We, being the person(s) identified below as the Applicant, request the grant of a patent to the person identified below as the Nominated Person, for an invention described in the accompanying standard complete specification.

Full application details follow:

**Applicant**

[71] STEPHEN HAYMAN

Address

123/2 OCEAN AVE SURFERS PARADISE

State QLD Postcode 4217

**Invention Title**

SIMULATOR ROLLER COASTER AMUSEMENT RIDE.

**Name(s) of actual inventor(s)**

STEPHEN HAYMAN.

**Address for service in Australia**

123/2 OCEAN AVE SURFERS PARADISE QLD 4217

State QLD Postcode 4217 Contact Phone No. (07) 55390388 Attorney Code EXT. 123

**Associated Provisional Application(s) Details**

[60] Application Number(s) and Date(s)

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**Basic Convention Application(s) Details**

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**Divisional Application Details**

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**Patent Invention Details (Patent of Addition requests only)**

[61] Application number Patent number

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**Drawing number recommended to accompany the abstract**

FIVE (5).

**Signature**

SHayman

Date 5/1/96
NOTICE OF ENTITLEMENT
(To be filed before acceptance)

I/V, .................................................. STEPHEN HAYMAN
.................................................................................. ACN/ARBN
of .......................................................... 123/2 OCEAN AVE, SURFERS PARADISE QLD 4217

being the applicant in respect of Application No. ..........P00378... (Provisional)....... , state the following:

Part 1 - Must be completed FOR ALL APPLICATIONS.

The person(s) nominated for the grant of the patent:

*is / *are the actual inventor(s)

or

*has entitlement from the actual inventor(s)

.................................................................................................................................

(eg by assignment, by mesne assignment, as legal representative of ...., etc)

* Part 2 - Must be completed IF THE APPLICATION IS ASSOCIATED with one or more
PROVISIONAL APPLICATIONS.

The person (s) nominated for the grant of the patent:

*is / *are the applicant(s) of the provisional application(s) listed on the patent request form

or

has entitlement to make a request under Section 113 in relation to the provisional application(s) listed on
the patent request form

.................................................................................................................................

(eg by assignment, by agreement, etc)

* Part 3 - Must be completed for ALL CONVENTION APPLICATIONS.

N/A .

The person(s) nominated for the grant of the patent:

*is / *are the applicant(s) of the basic application(s) listed on the patent request form

or

*has entitlement from the applicant(s) of the basic application(s) listed on the patent request form

.................................................................................................................................

(eg by assignment, by mesne assignment, by consent, etc)

(Continued over)
*The basic application(s) listed on the request form:  

*is/*are the first application(s) made in a Convention country in respect of the invention 
or  
*was/were not the first application(s) made in a Convention country in respect of the invention, and a request has been made under Section 96 of the Patents Act 1990 (or Section 142AA of the Patents Act 1952) to disregard the following application(s) .................................................................

* Part 4 - Must be completed FOR PCT APPLICATIONS.

The person(s) nominated for the grant of the patent:

*is *are the applicant(s) of the application(s) listed in the declaration under Article 8 of the PCT 
or  
*has entitlement from the applicant(s) of the application(s) listed in the declaration under Article 8 of the PCT .................................................................

(eg by assignment, by mesne assignment, by consent of ..., as legal representative of ... etc)

The basic application(s) listed in the declaration made under Article 8 of the PCT 

*is / *are the first application(s) made in a Convention country in respect of the invention 
or  
*was / *were not the first application(s) made in a Convention country in respect of the invention, and a request has been made under Section 96 of the Patents Act 1990 (or Section 142AA of the Patents Act 1952) to disregard the following application(s) .................................................................

*The provisional application(s) listed in the declaration made under Article 8 of the PCT

*was / *were filed in Australia not more than 12 months before the filing date of this application.

* Part 5 - Must be completed if the application is a DIVISIONAL APPLICATION.

