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(54) **MOUNTING SEAT AND DRYING APPARATUS**

(57) The present disclosure discloses mounting seat and drying apparatus, the drying apparatus having an airflow channel and one or more one or more radiation sources. mounting seat comprises a mounting portion and a hollow portion, the mounting portion being avail-

able for mounting of the one or more radiation sources; and in any of the perpendiculars of the mounting seat to the first axis (m) in section, the hollow portion extends from a first edge of the mounting seat to a second edge.

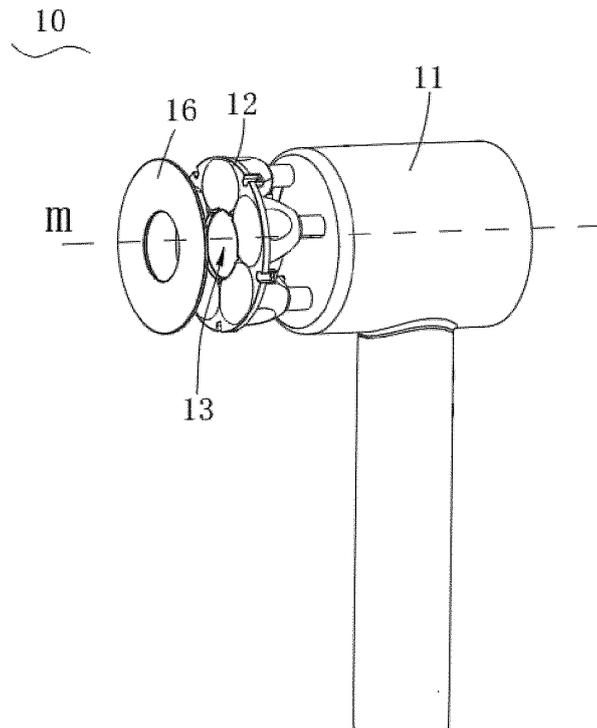


FIG. 1a

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Description**FIELD OF THE INVENTION**

[0001] The present disclosure relates to the field of drying apparatus and in particular to a mounting seat and a drying apparatus.

BACKGROUND OF THE INVENTION

[0002] A new generation of hair dryers has one or more radiation sources that can emit infrared radiation, which can avoid excessive drying of hair during operation and play a role in hair care. However, if the hair dryer falls, bumps, or shakes violently during use, the impact will be transmitted to the one or more radiation sources through the housing of the hair dryer, which may lead to changes of the optical path or even damages to the one or more radiation sources.

SUMMARY OF THE INVENTION

[0003] The present disclosure provides a mounting seat and a drying apparatus designed to solve the problem that the one or more radiation sources of a hair dryer in the prior art may be damaged during use.

[0004] The present disclosure provides a mounting seat, coupled to a drying apparatus, the drying apparatus having an airflow channel and one or more radiation sources, wherein the mounting seat comprises a mounting portion and a hollow portion, the mounting portion is configured for the mounting of the one or more radiation sources; in any cross-section of the mounting seat perpendicular to a first axis, the hollow portion extends from a first edge of the mounting seat to a second edge of the mounting seat.

[0005] The present disclosure also provides a drying apparatus comprising a housing and the afore mounting seat, the housing being configured with an airflow channel and one or more radiation sources.

[0006] When the drying apparatus of the present disclosure falls or collides during use, the impact force is transmitted from the housing to the mounting seat. The mounting seat is configured with a hollow portion to reduce the overall rigidity, so that it can be elastically deformed to absorb part of the impact force, reducing the impact force on the one or more radiation source, and providing buffering and protection for the one or more radiation source.

[0007] Additional aspects and advantages of embodiments of the present disclosure will be partly given in the following description, part of which will become apparent from the following description or learned through the implementation of the present disclosure.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The above and/or additional aspects and ad-

vantages of the present disclosure will become apparent and easy to understand from the description of the embodiments in conjunction with the accompanying drawings, wherein:

FIGS. 1a and 1b are schematic showing an overall structure of a drying apparatus in certain embodiments of the present disclosure;

FIGS. 2a, 2b, and 2c are schematic showing an airflow channel of a drying apparatus in certain embodiments of the present disclosure;

FIGS. 3a, 3b, 3c, and 4 are schematic showing a hollow portion in certain embodiments of the present disclosure;

FIGS. 5 and 6 show schematic showing mounting seat structures with light cup in certain embodiments of the present disclosure;

FIGS. 7 to 19 are schematic showing a mounting seat structure with multiple light cups in certain embodiments of the present disclosure.

FIGS. 20 to 21 are schematic showing induced eddy currents in certain embodiments of the present disclosure.

FIGS. 22 to 23 are schematic showing antennas in certain embodiments of the present disclosure.

DETAILED DESCRIPTION OF THE INVENTION

[0009] Embodiments of the present disclosure are described in detail below, and examples of the embodiments are shown in the accompanying drawings, in which the same or similar reference numerals refer to the same or similar components or components having the same or similar functions throughout. The embodiments described below with reference to the accompanying drawings are exemplary, and are used only to explain the embodiments of the present disclosure, and are not to be construed as limiting the embodiments of the present disclosure.

