1. A method for accessing a key value pair stored in a solid state drive (SSD) memory, the method comprises:

calculating, by a SSD memory controller based on an input key, a first bucket identifier and a first inter-bucket value;

determining a block cluster that stores the key pair value, based on the first bucket identifier, the first inter-bucket value and first metadata of a first data structure;

calculating, based on the input key, a second bucket identifier and a second inter-bucket value;

determining key value pair retrieval information, based on the second bucket identifier, the second inter-bucket value and second metadata of a second data structure; wherein the second data structure is allocated to the block cluster; and

retrieving at least the value of the key pair value based on the key pair value retrieval information.

- 2. The method according to claim 1 comprises: receiving an input key by the SSD memory controller; converting the input value to an intermediate key; and wherein the calculating of the first bucket identifier and the first inter-bucket value comprises applying a first hash function on the intermediate key to provide a first hash result; and determining, based on the first hash result, the first bucket identifier and the first inter-bucket value.
- 3. The method according to claim 2 wherein the determining of the block cluster comprises: accessing, using at least the first inter-bucket value, first meta data of a first bucket that is identified by the first bucket identifier; wherein the first bucket belongs to the first data structure; and selecting, based on the first metadata, the second data structure.

1、一种用于获取存储在固态硬盘(SSD) 存储器中的键值对的方法,所述方法包括:

SSD 存储器控制器基于输入键计算第一桶 标识符和第一桶间值;

基于所述第一桶标识符、所述第一桶间值和 第一数据结构的第一元数据来确定存储所述键 值对的块集群:

基于所述输入键计算第二桶标识符和第二桶间值;

基于所述第二桶标识符、所述第二桶间值和 第二数据结构的第二元数据来确定键值对检索 信息;其中,所述第二数据结构被分配给所述块 集群;以及

基于所述键值对检索信息检索至少所述键值对的值。

2、根据权利要求1所述的方法,包括:所述 SSD 存储器控制器接收输入键;将输入值转换为中间键;并且其中,所述计算所述第一桶标识符和所述第一桶间值包括:对所述中间键应用第一散列函数以提供第一散列结果;以及基于所述第一散列结果确定所述第一桶标识符和所述第一桶间值。

3、根据权利要求2所述的方法,其中,所述确定所述块集群包括:使用至少所述第一桶间值获取由所述第一桶标识符标识的第一桶的第一元数据;其中,所述第一桶属于所述第一数据结构;以及基于所述第一元数据选择所述第二数据结构。

- 4. The method according to claim 3 comprises: receiving an input key by the SSD memory controller; converting the input value to an intermediate key; and wherein the calculating of the second bucket identifier and the second inter-bucket value comprises applying a second hash function on the intermediate key to provide a second hash result; and determining, based on the second hash result, the second bucket identifier and the second inter-bucket value.
- 5. The method according to claim 4 wherein the determining of the key value pair retrieval information comprises accessing, using at least the second inter-bucket value, second metadata of a second bucket that is identified by the second bucket identifier; wherein the second bucket belongs to the second data structure; and determining, based on the second metadata, key value pair retrieval information.
- 4、根据权利要求 3 所述的方法,包括:所述 SSD 存储器控制器接收输入键;将所述输入值转换为中间键;并且其中,所述计算所述第二桶标识符和所述第二桶间值包括:对所述中间键应用第二散列函数以提供第二散列结果;以及基于所述第二散列结果确定所述第二桶标识符和所述第二桶间值。
- 5、根据权利要求 4 所述的方法, 其中, 所述确定所述键值对检索信息包括: 使用至少所述第二桶间值来获取由所述第二桶标识符标识的第二桶的第二元数据; 其中, 所述第二桶属于所述第二数据结构; 以及基于所述第二元数据确定所述键值对检索信息。

1. A remote access system for a vehicle, comprising:

at least one receiver configured to detect a location of a mobile device; and

a controller comprising a processor configured to:

determine an association of the mobile device to an authorized user when the mobile device is within a first range from the vehicle;

authenticate the authorized user when the mobile device is within a second range from the vehicle, wherein the second range is smaller than the first range;

determine a vehicle function to perform based on data associated with the mobile device or the authorized user; and

perform the vehicle function when the mobile device is within a third range from the vehicle and the

1、一种用于车辆的远程访问系统,包括:

至少一个接收器,所述至少一个接收器被 配置成检测移动设备的位置;以及

控制器,所述控制器包括处理器,所述处理器被配置成:

当所述移动设备与所述车辆的距离在第 一范围内时,确定所述移动设备与授权用户的 关联:

当所述移动设备与所述车辆的距离在第 二范围内时,对所述授权用户进行认证,其中, 所述第二范围小于所述第一范围;

基于与所述移动设备或所述授权用户相 关联的数据来确定要执行的车辆功能;以及

当所述移动设备与所述车辆的距离在第 三范围内且所述授权用户得到认证时执行所述 车辆功能,其中,所述第三范围小于所述第二 authorized user is authenticated, wherein the third range is smaller than the second range.

