure lever. The self-travelling device can travel along a track. The multi-freedom-degree movement-sense platform is installed above the self-travelling device, and the upper part can be driven to perform multi-freedom-degree movement as required. The linkage frame structure is installed above the multi-freedom-degree movement-sense platform and used for being connected with the movement-sense base cabin rotating shaft, the movement-sense base cabin rotation driving device, the movement-sense base cabin and the seat rotating device. According to the riding device, by means of rotation of the movement-sense base cabin and the seat rotating device, a passenger can have various kinds of vehicle-riding movement-sense experience, the flying experience that the two feet rise high into the air can also be simulated, and therefore the multi-freedom-degree movement-sense platform and the self-travelling device can be matched better, multiple experience of different scenes, different actions and multiple freedom degrees can be achieved through combination of video playing content, and curiosity sense and shocking power of performance are improved.



36.

Amusement ride

EP2911757

2015-09-02

DYNAMIC STRUCTURES
DYNAMIC ATTRACTIONS
IMPERIAL IRON PRODUCTS

68 %

A motion base, comprising a pivot structure having a pivot point near the center of gravity of the pivot structure; a platform support by the pivot structure, the platform having a generally horizontal position and a generally vertical position; and, a drive for rotating of the pivot structure at the pivot point to move the platform from the generally horizontal position to the generally vertical position.

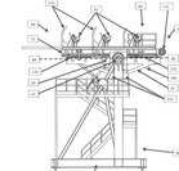
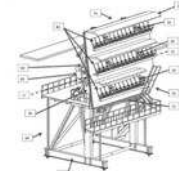
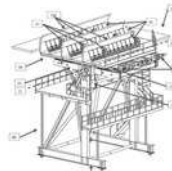
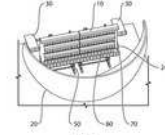
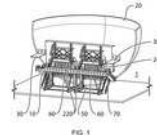
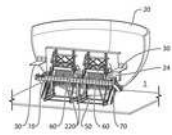
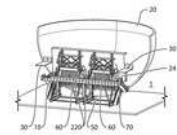


FIG. 1

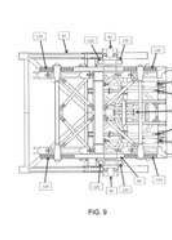
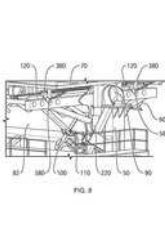
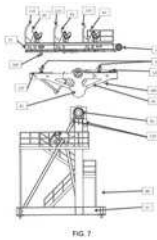
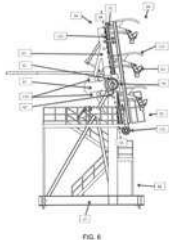


FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

FIG. 7

FIG. 8

FIG. 9

FIG. 10

FIG. 11

37.

Human flying apparatus

US9120023

2015-09-01

BURROUGHS ELIZABETH WALES

68 %

The lever, wheel and axle, pulley, wedge, screw, and inclined plane are the six Simple Machines of the Classical era. Over 2000 years ago a man from Syracuse used them to create a way to move water against the pull of gravity. The Archimedes' screw is still a standard for simple efficiency. In homage to those early machines and the dreamers who built them, the Human Flying Apparatus provides a carriage, wheels and an axle, a harness, and a braking and steering system and, in specific embodiments, thrusters, all suspended from a single rail, which allows a human being to soar in simulated flight that is safe, sustained, and suitable for all skill levels. "For once you have tasted flight, you will walk the Earth with your eyes turned skyward, for there you have been, and there you long to return." -Leonardo Da Vinci

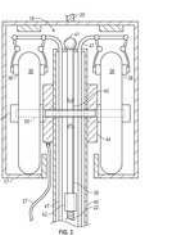
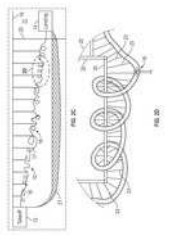
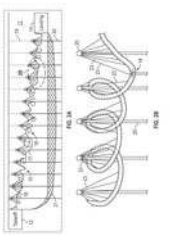
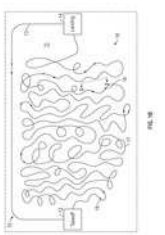
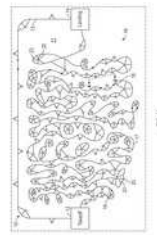
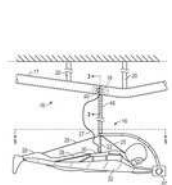
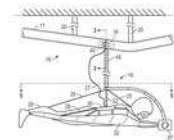