The person(s) nominated for the grant of the patent:

*is / *are the applicant(s) / patentee(s) of the original application(s) / patent(s) 
or  
*has entitlement to make a request under Section 113 of the Act in relation to the original application / patent .................................................................

(eg by assignment, by agreement, etc)
**Part 6 - Must be completed if the application relates to a Microorganism and relies on Section 6 of the Act.**

The person(s) nominated for the grant of the patent:

* is / are the depositor(s) of the deposit(s) as listed hereafter

or

* has entitlement from the depositor(s) of the deposit(s) as listed hereafter

(eg by assignment, by consent, etc)

Deposit List (by number, deposit institution, date)

**Part 7 - Must be completed if the applicant for a Patent of Addition is not the applicant or patentee of the main invention.**

I, .................................................................................................................., the *applicant / *patentee for *application / *patent No. .................................................................................................................,

authorise ..............................................................................................................

to apply for a further patent for an improvement in, or modification of, the main invention.

.................................................................................................................. ..................................................................................................................

(Signature) (Date)

*Note: This part must be signed by the applicant/patentee of the main invention.*

........................................................................................................................................

........................................................................................................................................

(Signature) (Date)

(If the applicant is a Company or other legal entity, also indicate the name and standing of the authorized signatory.)

*Note: This MUST be signed FOR ALL APPLICATIONS*

*Omit/Delete if not appropriate*
A simulator roller coaster amusement ride is disclosed. This invention relates to a simulator roller coaster amusement ride suitable for group participation, wherein a group participating seating arrangement resembling a roller coaster vehicle (1), maneuvers in conjunction with an underlying arrangement of hydraulic/mechanical workings (2), with this underlying arrangement of hydraulic/mechanical workings (2) being programmed to maneuver this group participating seating arrangement resembling a roller coaster vehicle (1), in a fluctuating, angulated and varied manner as per by the means of software driven computer technology, and in simultaneous accordance with synchronized moving images (10) projected onto the outer surface planes of an encircling amalgamation of rear projection screens (3) as per by the means of outlying installed rear image projectors (4).
Invention Title

SIMULATOR ROLLER COASTER AMUSEMENT RIDE.

The following statement is a full description of this invention, including the best method of performing known to me:-

1.

This invention relates to a simulator roller coaster amusement ride suitable for group participation, as described in the following 18 pages, with references to the accompanying drawings FIG 1, FIG 2, FIG 3, FIG 4 and FIG 5.
SIMULATOR ROLLER COASTER AMUSEMENT RIDE.

This invention relates to a simulator roller coaster amusement ride suitable for group participation.

This invention relates to a simulator roller coaster amusement ride suitable for group participation, wherein a group participating seating arrangement resembling a roller coaster vehicle, maneuvers in conjunction with an underlying arrangement of hydraulic/mechanical workings, with this underlying arrangement of hydraulic/mechanical workings being programmed to maneuver this group participating seating arrangement resembling a roller coaster vehicle, in a fluctuating, angulated and varied manner as per by the means of software driven computer technology, and in simultaneous accordance with synchronized moving images projected onto the outer surface planes of an encircling amalgamation of rear projection screens as per by the means of outlying installed rear image projectors.

There are established simulator amusement rides that incorporate hydraulic/mechanical workings that maneuver a seating arrangement in accordance with a specified image projected onto a screen or screens, but these simulator amusement rides provide the group participants with an equable physical experience and in most cases frontal viewing only, whereas this invention of a simulator roller coaster amusement ride provides the group participants with a fluctuating and varied physical experience, and at the same time multidirectional viewing of an exceedingly dramatised computer generated roller coaster journey, thus providing the group participants with an unexampled and thrilling simulated roller coasting experience.
In one form of the invention, the herein referred to group participating seating arrangement resembling a roller coaster vehicle, maneuvers in conjunction with the herein referred to underlying arrangement of hydraulic/mechanical workings, with this herein herein referred to underlying arrangement of hydraulic/mechanical workings being programmed to maneuver this herein referred to group participating seating arrangement resembling a roller coaster vehicle, in a fluctuating, angulated and varied manner as per by the means of software driven computer technology.