5. The remote access system of claim 1,

wherein the at least one receiver is further configured to track the mobile device to acquire tracking data indicative of movement of the authorized user, and

wherein the processor is further configured to:
compare the tracking data to movement trajectory
data stored in a storage unit; and

perform the vehicle function based on the tracking data matching the stored movement trajectory data.

11. A method of remote access for a vehicle, the method comprising:

detecting, with at least one receiver, a location of a mobile device when the mobile device is within a first range;

determining, with a processor, an association of the mobile device to an authorized user:

authenticating, with the processor, the user based on the mobile device being detected within a second range from the vehicle, wherein the second range is smaller than the first range;

determining, with the processor, a vehicle function to perform based on data associated with the mobile device or the authorized user; and

performing, with the processor, the vehicle function when the mobile device is detected within a third range from the vehicle and the user is authenticated, wherein the third range is smaller than the second range.

14. The method of claim 11, further including:

tracking, with the at least one receiver, the mobile device to acquire tracking data indicative of movement of the user, and

comparing, with the processor, the tracking data to

范围。

5、根据权利要求1所述的远程访问系统,

其中,所述至少一个接收器还被配置成跟 踪所述移动设备以获取指示所述授权用户的移 动的跟踪数据,以及

其中, 所述处理器还被配置成:

将所述跟踪数据与存储在存储单元中的移 动轨迹数据进行比较;以及

基于所述跟踪数据与所存储的所述移动轨迹数据匹配来执行所述车辆功能。

11、一种用于车辆的远程访问的方法,所述方法包括:

当移动设备在第一范围内时,使用至少一个接收器来检测所述移动设备的位置;

使用处理器来确定所述移动设备与授权用户的关联:

使用所述处理器基于检测到所述移动设备 与所述车辆的距离在第二范围内来对用户进行 认证,其中,所述第二范围小于所述第一范围;

使用所述处理器基于与所述移动设备或所 述授权用户相关联的数据来确定要执行的车辆 功能;以及

当检测到所述移动设备与所述车辆的距离 在第三范围内且所述用户得到认证时,使用所 述处理器执行所述车辆功能,其中,所述第三 范围小于所述第二范围。

14、根据权利要求 11 所述的方法, 还包括:

使用所述至少一个接收器来跟踪所述移动 设备以获取指示所述用户的移动的跟踪数据, 以及

使用所述处理器将所述跟踪数据与存储在

movement trajectory data stored in a storage unit; and

performing, with the processor, the vehicle function based on the tracking data matching the stored movement trajectory data.

20. A vehicle comprising:

车架; 以及

a frame; and

a remote access system including:

at least one receiver positioned in or on the frame and configured to detect a location of a mobile device; and

a controller comprising a processor configured to:

determine an association of the mobile device to an authorized user when the mobile device is detected within a first range from the vehicle;

authenticate the user based on the mobile device being detected within a second range from the vehicle, wherein the second range is smaller than the first range;

determine a vehicle function to perform based on data associated with the mobile device or the authorized user, and

perform the vehicle function when the mobile device is detected within a third range from the vehicle and the authorized user is authenticated, wherein the third range is smaller than the second range.

远程访问系统,所述远程访问系统包括:

存储单元中的移动轨迹数据进行比较;以及

运动轨迹数据匹配来执行所述车辆功能。

20、一种车辆,包括:

使用处理器基于所述跟踪数据与所存储的

至少一个接收器,所述至少一个接收器位于所述车架中或所述车架上并被配置成检测移动设备的位置;以及

控制器,所述控制器包括处理器,所述处理器被配置成:

当检测到所述移动设备与所述车辆的距离 在第一范围内时,确定所述移动设备与授权用 户的关联;

基于检测到所述移动设备与所述车辆的距 离在第二范围内来对授权用户进行认证,其中, 所述第二范围小于所述第一范围;

基于与所述移动设备或所述授权用户相关 联的数据来确定要执行的车辆功能,以及

当检测到所述移动设备与所述车辆的距离 在第三范围内且所述用户得到认证时执行所述 车辆功能,其中,所述第三范围小于所述第二 范围。

1. An engine apparatus comprising:

an internal combustion engine;

a cooling airflow control subsystem comprising:

an airflow regulator comprising:

a first component comprising one or more first passageways extending through the first component; and

、一种发动机装置,包括:

内燃机:

冷却气流控制子系统, 所述冷却气流控制 子系统包括:

气流调节器,所述气流调节器包括:

第一部件,所述第一部件包括延伸穿过所

a second component comprising one or more second passageways extending through the second component, the second component mounted adjacent the first component;

an actuator operably coupled to the airflow regulator to cause relative rotation between the first and second components when actuated so that the airflow regulator can be altered between: (1) a first state in which the first and second passageways are aligned first extent to allow a first amount of cooling airflow to reach the engine; and (2) a second state in which the first and second passageways are aligned a second extent to allow a second amount of cooling airflow to reach the engine, the first amount being greater than the second amount.

2. The engine apparatus according to claim 1 further comprising:

the first component comprising a plurality of first louvers, the one or more first passageways defined between the plurality of first louvers; and

the second component comprising a plurality of second louvers, the one or more second passageways defined between the plurality of second louvers.