FIG. 1

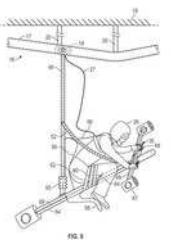
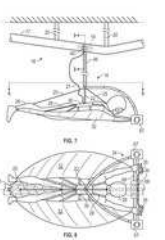
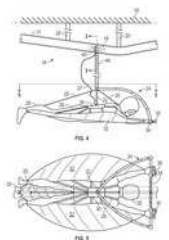


FIG. 2

FIG. 3

FIG. 4

FIG. 5

FIG. 6

FIG. 7

FIG. 8

FIG. 9

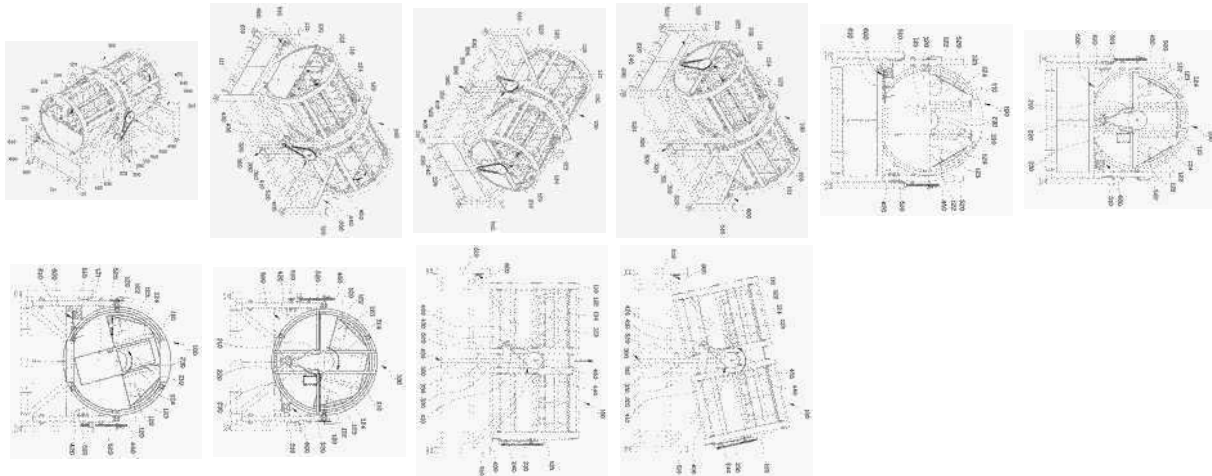
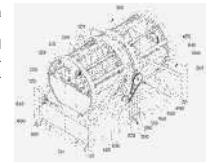
FIG. 10

FIG. 11

38. **A revolving ride of cylinder type** KR20130009717 2013-01-23 YU, HEUNG YEOL 68 %