In another form of the invention, the herein referred to encircling amalgamation of rear projection screens, structurally encircles the herein referred to group participating seating arrangement resembling a roller coaster vehicle, and the herein referred to underlying arrangement of hydraulic/mechanical workings, with the herein referred to synchronized moving images being projected onto the outer surface planes of this herein referred to encircling amalgamation of rear projection screens, as per by the means of the herein referred to outlying installed rear image projectors.

In another form of the invention, the herein referred to synchronized moving images simulate an exceedingly dramatised roller coaster journey, with this herein referred to synchronised moving images being programmed for projection in a manner so as to coincide with the software driven motions of the herein referred underlying arrangement of hydraulic/mechanical workings.
To assist with understanding the invention, references will now be made to the accompanying drawings which show one example of the invention.

In the drawings:

5 FIG 1 shows one example of a designated section of the herein referred to group participating seating arrangement resembling a roller coaster vehicle, according to this invention.

FIG 2 shows one example of the herein referred to underlying arrangement of hydraulic/mechanical workings, according to this invention.

FIG 3 shows one example of the herein referred to encircling amalgamation of rear projection screens, according to this invention.

15 FIG 4 shows one example of the placement depths relevant to the herein referred to outlying installed rear image projectors, as well as the positional alignments relevant to the group participants optimum viewing distances, and includes details pertaining to the herein referred to synchronized moving images, according to this invention.

FIG 5 shows one example of the herein referred to encircling amalgamation of rear projection screens as well as a designated number of the herein referred to outlying installed rear image projectors, structurally encircling the herein referred to group participating seating arrangement resembling a roller coaster vehicle and the herein referred to underlying arrangement of hydraulic/mechanical workings, according to this invention.
Referring to FIG 1, the herein referred to group participating seating arrangement resembling a roller coaster vehicle, incorporates divided sections of structural arrangements resembling roller coaster carriages (1), as well as a participants access perimeter (5,6,7), with each of the herein referred to divided sections of structural arrangements resembling roller coaster carriages (1) incorporating divided rows of individual seating provisions (2), accompanying safety restraints (3,4), and underlying attachments (not illustrated - refer item number (7)), and the herein referred to participants access perimeter (5,6,7) incorporating divided sections of panelling hinged together (5), an overlaying layer of rubberised footing material (6), and underlying attachments (7). Referring to the accompanying drawing, only one of the herein referred to divided sections of structural arrangements resembling a roller coaster carriage (1,2,3,4), and a designated section of the herein referred to participants access perimeter (5,6,7), is illustrated, with the designated number of herein referred to divided sections of structural arrangements resembling roller coaster carriages (1,2,3,4), and the overall dimensional structure of the herein referred to participants access perimeter (5,6,7) being unreserved, and determined in accordance with the final dimensional specifications of the herein referred to underlying arrangement of hydraulic/mechanical workings (refer FIG 2). The herein referred to divided sections of structural arrangement resembling roller coaster carriages (1) are relevant structured frameworks designed for the participants comfort and safety, and incorporates the herein referred to divided rows of individual seating provisions (2), the herein referred to accompanying safety restraints (3,4), and the herein referred to underlying attachments (7). These herein referred to divided sections of structural arrangements resembling roller coaster carriages (1) are composed of any components and materials that comply with safety regulation guidelines, and are incorporated in conjunction with the herein referred to participants access
perimeter (5, 6, 7), and the herein referred to underlying arrangement of hydraulic/mechanical workings (refer FIG 2). The herein referred to divided rows of individual seating provisions (3) are parallel aligned rows of individual seats designed for the participants comfort and safety, and are composed of any components and materials that comply with safety regulation guidelines. The herein referred to accompanying safety restraints (3, 4) are safety harnesses amalgamated with lifting mechanisms (3), with each safety harness being designed for the participants comfort and safety, and each lifting mechanism being designed to lock in a downward position when engaged (4), and maneuver up and down when disengaged (4). These herein referred to accompanying safety restraints (3, 4) are composed of any components and materials that comply with safety regulation guidelines. The herein referred to participants access perimeter (5, 6, 7) is the region immediately surrounding the herein described divided sections of structural arrangements resembling roller coaster carriages (1, 2, 3, 4), and incorporates divided sections of panelling hinged together (5), an overlaying layer of rubberised footing material (6), underlying attachments (7). The herein referred to divided sections of panelling hinged together (5) are specifically designed panels securely hinged together in a manner so as they can be fluctuatingly maneuvered as per by the means of the herein referred to underlying arrangement of hydraulic/mechanical workings (refer FIG 2). These herein referred to divided sections of panelling hinged together (5) are composed of any components and materials that comply with safety regulation guidelines. The herein referred to overlaying layer of rubberised footing material (6) is incorporated with the upper region of the herein described divided sections of panelling hinged together (5) is designed for the participants safety, and is composed of any components and materials that comply with safety regulation guidelines. The herein referred to underlying attachments (7) are an arrangement of connecting components amalgamated with the under sections of the herein described
7. divided sections of structural arrangements resembling roller coaster carriages (1, 2, 3, 4), and the under-sections of the herein described divided sections of panelling hinged together (5). These herein referred to underlying attachments (7) are composed of any components and materials that comply with safety regulation guidelines, and are incorporated in conjunction with the herein referred to underlying arrangement of hydraulic/mechanical workings (refer FIG 2).