3. The engine apparatus according to claim 2 further comprising:

the relative rotation between the first and second components taking place about a rotational axis; 旋转绕着旋转轴线进行;

the plurality of first louvers extending radially outward from the rotational axis; and

the plurality of second louvers extending radially outward from the rotational axis.

4. The engine apparatus according to any one of claims 2 to 3 further comprising:

述第一部件的一个或多个第一通道: 以及

第二部件, 所述第二部件包括延伸穿过所 述第二部件的一个或多个第二通道, 所述第二 部件被安装成靠近所述第一部件;

致动器,所述致动器能够操作地联接至所 述气流调节器, 以使得当所述致动器被致动时 使得所述第一部件和所述第二部件相对旋转, 从而使得所述气流调节器能够在下述状态之间 变化: (1) 第一状态, 在所述第一状态下, 所 述第一通道和所述第二通道以第一程度对准, 以使得第一数量的冷却气流到达所述内燃机; (2) 第二状态, 在所述第二状态下, 所述第一 通道和所述第二通道以第二程度对准, 以使得 第二数量的冷却气流到达所述内燃机, 所述第 一数量大于所述第二数量。

根据权利要求1所述的发动机装置,还 包括:

所述第一部件包括多个第一栅格, 所述一 个或多个第一通道被限定在所述多个第一栅格 之间: 以及

所述第二部件包括多个第二栅格,所述-个或多个第二通道被限定在所述多个第二栅格 之间。

3、根据权利要求2所述的发动机装置,还 包括:

所述第一部件和所述第二部件之间的相对

所述多个第一栅格从所述旋转轴线径 外延伸: 以及

所述多个第二栅格从所述旋转轴线径向向 外延伸。

4、根据权利要求2至3中任一项所述发动 机装置,还包括:

the first component being a first plate comprising the plurality of first louvers, the plurality of first louvers lying in a first plane;

the second component being a second plate comprising the plurality of second louvers, the plurality of second louvers lying in a second plane; and

wherein the plurality of first louvers remain in the first plane and the plurality of second louvers remain in the second plane in both the first and second states.

5. The engine apparatus according to any one of claims 1 to 4 further comprising:

the internal combustion engine being an air-cooled engine having one or more cooling fins;

a blower housing mounted to the engine and comprising an air inlet opening;

an airflow generator mounted within the blower housing and aligned with the air inlet opening; and

the airflow regulator covering the air inlet opening of the blower housing.

所述第一部件是包括所述多个第一栅格的 第一板,所述多个第一栅格位于第一平面内;

所述第二部件是包括所述多个第二栅格的 第二板,所述多个第二栅格位于第二平面内; 以及

其中,在所述第一状态和所述第二状态下, 所述多个第一栅格保持在所述第一平面内,所述多个第二栅格保持在所述第二平面内。

5、根据权利要求1至4中任一项所述发动机装置,还包括:

所述内燃机是具有一个或多个散热片的风 冷式发动机:

鼓风机壳体, 所述鼓风机壳体被安装在所述内燃机上并且包括进气口;

气流发生器,所述气流发生器被安装在所 述鼓风机壳体内并与所述进气口对准;以及

所述气流调节器覆盖所述鼓风机壳体的所述进气口。

- 1. A method of preparing a catalyst for the ethynylation of formaldehyde which comprises: depositing by precipitation copper hydroxide, over a particulate siliceous carrier and calcining the treated carrier to yield a copper oxide coating around the carrier.
- 1. 一种制备用于使甲醛乙炔基化的催化剂的方法,其包括:通过沉淀法将氢氧化铜沉积于颗粒硅质载体上,以及煅烧所述经处理的载体以得到所述载体周围的氧化铜涂层。
- 2. The method of claim 1, wherein a mixture of copper and bismuth hydroxides are deposited on said carrier.
- 如权利要求1所述的方法,其中将氢氧 化铜和氢氧化铋的混合物沉积于所述载体上。
- 3. The method of claim 1, wherein the copper hydroxide is formed by adding an alkali metal hydroxide to an acidic copper salt solution.
- 3. 如权利要求1所述的方法,其中通过将 碱金属氢氧化物添加至酸性铜盐溶液来形成所 述氢氧化铜。
- 4. The method of claim 3, wherein an acidic
- 4. 如权利要求 3 所述的方法, 其中酸性溶

液由硝酸铜与硝酸铋的混合物制成。 solution is made of a mixture of copper nitrate and bismuth nitrate. 5. 如权利要求 3 所述的方法, 其中所述碱 5. The method of claim 3, wherein said alkali metal 金属氢氧化物是氢氧化钠。 hydroxide is sodium hydroxide. 6. The method of claim 5, wherein the sodium 6. 如权利要求 5 所述的方法, 其中将所述 hydroxide is provided in a separate vessel from the 氢氧化钠提供于与所述酸性溶液分开的容器 acidic solution, and the siliceous carrier particles are 并且将所述硅质载体颗粒提供于与所述氢 氧化钠和酸性溶液分开的沉淀容器中的水中, provided in water in a precipitation vessel separate from 其中将所述酸性溶液和所述氢氧化钠同时添加 the sodium hydroxide and acidic solution, wherein the

acidic solution and the sodium hydroxide are added

simultaneously to the precipitation vessel.