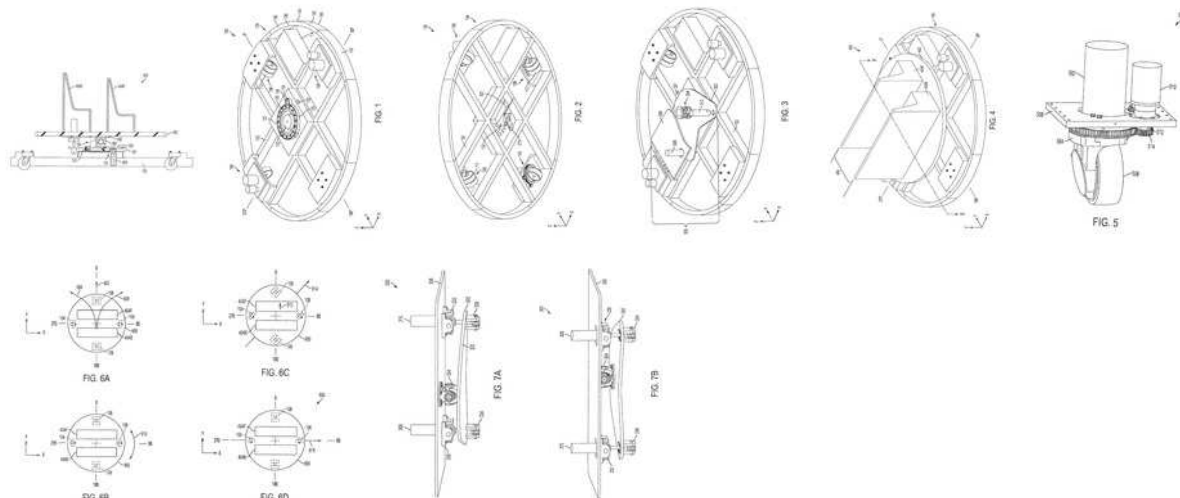
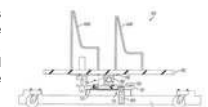
PURPOSE: A revolving ride in cylinder type is provided to supply various amusements by combining up-and-down and left-and-right rotation and to be able to be operated in a relatively small space.
CONSTITUTION: A revolving ride in cylinder type capable of the left-and-right rotation, vertical movement and up-and-down rotation comprises a rotary tank(100) equipped with seats(122) and safety tools, a left-and-right rotation tool for rotating the rotary tank to left-and-right, a vertical movement tool(300) for making a space possible to move up-and-down rotation for the rotary tank, and an up-and-down rotation tool(400) for rotating the rotary tank to up-and-down, a controller(600) for controlling the operation of the left-and-right rotation, vertical movement and up-and-down rotation, and a framework(500) where the controller is installed.

COPYRIGHT KIPO 2013



39. **Trackless dark ride vehicle, system, and method** EP3413290 2018-12-12 OCEANEERING INTERNATIONAL OUSHENIRING INTERNESHNL INK 68 %

A motion assembly that produces pitch and roll motions includes lower and upper plates. A pivotable coupling having upper and lower shafts extending from its center is coupled between the upper and lower plates. At least two linear actuators are coupled between the plates. Extension and retraction of the actuators pivots the upper plate about the pivotable coupling relative to the lower plate. A vehicle includes two steerable propulsion wheels coupled to a chassis. A lower plate of a pitch and roll assembly, similar to that just described, couples to the chassis via a slew bearing. The seating is coupled to the upper plate. The seating rotates with respect to the chassis via controlled rotation of the slew bearing with reference to the chassis. The seating can be rotated to point in any direction with respect to the chassis regardless of the direction the steerable propulsion wheels move the chassis.