10 This herein described group participating seating arrangement resembling a roller coaster vehicle, is claimed as per the intentions of the inventor, but may be subject to variations consistent with the matters described herein; ie three divided rows of individual seating provisions (2) per divided section of structural arrangement resembling a roller coaster carriage (1) may be more viable than as illustrated, or five individual seats (2) with accompanying safety restraints (3, 4) per divided row of individual seating provisions (2) may be more viable than as illustrated ...etc. Any variations consistent with the matters described herein, is to be determined in compliance with safety regulation guidelines.
8.

Referring to FIG 2, the herein referred to underlying arrangement of hydraulic/mechanical workings is a complex integration of hydraulic workings, mechanical workings, electronic devises and relevent contrivances (1) that are incorporated in conjunction with the herein described divided sections of structural arrangements resembling roller coaster vehicles (2) (perimeter region illustrated only), and the herein described participants access perimeter (3) (perimeter region illustrated only), as per by the means as described in FIG 1. This herein referred to complex integration of hydraulic workings, mechanical workings, electronic devises and relevent contrivances (1) is programmed to maneuver the herein described divided sections of structural arrangements resembling roller carriages (2), and the herein described participants access perimeter (3), in a fluctuating, angulated and varied manner as per by the means of software driven computer technology (not illustrated), and is composed of any hydraulic components, mechanical components, electronic devises, and any other components and materials that comply with safety regulation guidelines. The herein referred to software driven computer technology (not illustrated) is an advance computer hardware system that incorporates advanced software arrangements that are programmed to maneuver this herein described underlying arrangement of hydraulic/mechanical workings (as well as the herein described group participating seating arrangement resembling a roller coaster vehicle), in a manner simultaneous with the synchronized moving images (refer FIG 4) projected onto the outer surface planes of the herein referred to encircling amalgamation of rear projection screens (refer FIG 3), as per by the means of the herein referred to outlying installed rear image projectors (refer FIG 4). Any advanced computer technology and any advanced software programmes may be utilised.

This herein described underlying arrangement of hydraulic/mechanical workings, is claimed as per the intentions of
9.

the inventor, but may be subject to variations consistent with the matters described herein i.e. the complex integration of hydraulic workings, mechanical workings, electronic devices, and relevant contrivances (1) may be arranged alternatively than as illustrated, or may incorporate more or less hydraulic/mechanical workings than as illustrated ... etc. Any variations consistent with the matters described herein, is to be determined in compliance with safety regulation guidelines.
Referring to FIG 3, the herein referred to encircling amalgamation of rear projection screens, is an encircling arrangement of individually designed rear projection screens amalgamated together in a hemi-cylindric dome like formation (1) combined with a rear wall structure (2,3), that together structurally encircle the herein described group participating seating arrangement resembling a roller coaster vehicle (not illustrated), and the herein described underlying arrangement of hydraulic/mechanical workings (not illustrated), according to this invention (refer FIG 5).