1、一种视频画面的绘制方法,其特征在于,包括:

创建 GLSurfaceView 以及与所述 GLSurfaceView 相对应的第一渲染器和第二渲染器:

为所述第一渲染器配置第一渲染参数,所述 第一渲染参数至少包括视频发起方的画面位置和 画面尺寸;

为所述第二渲染器配置第二渲染参数,所述 第二渲染参数至少包括视频接收方的画面位置和 画面尺寸;

当视频通话建立时,所述第一渲染器和所述 第二渲染器分别根据所述第一渲染参数和所述第 二渲染参数,对接收的每一帧图片进行绘制。

- 2、根据权利要求1所述的视频画面的绘制方法,其特征在于,所述第一渲染器为本地渲染器,所述第二渲染器为远程渲染器。
- 3、根据权利要求1所述的视频画面的绘制方法,其特征在于,当视频通话建立时,所述第一渲染器和所述第二渲染器分别根据所述第一渲染参数和所述第二渲染参数,对接收的每一帧图片进行绘制具体包括:

当视频通话建立时,根据视频接收方的画面 位置和画面尺寸对所述第二渲染器接收的每一帧 图片进行绘制,得到第二图片流; A method for drawing a video image, comprising:

creating a GLSurfaceView and a first renderer and a second renderer corresponding to the GLSurfaceView;

configuring a first rendering parameter for the first renderer, the first rendering parameter at least comprising an image position and an image size of a video initiator;

configuring a second rendering parameter for the second renderer, the second rendering parameter at least comprising an image position and an image size of a video receiver; and

drawing, by the first renderer and the second renderer, each frame of picture received according to the first rendering parameter and the second rendering parameter respectively when establishing a video call.

- 2. The method for drawing a video image according to claim 1, wherein the first renderer is a local renderer, and the second renderer is a remote renderer.
- 3. The method for drawing a video image according to claim 1, wherein the drawing, by the first renderer and the second renderer, each frame of picture received according to the first rendering parameter and the second rendering parameter respectively when establishing a video call specifically comprises:

drawing each frame of picture received by the second renderer according to the image position and the image size of the video receiver to obtain a second picture stream when establishing the video call;

drawing each frame of picture received by the

根据视频发起方的画面位置和画面尺寸对所 述第一渲染器接收的每一帧图片进行绘制,得到 第一图片流;

将所述第一图片流加载于所述第二图片流之 上,构成视频画面。

8、一种视频画面的绘制装置,其特征在于, 包括:

渲染器创建模块,设置为创建 GLSurfaceView 以及与所述 GLSurfaceView 相对应的第一渲染器 和第二渲染器;

第一渲染参数配置模块,设置为为所述第一 渲染器配置第一渲染参数,所述第一渲染参数至 少包括视频发起方的画面位置和画面尺寸;

第二渲染参数配置模块,设置为为所述第二 渲染器配置第二渲染参数,所述第二渲染参数至 少包括视频接收方的画面位置和画面尺寸;

绘制模块,设置为当视频通话建立时,所述 第一渲染器和所述第二渲染器分别根据所述第一 渲染参数和所述第二渲染参数,对接收的每一帧 图片进行绘制。

9、根据权利要求 8 所述的视频画面的绘制 装置, 其特征在于, 所述绘制模块具体包括:

第二图片流获取模块,设置为当视频通话建立时,根据视频接收方的画面位置和画面尺寸对 所述第二渲染器接收的每一帧图片进行绘制,得 到第二图片流; first renderer according to the image position and the image size of the video initiator to obtain a first picture stream; and

loading the first picture stream on the second picture stream to form a video image.

- 8. An apparatus for drawing a video image, comprising:
- a renderer creating module, adapted to create a GLSurfaceView and a first renderer and second renderer corresponding to the GLSurfaceView;
- a first rendering parameter configuring module, adapted to configure a first rendering parameter for the first renderer, the first rendering parameter at least comprising an image position and an image size of a video initiator;
- a second rendering parameter configuring module, adapted to configure a second rendering parameter for the second renderer, the second rendering parameter at least comprising an image position and an image size of a video receiver; and
- a drawing module, adapted to draw, by using the first renderer and the second renderer, each frame of picture received according to the first rendering parameter and the second rendering parameter respectively when establishing a video call.
- 9. The apparatus for drawing a video image according to claim 8, wherein the drawing module specifically comprises:
- a second picture stream acquiring module, adapted to draw each frame of picture received by the second renderer according to the image position and the image size of the video receiver to obtain a second picture stream when establishing the video call;
 - a first picture stream acquiring module, adapted

第一图片流获取模块,设置为根据视频发起 方的画面位置和画面尺寸对所述第一渲染器接收 的每一帧图片进行绘制,得到第一图片流;

加载模块,设置为将所述第一图片流加载于 所述第二图片流之上,构成视频画面。 to draw each frame of picture received by the first renderer according to the image position and the image size of the video initiator to obtain a first picture stream; and

a loading module, adapted to load the first picture stream on the second picture stream to form a video image.