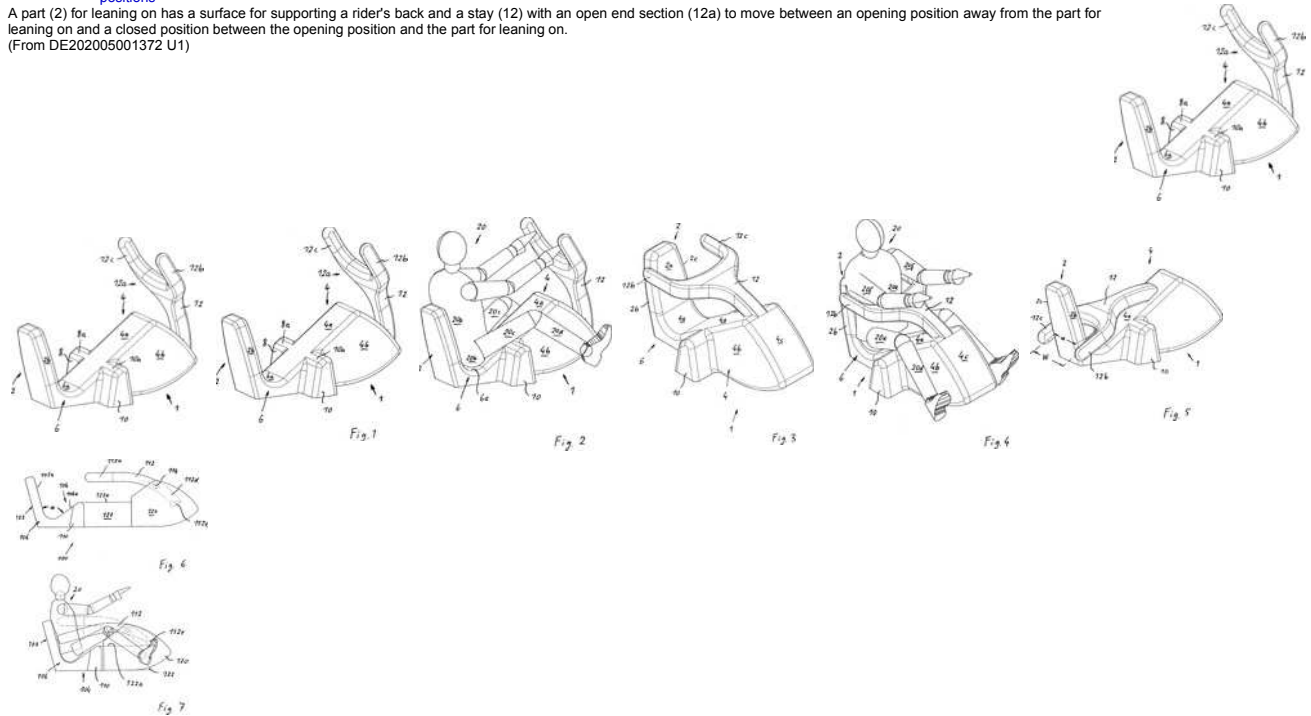
40. **Leisure-time entertainment** RU2358789 2009-06-20 OSNOVIN EVGENIJ VLADIMIROVICH 68 %

FIELD: games; entertainment.
SUBSTANCE: leisure-time entertainment is made in the form of a cabin capsule installed on internal ring connected by means of vertical semi-axes to intermediate ring that in its turn is connected by means of horizontal semi-axes to external ring and the slide located on guides. Cabin capsule is equipped with a seat installed on a movable platform, user's state observer, user's information action systems, levers, pedals, and leisure-time entertainment operation control buttons. Leisure-time entertainment control system is informative and computer-aided, and connected with control panel, server platform and controller, and it is also equipped with electronic totalisator, electronic scanning device and electronic prize point.
EFFECT: increasing user's safety.

4 cl, 2 dwg

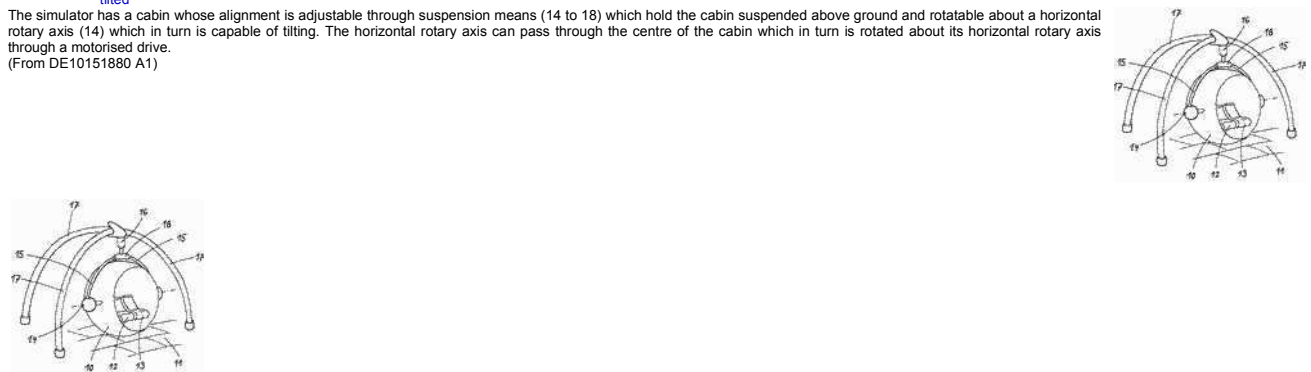
41. [Safety seat device for a rider, e.g. on a merry-go-round, has a part for a rider to lean back on and a stay with a section moving between open and closed positions](#) DE202005001372 2006-06-08 [HUSS MASCHINENFABRIK](#) 68 %