This herein referred to encircling arrangement of individually designed rear projection screens amalgamated together in a hemi-cylindric dome like formation (1), is structurally designed in a manner so as when the herein referred to synchronised moving images (refer FIG 4) are projected onto the outer surface planes as per by the means described in FIG 4, no seems or joints impede the actual moving images projected. Each herein referred to individually designed rear projection screen may be dimensionally designed in any manner suitable in forming a resemblance to the herein referred to hemi-cylindric formation, with the designated number of individually designed rear projection screens amalgamated in the herein referred to hemi-cylindric dome like formation (1) being unreserved, and determined in accordance with the final dimensional specifications of the herein described group participating seating arrangement resembling a roller coaster vehicle (refer FIG 1), and the herein described underlying arrangement of hydraulic/mechanical workings (refer FIG 2), as well as in accordance with the optimum viewing distances applicable to the group participants optical focal planes (refer FIG 4). This herein referred to encircling arrangement of individually designed rear projection screens amalgamated together in a hemi-cylindric dome like formation (1) is composed of screening materials suitable for rear image projection, and any other components and materials that comply with safety regulation guidelines. The herein referred to rear wall structure (2,3) is a structured framework (2) and access doorway (3).
incorporated in conjunction with this herein described encircling arrangement of individually designed rear projection screens amalgamated together in a hemi-cylindric dome like formation (1). The herein referred to structured framework (2) is a supporting foundation composed of any components and materials that comply with safety regulation guidelines, and incorporates the herein referred to access doorway (3). The herein referred to access doorway (3) is a participants access point centrally positioned in parallel alignment with the herein described participants access perimeter (refer FIG 1), and is composed of any components and materials that comply with safety regulation guidelines. This herein described rear wall structure (2,3), is a designated part of the overall structural foundations (not illustrated) necessary in supporting this invention as described herein.

This herein described encircling amalgamation of rear projection screens, is claimed as per the intentions of the inventor, but may be subject to variations consistent with the matters described herein ie the encircling arrangement of individually designed rear projection screens amalgamated together in a hemi-cylindric dome like formation (1) may vary in configuration than as illustrated to comply with the final dimensional specifications of the herein described group participating seating arrangement resembling a roller coaster vehicle, and/or the herein described underlying arrangement of hydraulic/mechanical workings, and/or the herein described optimum viewing distances applicable to the group participants optical focal planes; or the access doorway (3) may be positionally aligned differently than as illustrated ...etc.. Any variations consistent with the matters described herein, is to be determined in compliance with safety regulation guidelines.
Referring to FIG 4, the herein referred to outlying installed rear image projectors, are a designated number of rear image projectors (1) positionally installed at placement depths (2) encircling the outer region of the herein described encircling amalgamation of rear projection screens (refer FIG 3). Each herein referred to rear image projector (1) is programmed to simultaneously project moving images onto the outer surface planes of this herein described encircling amalgamation of rear projection screens (refer FIG 3), as per by the means of software driven computer technology (not illustrated). Any advanced computer technology, any advanced software programmes, and any style of rear image projector (1) may be utilised in the programming and projection of these herein referred to moving images, with the designated number of rear image projectors (1) installed being unreserved, and determined in accordance with the final dimensional specifications of the herein described encircling amalgamation of rear projection screens (refer FIG 3). The placement depths (2) of each herein described rear image projector (1), is determined in accordance with the specifications chart included with the accompanying drawing, and if a full span placement depth (2) is not feasible at the time of installation, high quality mirror surfaces are to be utilised to fold the projection, thereby achieving the desired image dimension with a shorter distance. The optimum viewing distances applicable to the group participants optical focal planes (4) are determined in accordance with the final dimensional specifications of the herein described encircling amalgamation of rear projection screens (refer FIG 3), and calculated as per in accordance with the specifications chart included with the accompanying drawing. Referring to the accompanying drawing, only one of the herein described outlying installed rear image projectors (1) is illustrated, only one of the herein described individually designed rear projection screens (3) is illustrated, and only the frontal optimum viewing distance applicable to the group participants frontal focal plane (4) is illustrated. In accordance with the final
13.