1、一种修复出错数据的方法,其特征在于, 所述方法包括:

当读取固态硬盘包括的存储块中的数据时, 对所述存储块的某个页中的数据进行第一次错 误检查,获取所述页中出错的数据;

如果所述页中出错的数据的第一个数小于 或等于预设第一门限,则对所述页中的数据进行 错误检查和纠正 ECC 修复;

如果所述第一个数大于所述预设第一门限,则根据所述页中出错的数据的存储位置和所述存储块对应的固定表项,从备用空间中获取数据,并将所述页中出错的数据替换为获取的数据,所述固定表项包括所述备用空间中存储的各数据的存储位置。

2、如权利要求1所述的方法,其特征在于, 所述如果所述第一个数大于所述预设第一门限, 则根据所述页中出错的数据的存储位置和已存 储的固定表项,从备用空间中获取数据,并将所 述页中出错数据替换为获取的数据之后,还包 括:

对所述页中的数据进行第二次错误检查,获 取所述页中出错的数据; 1. A method for restoring error data, comprising:

when data in a storage block comprised in a solid state disk is read, performing first error checking on data in a certain page of the storage block to acquire error data in the page;

if a first number of the error data in the page is less than or equal to a preset first threshold, performing error checking and ECC correcting restoration on the data in the page; and

if the first number is greater than the preset first threshold, acquiring data from spare space according to a storage position of the error data in the page and a fixed entry corresponding to the storage block, and replacing the error data in the page with the acquired data, wherein the fixed entry comprises a storage position of each data stored in the spare space.

2. The method according to claim 1, after acquiring the data from the spare space according to the storage position of the error data in the page and the stored fixed entry corresponding to the storage block, and replacing the error data in the page with the acquired data if the first number is greater than the preset first threshold, the method further comprises:

performing second error checking on the data in the page to acquire the error data in the page; 如果所述页中出错的数据的第二个数小于 或等于所述预设第一门限,则对所述页中的数据 进行 ECC 修复;

如果所述第二个数大于所述预设第一门限,则将所述存储块标记为坏块,并根据所述页的页标识,从预设个数个存储块中获取数据;

根据获取的数据,判断是否对所述页中的数据进行独立冗余磁盘阵列 RAID 修复,如果是,则对所述页中的数据进行 RAID 修复。

8、一种修复出错数据的设备,其特征在于, 所述设备包括:

第一获取模块,用于当读取固态硬盘包括的存储块中的数据时,对所述存储块的某个页中的数据进行第一次错误检查,获取所述页中出错的数据;

第一修复模块,用于如果所述页中出错的数据的第一个数小于或等于预设第一门限,则对所述页中的数据进行错误检查和纠正 ECC 修复;

第一替换模块,用于如果所述第一个数大于 所述预设第一门限,则根据所述页中出错的数据 的存储位置和所述存储块对应的固定表项,从备 用空间中获取数据,并将所述页中出错的数据替 换为获取的数据,所述固定表项包括所述备用空 间中存储的各数据的存储位置。

9、如权利要求8所述的设备,其特征在于, 所述设备还包括: if a second number of the error data in the page is less than or equal to the preset first threshold, performing ECC correcting restoration on the data in the page;

if the second number is greater than the preset first threshold, labeling the storage block as a bad block, and acquiring data from a preset number of storage blocks according to a page identity of the page; and

determining whether to perform redundant arrays of independent disks RAID restoration on the data in the page according to the acquired data; and if RAID restoration can be performed, performing RAID restoration on the data in the page.

- 8. A device for restoring error data, comprising:
- a first acquiring module, configured to perform first error checking on data in a certain page of the storage block to acquire error data in the page, when data in a storage block comprised in a solid state disk is read:
- a first restoring module, configured to perform error checking and ECC correcting restoration on the data in the page if the first number of the error data in the page is less than or equal to a preset first threshold; and
- a first replacing module, configured to acquire data from spare space according to a storage position of the error data in the page and a fixed entry corresponding to the storage block, and replace the error data in the page with the acquired data if the first number is greater than the preset first threshold, wherein the fixed entry comprises a storage position of each data stored in the spare space.
- 9. The device according to claim 8, further comprising:

第二获取模块,用于对所述页中的数据进行 第二次错误检查,获取所述页中出错的数据;

第二修复模块,用于如果所述页中出错的数据的第二个数小于或等于所述预设第一门限,则对所述页中的数据进行 ECC 修复;

标记模块,用于如果所述第二个数大于所述 预设第一门限,则将所述存储块标记为坏块,并 根据所述页的页标识,从预设个数个存储块中获 取数据;

第三修复模块,用于根据获取的数据,判断是否对所述页中的数据进行独立冗余磁盘阵列RAID修复,如果是,则对所述页中的数据进行RAID修复。

a second acquiring module, configured to perform second error checking on the data in the page to acquire the error data in the page;

a second restoring module, configured to perform ECC correcting restoration on the data in the page if the second number of the error data in the page is less than or equal to the preset first threshold;

a labeling module, configured to label the storage block as a bad block and acquire data from a preset number of storage blocks according to a page identity of the page, if the second number is greater than the preset first threshold; and

a third restoring module, configured to determine whether to perform redundant arrays of independent disks RAID restoration on the data in the page according to the acquired data; and if RAID restoration can be performed, perform RAID restoration on the data in the page.