A part (2) for leaning on has a surface for supporting a rider's back and a stay (12) with an open end section (12a) to move between an opening position away from the part for leaning on and a closed position between the opening position and the part for leaning on.
(From DE202005001372 U1)



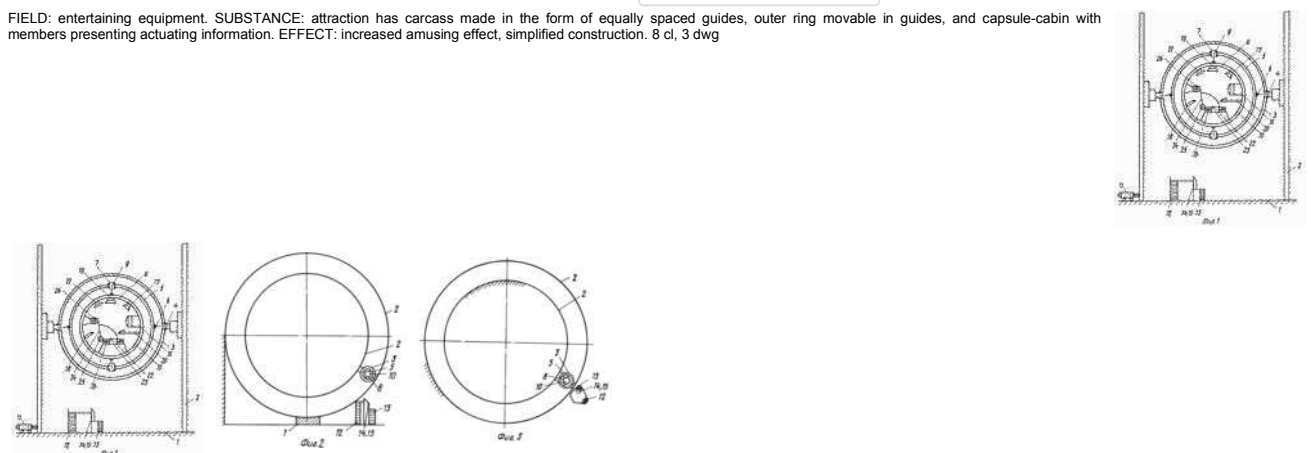
42. [Simulator especially for pilot training is held in adjustable alignment through suspension means which hold cabin above ground and rotatable about horizontal rotary axis which itself can be tilted](#) DE10151880 2003-05-08 [KRAUSE DETELF](#) 68 %

The simulator has a cabin whose alignment is adjustable through suspension means (14 to 18) which hold the cabin suspended above ground and rotatable about a horizontal rotary axis (14) which in turn is capable of tilting. The horizontal rotary axis can pass through the centre of the cabin which in turn is rotated about its horizontal rotary axis through a motorised drive.
(From DE10151880 A1)



43. [Attraction](#) RU2159141 2000-11-20 [OSNOVIN EVGENIJ VLADIMIROVICH](#) 68 %

FIELD: entertaining equipment. SUBSTANCE: attraction has carcass made in the form of equally spaced guides, outer ring movable in guides, and capsule-cabin with members presenting actuating information. EFFECT: increased amusing effect, simplified construction. 8 cl, 3 dwg



44.

Powered ride apparatus

EP1009505

2000-06-21

HARRAP, NEIL HORACE
NEIL HORACE HARRAP

68 %

A powered ride apparatus for swinging a rider attached to a craft through the air for excitement, comprises a support means such as a cable extending between at least two anchor points positioned substantially opposite each other at a height above the ground, and a swing cable suspended from the support means, and a craft adapted to carry a rider during a ride, attached to the lower end of the swing cable and comprising an on-board propulsion system comprising a motor driving a propeller and a steering system operable by the rider during the ride, enabling the rider to steer the craft during the ride as the craft swings on the swing cable.

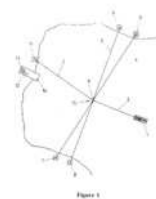


Figure 1