dimensional specifications of the herein described encircling amalgamation of rear projection screens (refer FIG 3), the placement depth (2) of all herein described rear image projectors (1) is determined in accordance with the specifications chart included with the accompanying drawing, with the optimum viewing distances applicable to the group participants frontal focal plane (4), left side focal plane, right side focal plane, and overhead focal plane (multidirectional viewing), being determined as per by the same means as described herein. The herein referred to specifications chart included with the accompanying drawing, is provided by the Sony Corporation.

The herein referred to synchronized moving images (not illustrated), is a synchronized arrangement of individually edited moving images individually projected onto the outer surface planes of the herein described encircling amalgamation of rear projection screens (refer FIG 3), as per by the means of the herein described outlying installed rear image projectors (1). The image dimensions of each individually projected moving images, precisionally connect with one another to form the herein referred to synchronized moving images, with this herein referred to synchronized moving images simulating an exceedingly dramatised roller coaster journey. Any advanced software programme associated with any computer technology may be utilised in producing this herein described synchronized moving images of an exceedingly dramatised roller coaster journey, with all moving images being produced and edited in any manner or direction, and in any environment or location.

The placement depths (2) of the herein described outlying installed rear image projectors (1), and the optimum viewing distances applicable to the group participants optical focal planes (4), are claimed as per the intentions of the inventor, but may be subject to variations consistent with the matters described herein ie the installation depths (2) of any of the herein described rear image projectors (1) may
14. differentiate with the specification details included in the herein referred to specifications chart, or the optimum viewing distances of any of the group participants focal planes (4) may differentiate with the specification details included in the herein referred to specifications chart ... etc.. Any variations consistent with the matters described herein, is to be determined in compliance with safety regulation guidelines.
Referring to FIG 5, the herein described encircling amalgamation of rear projection screens (3), and a designated number of the herein described outlying installed rear image projectors (4), structurally encircle the herein described group participating seating arrangement resembling a roller coaster vehicle (1), and the herein described underlying arrangement of hydraulic/mechanical workings (2), according to this invention. To assist in understanding how this herein claimed simulator roller coaster amusement ride works, the following reference text is descriptively worded in accordance with the group participants ongoing progress and experience. Initially entering the herein described access doorway (5), the group participants are ushered towards the herein described divided sections of structural arrangements resembling roller coaster carriages (6), as per by the way of the herein described participants access perimeter (7), and then secured into the herein described individual seating provisions (8), as per by the means of the herein described accompanying safety restraints (9).

When all participants are secured, the herein described underlying arrangement of hydraulic/mechanical workings (2), maneuvers the herein described group participating seating arrangement resembling a roller coaster vehicle (1), in a fluctuating, angulated and varied manner as per by the means of the herein described software driven computer technology (not illustrated), and in simultaneous accordance with the herein described synchronised moving images (10) projected onto the outer surface planes of the herein described encircling amalgamation of rear projection screens (3), as per by the means of the herein described outlying installed rear image projectors. This herein described programmed movement and images, provides the group participants with a fluctuating, angulated and varied physical experience that coincides with multi-directional viewing of the herein described exceedingly dramatised roller coaster journey, for the duration of a specified time period. Thereafter when this programmed movement and images come to a programmed standstill, the participants are released from the herein
described individual seating provisions (8), and ushered away accordingly.