1、一种水工测渗用自控热源特制单模 光纤,其特征在于:从内到外依次设有单芯 光纤、内护弹性层、绝热钢环、内层填护环、 弹性硬环、防渗隔热硬套环,所述单芯光纤 分别与若干根外圆套护管连接,外圆套护管 依次穿过内护弹性层、绝热钢环、内层填护 环、弹性硬环与防渗隔热硬套环连接,外圆 套护管内装填有引流储水棉套,引流储水棉 套与第二滤网相连,第二滤网上布设有第二 滤网纱网通孔,第二滤网外与第一滤网相 连,第一滤网上布设有第一滤网纱网通孔。

1. A single-mode optical fiber having an automatic control heat source specifically produced for hydraulic seepage measurement, comprising: a single-core optical fiber, an inner protective elastic layer, a heat insulation steel ring, an inner-layer filling protection ring, an elastic hard ring, and an anti-seepage heat insulation hard sleeve ring arranged in sequence from inside to outside, wherein the single-core optical fiber is connected to a plurality of outer circular sheathing protection pipes respectively, the outer circular sheathing protection pipes sequentially pass through the inner protective elastic layer, the heat insulation steel ring, the inner-layer filling

2、根据权利要求1所述的水工测渗用自控热源特制单模光纤,其特征在于: 所述弹性硬环和防渗隔热硬套环为不规则的四边形框,四边形框的四个边向内凹陷,四边形框的四个角为圆角。 protection ring and the elastic hard ring and are connected to the anti-seepage heat insulation hard sleeve ring, each outer circular sheathing protection pipe is filled with a drainage water storage cotton sleeve, the drainage water storage cotton sleeve is connected to a second filter screen, the second filter screen is provided with a gauze through-hole of the second filter screen, the second filter screen is connected to a first filter screen externally, and the first filter screen is provided with a gauze through-hole of the first filter screen.

2. The single-mode optical fiber having an automatic control heat source specifically produced for hydraulic seepage measurement according to claim 1, wherein the elastic hard ring and the anti-seepage heat insulation hard sleeve ring are irregular quadrilateral frames, the four sides of the quadrilateral frame are depressed inwards, and the four corners of the quadrilateral frame are round corners.

- 1、一种 Decoy 核酸阳离子脂质体载体的制备方法,其特征在于,它包括如下步骤:
- (1) 将二油酰磷脂酰乙醇胺和(2,3-二油酰基-丙基)-三甲胺按质量比 4:1~1:4
- (2) 将步骤(1) 得到的混合溶液完全蒸干有机溶剂,使用 HEPES 缓冲液溶解剩余的固体部分,先水合 30~60min,再超声 30~60min;

- A preparation method of a Decoy nucleic acid cationic liposome carrier, comprising the following steps of:
- (1) mixing dioleoyl phosphoethanolamine and (2,3-dioleoyl-propyl)-trimethylamine in a mass ratio of 4:1 to 1:4, and adding an organic solvent to obtain a mixed solution through dissolution;
- (2) completely evaporating the organic solvent in the mixed solution obtained in step (1), dissolving the remaining solid fraction by using an HEPES buffer solution, firstly hydrating the solution for 30 to 60 min, and then ultrasonically processing the solution for 30 to

- (3) 将步骤(2) 处理后得到的混合体 系 先 过 $0.4 \sim 0.8 \mu m$ 的 膜 , 再 过 $0.03 \sim 0.2 \mu m$ 的膜,制备粒径小、分布均匀的空白脂质体;
- (4) 将空白脂质体与鱼精蛋白、Decoy 核酸按照质量比(50~120): (10~20): 1混合,2°C~8°C 孵育12~24小时形成完整的 Decoy 核酸阳离子脂质体载体。
- 2、根据权利要求 1 所述的 Decoy 核酸阳离子脂质体载体的制备方法,其特征在于,步骤(1)中,所述的有机溶剂为三氯甲烷。
- 3、根据权利要求 1 或 2 所述的 Decoy 核酸阳离子脂质体载体的制备方法,其特征在于,步骤(1)中,每毫克二油酰磷脂酰乙醇胺和(2,3-二油酰基-丙基)-三甲胺的混合物中加入 10ml 有机溶剂。

60 min.

- (3) filtering the mixed system obtained after processing in step (2) by a membrane of 0.4 to 0.8 μ m, and then filtering the mixed system by a membrane of 0.03 to 0.2 μ m, to prepare a uniformly distributed blank liposome with a small grain size;
- (4) mixing the blank liposome with protamine and Decoy nucleic acid according to a mass ratio of (50 to 120):(10 to 20):1, and incubating for 12 to 24 h at the temperature of 2°C to 8°C to form the complete Decoy nucleic acid cationic liposome carrier.
- 2. The preparation method of a Decoy nucleic acid cationic liposome carrier according to claim 1, wherein in step (1), the organic solvent is trichloromethane.
- 3. The preparation method of a Decoy nucleic acid cationic liposome carrier according to claim 1, wherein in step (1), 10 ml organic solvent is added into per 1 mg mixture of dioleoyl phosphoethanolamine and (2,3-dioleoyl-propyl)-trimethylamine.
- 1、一种大数据计算的方法,包括: 获取对大数据进行计算的指示信息;

根据所述指示信息对所述大数据中的部分数据进行计算,输出计算结果。

- 2、根据权利要求1所述的方法,其中,所述指示信息包括以下至少之一的信息:所述计算结果为指定类型、在预定时间段内对所述数据进行计算的信息、对所述大数据中的指定数据进行计算的信息、预先设置的数据筛选条件。
- 1. A big data calculation method, comprising:
 acquiring indication information for calculating

calculating, according to the indication information, part of the big data, and outputting a calculation result.

big data; and

2. The method according to claim 1, wherein the indication information comprises at least one of the following information: the calculation result being a specified type, information of calculating the data in a predetermined time period, information of calculating specified data in the big data, and a preset data screening condition.

3、根据权利要求 2 所述的方法,其中,根据所述指示信息对所述大数据中的部分数据进行计算,输出计算结果包括:

在所述计算结果为指定类型的情况 下,终止对所述大数据进行计算;和/或,

在当前时间为超出所述预定时间段 之后的时间时,终止对所述大数据进行计 算:和/或,

对所述指定数据计算完成之后,终止 对所述大数据进行计算。

9、一种大数据计算的系统,所述系统包括:

交互组件,设置为接收对大数据进行 计算的指示信息;

核心控制组件,安装于分布式节点,与所述交互组件连接,设置为接收所述指示信息,并根据所述指示信息对所述大数据中的部分数据进行计算,输出计算结

10、根据权利要求9所述的系统,其中,所述指示信息包括以下至少之一的信息:所述计算结果为指定类型、在预定时间段内对所述数据进行计算的信息、对所述大数据中的指定数据进行计算的信息、预先设置的数据筛选条件。

11、根据权利要求 10 所述的系统, 其中,所述核心控制组件还设置为:在所述计算结果为指定类型的情况下,终止对 所述大数据进行计算;和/或,在当前时 间为超出所述预定时间段之后的时间时, 终止对所述大数据进行计算;和/或,对 所述指定数据计算完成之后,终止对所述 大数据进行计算。 3. The method according to claim 2, wherein the calculating, according to the indication information, part of the big data, and outputting the calculation result comprises:

stopping calculating the big data when the calculation result is of the specified type; and/or,

stopping calculating the big data when current time exceeds the predetermined time period; and/or

stopping calculating the big data after the specified data is completely calculated.

9. A big data calculation system, comprising:

an interacting component configured to receive indication information for calculating big data; and

a core control component installed at a distributed node and connected to the interacting component, and configured to receive the indication information, calculate part of data in the big data according to the indication information, and output a calculation result.

10. The system according to claim 9, wherein the indication information comprises at least one of the following information: the calculation result being a specified type, information of calculating the data in a predetermined time period, information of calculating specified data in the big data, and a preset data screening condition.

11. The system according to claim 10, wherein the core control component is further configured to: stop calculating the big data when the calculation result is of the specified type; and/or, stop calculating the big data when current time exceeds the predetermined time period; and/or, stop calculating the big data after the specified data is completely calculated.



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多杀菌素异源表达菌株及其	
多示图系开源农区图怀及共 构建方法和应用	SPINOSAD HETEROLOGOUS EXPRESSION STRAIN AN CONSTRUCTION METHOD THEREOF AND USE
PCT/CN2015/085701	US20190007049
自适应芯片和配置方法	SELF-ADAPTIVE CHIP AND CONFIGURATION METHOD
日 坦	EP3306893
一种实现应用控制的方法及	
系统 网络西拉阿的万仏及	AFFEICATION CONTROL METHOD AND STSTEM
PCT/CN2015/093368	US20180180510
一种水工建筑物渗流性态分	
布式光纤感知集成系统	OPTICAL FIBER SENSING INTEGRATED SYSTEM AND METHOD
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一种 Decoy核酸阳离子脂质体	
或体及其制备方法	PREPARATION METHOD THEREOF
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一种切换摄像头的方法和装	
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肖息传输方法及装置、电子设	
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一种用于制备抑制肿瘤生长	
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一种耐电弧烧蚀的钨合金开	ARC ABLATION-RESISTANT TUNGSTEN ALLOY SWITCH CONTAC
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PCT/CN2015/086130	US20170212894
交通数据流的聚集查询方法	TRAFFIC DATA STREAM AGGREGATE QUERY METHOD AN
及系统	SYSTEM
PCT/CN2015/082892	US20170217840
一种在氧化物陶瓷粉体表面	METHOD FOR COATING METAL NANOPARTICLES ON OXID
包覆金属纳 <mark>米</mark> 粒子的方法	CERAMIC POWDER SURFACE
PCT/CN201 <mark>6/</mark> 070722	US20170151942
一种汽车转 <mark>弯防侧翻方法及</mark>	AUTOMOBILE CORNERING ROLLOVER PREVENTION METHO
系统 Land Land	AND SYSTEM
PCT/CN2016/070719	US20170120927
气车车速测控方法及系统	AUTOMOBILE SPEED MEASUREMENT AND CONTROL METHO
	AND SYSTEM
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远程自定义频道的控制方法、	REMOTE CUSTOMIZED-CHANNEL CONTROL METHOD, SERVE
服务器、客户端及控制系统	CLIENT AND CONTROL SYSTEM
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一种氧化铝-碳纳米管复合粉	PREPARATION METHOD OF ALUMINA-CARBON NANO TUBE	
体材料的制备方法	COMPOSITE POWDER MATERIAL	
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一种水工测渗用自控热源特	SINGLE-MODE OPTICAL FIBER HAVING AUTOMATIC CONTROL	
制单模光纤	HEAT SOURCE SPECIFICALLY PRODUCED FOR HYDRAULIC	
	SEEPAGE MEASUREMENT	
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送、接收终端和通信系统	METHOD AND SYSTEM, RECEIVING TERMINAL AND	
	COMMUNICATION SYSTEM	
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事件中动作的处理方法及装	PROCESSING METHOD AND DEVICE FOR ACTION IN EVENT	
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的滤芯管控方法		
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一种多用户传输网络分配矢	METHOD AND APPARATUS FOR SETTING NETWORK ALLOCATION	
量设置方法和装置	VECTOR OF MULTI-USER TRANSMISSION	
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信道状态信息报告类型获取	METHOD, APPARATUS AND SYSTEM FOR ACQUIRING CODEBOOK	
码本的方法、装置及系统	BY CHANNEL STATE INFORMATION REPORT TYPE	
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寻呼处理方法及装置	PAGING PROCESSING METHOD AND DEVICE	