This herein described simulator roller coaster amusement ride, substantially as described herein with references to the accompanying drawings; is claimed as per the intentions of the inventor, but may be subject to variations consistent with the matters described herein, as referred to in the reference text accompanying FIG 1, FIG 2, FIG 3 and FIG 4.

All drawings and text included herein has been copyrighted.
The claims defining the invention are as follows:

1. A simulator roller coaster amusement ride for group participation, wherein a group participating seating arrangement resembling a roller coaster vehicle, maneuvers in conjunction with an underlying arrangement of hydraulic/mechanical workings, with this underlying arrangement of hydraulic/mechanical workings maneuvering this group participating seating arrangement resembling a roller coaster vehicle, in a fluctuating, angulated and varied manner, as per by the means of software driven computer technology, and in simultaneous accordance with synchronised moving images projected onto the outer surface planes of an encircling amalgamation of rear projection screens, as per by the means of outlying installed rear image projectors.

2. The group participating seating arrangement resembling a roller coaster vehicle of claim 1, wherein this group participating seating arrangement resembling a roller coaster vehicle incorporates divided sections of structural arrangements that resemble roller coaster carriages, and a participants access perimeter.

3. The underlying arrangement of hydraulic/mechanical workings of claim 1, wherein this underlying arrangement of hydraulic/mechanical workings incorporates a complex integration of hydraulic workings, mechanical workings, electronic devises and relevant contrivances that maneuver as per by the means of software driven computer technology.

4. The encircling amalgamation of rear projection screens of claim 1, wherein this encircling amalgamation of rear projection screens incorporates an encircling arrangement of individually designed rear projection screens amalgamated together in a hemi-cylindric dome like formation.

5. The encircling amalgamation of rear projection screens and synchronized moving images of claims 1 and 4.
wherein this synchronized moving images incorporates a synchronized arrangement of individually edited moving images that are individually projected onto the outer surface planes of the encircling amalgamation of rear projection screens, as per by the means of outlying installed rear image projectors, and in accordance with software driven computer technology.

6. The group participating seating arrangement resembling a roller coaster vehicle and the underlying arrangement of hydraulic/mechanical workings of claims 1, 2 and 3, wherein the group participating seating arrangement resembling a roller coaster vehicle is incorporated with, and maneuvers in conjunction with, the underlying arrangement of hydraulic/mechanical workings, in a fluctuating, angulated and varied manner, as per by the means of software driven computer technology.

7. The underlying arrangement of hydraulic/mechanical workings and synchronized moving images of claims 1, 3, 5 and 6, wherein the underlying arrangement of hydraulic/mechanical workings manouvers in simultaneous accordance with the synchronized moving images, as per by the means of software driven computer technology.

8. The synchronised moving images of claims 1, 5 and 7 wherein this synchronized moving images is produced in association with computer technology, and simulates an exceedingly dramatised roller coaster journey progressing in any manner, direction, environment or location.

9. A simulator roller coaster amusement ride for group participation, substantially as described herein, with references to the accompanying drawings.

__________________________  _________________________
Stephen Hayman            5th January, 1996
(Name of Applicant)        (Date)
ABSTRACT:

A simulator roller coaster amusement ride is disclosed. This invention relates to a simulator roller coaster amusement ride suitable for group participation, wherein a group participating seating arrangement resembling a roller coaster vehicle (1), maneuvers in conjunction with an underlying arrangement of hydraulic/mechanical workings (2), with this underlying arrangement of hydraulic/mechanical workings (2) being programmed to maneuver this group participating seating arrangement resembling a roller coaster vehicle (1), in a fluctuating, angulated and varied manner as per by the means of software driven computer technology, and in simultaneous accordance with synchronized moving images (10) projected onto the outer surface planes of an encircling amalgamation of rear projection screens (3) as per by the means of outlying installed rear image projectors (4).

(116 words)
angle of optical axis is $2^\circ$

$a = 2^\circ \pm 0.5^\circ$

**SPECIFICATIONS CHART ACCOMPANYING FIG 4:**

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