翔				
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Some translations: English to Simplified Chinese h (25 patents for reference only)				
US20150151600	CN104669975			
Vehicle height adjustment apparatus	车辆高度调整装置			
US20170216264	CN107207528			
Substituted macrocycles useful as kinases inhibitors and	可用作激酶抑制剂的经取代大环及其使用方法			
methods of use thereof				
US20170110991	CN106941333			
HYBRID DEVICE WITH Segmented waveform converter	具有分段波形转换器的混合型装置			
US20170346909	CN107451049			
CLIENT-SIDE BOTTLENECK ANALYSIS USING REAL	使用真实用户监测数据进行客户端瓶颈分析			
USER MONITORING DATA				
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Leveraging Usage Data Of An Online Resource When				
Estimating Future User Interaction With the Online Resource	线资源的使用数据			
US20180179 <mark>5</mark> 19	CN107849 7 37			
PEPTIDE LIBRARY CONSTRUCTING METHOD AND	肽文库构建方法及相关载体			
RELATED VECTORS				
US20190043 <mark>0</mark> 79	CN109391672			
LEVERAGING PERFORMANCE DATA TO	利用性能数据自动选择内容项目			
AUTOMATICALLY SELECT CONTENT ITEMs				
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SEAMLESS VEHICLE ACCESS SYSTEM	无缝车辆访问系统			
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A SURFACE COATING	表面涂层			
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PERSONALISED FOOTWEAR AND THE MANUFACTURE	个性化鞋子及其制造			
THEREOF				
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SYSTEM AND METHOD FOR VEHICLE PATH PREDICTION	日刊676067766 用于车辆路径预测的系统及方法			
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REACTIVE AND PRE-EMPTIVE SECURITY SYSTEM FOR	CN109314098 保护计算机网络与系统的抢占式响应安全系统			
THE PROTECTION OF COMPUTER NETWORKS &				
SYSTEMS				
	CN1100214627			
WO2017145021	CN109314637			

Method and system for efficient transfer of cryptocurrency	区块链上高效转移与工资关联的加密货币的方
associated with a payroll on a blockchain that leads to An	法和系统
Automated payroll method and system based on smart contracts	
WO2017145007	CN109155036
SYSTEM AND METHOD FOR CONTROLLING	用于经由区块链控制资产有关的动作的系统及
ASSET-RELATED ACTIONS VIA A BLOCKCHAIN	方法
WO2017145008	CN108885741
TOKENISATION METHOD AND SYSTEM FOR	一种实现区块链上交换的通证化方法及系统
IMPLEMENTING EXCHANGES ON A BLOCKCHAIN	
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A METHOD AND SYSTEM FOR SECURING COMPUTER	使用分布式散列表和区块链保护计算机软件的
SOFTWARE USING A DISTRIBUTED HASH TABLE AND A	方法及系统
BLOCKCHAIN	
WO2017145006	CN109074563
AGENT-BASED TURING COMPLETE TRANSACTIONS	区块链系统内的基于代理的图灵完备交易集成
INTEGRATING FEEDBACK WITHIN A BLOCKCHAIN	反馈
SYSTEM	
WO2017075386	
CONTENT SHARING SYSTEM AND METHOD	CN108431753 内容共享系统及方法
Woodstage	(1)110000077(1)
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A METHOD FOR SECURE PEER-TO-PEER	用于区块链上的安全点对点通信的方法
COMMUNICATION ON A BLOCKCHAIN	