[0010] In the description of this disclosure, it is to be understood that the terms "center", "longitudinal", "transverse", "length", "width", "thickness", "top", "bottom", "front", "rear", "left", "right", "vertical", "horizontal", "top", "bottom", "inner", "outer", "clockwise" and "counterclockwise" and the like indicate the directions or positional relationships based on the directions or positional relationships shown in the accompanying drawings, and are only for the purpose of facilitating the description of this disclosure and simplifying the description, and do not indicate or imply that the apparatus or components referred to must have a specific orientation, be constructed and operated in a specific orientation, and therefore cannot be construed as limiting this disclosure. In the description of this disclosure, the term "plural" means two or more, unless otherwise specifically limited.

[0011] In the description of this disclosure, it is to be noted that unless otherwise specifically provided and limited, the terms "mount", "connect" and "couple" shall

be construed broadly, for example, they may be fixed connections, detachable connections, or integral connections. They may be mechanical connections or electrical connections. They may be directly connected or indirectly connected through an intermediate medium, and may be internal connections between two components or interactive relationships between two components. For a person skilled in the art, the specific meaning of the above terms in the present disclosure can be understood according to the specific circumstances.

[0012] In this disclosure, unless otherwise specifically provided and limited, the first feature being "above" or "below" the second feature may include the first and second features being in direct contact, or the first and second features not being in direct contact but in contact through another feature therebetween. Moreover, the first feature being "above", "above" and "above" the second feature includes the first feature being directly above and diagonally above the second feature, or simply means that the first feature is higher in horizontal height than the second feature. The first feature being "below", "below" and "below" the second feature includes the first feature being directly below and diagonally below the second feature, or simply means that the first feature is lower in horizontal height than the second feature. The disclosure herein provides many different embodiments or examples used to realize the different structures of the present disclosure. In order to simplify the disclosure of the present disclosure, portions and settings of particular examples are described herein. They are, of course, examples only and are not intended to limit the present disclosure. In addition, the present disclosure may repeat reference numerals and/or reference letters in different examples, and such repetition is for purposes of simplification and clarity, and is not in itself indicative of a relationship between the various embodiments and/or settings discussed. In addition, various specific examples of processes and materials are provided in this disclosure, but one of ordinary skill in the art may realize the application of other processes and/or the use of other materials.

[0013] As shown in FIGS. 1a, 1b, and 3a, in some embodiments of the present disclosure, a drying apparatus 10 is configured with a housing 11 and a mounting seat 12. An airflow channel 13 and one or more radiation sources 15 are configured in the housing 11. Each radiation source 15 is coupled to a mounting portion 121 of the mounting seat 12, and the mounting seat 12 is coupled to the housing 11, so as to fix the radiation source 15 to the housing 11. In some other embodiments, the one or more radiation sources 15 is not directly coupled to the mounting seat 12, but is indirectly coupled to the mounting seat 12 by means of a structure such as assemblies, connectors, decorative parts, cover, or the like.

[0014] The radiation source 15 generates infrared radiation (IR) with a predetermined wavelength range and power density during operation, which is emitted to the target (e.g., hair, fabric) and then directly heats moisture

of the target. Almost no heat is absorbed by the surrounding air in the form of radiation heat transfer, which greatly improves the energy utilization rate compared with the traditional heat conduction method. In some embodiments, the mounting seat 12 only fix the one or more radiation sources 15. In some embodiments, the mounting seat 12 may further provide power supply, light convergence, heat dissipation or airflow resistance reduction function to the one or more radiation sources 15.

[0015] When the drying apparatus 10 is in operation, an airflow is generated within the housing 11, part of which the airflow passes through is defined as an airflow channel 13 of the drying apparatus 10. The airflow passes through the airflow channel 13, exiting the housing 11 and emitting toward the target to facilitate moisture evaporation. Moreover, the airflow can work with infrared radiation to expedite the moisture evaporation from the target.

[0016] In some embodiments, as shown in FIG. 2a, the airflow channel 13 is a complete and separate structure that is installed within the housing 11 of the drying apparatus 10 and/or coupled to other related structures within the housing 11. The airflow passes along the wall of the airflow channel 13 to the outside of the housing 11 without passing through other unrelated structures. For example, when a high-temperature hot airflow is generated within the drying apparatus 10, the airflow channel 13 with a certain wall thickness may be made of a material with poor thermal conductivity, and the hot airflow within the airflow channel 13 does not heat the other unrelated structures during flowing.

[0017] In some embodiments, as shown in FIG. 2b, the airflow channel 13 is formed by any combination of multiple portions of the drying apparatus 10, rather than a complete and separate structure. For example, part of the housing 11, part of the one or more radiation sources 15, part of an airflow guiding structure (not shown), etc., are combined to form the airflow channel 13. The airflow generated within the drying apparatus 10 passes through the multiple portions combined to the outside of the housing 11. It may also be understood that within the housing 11, all of the portions through which the airflow passes through combine to form the airflow channel 13. For example, if there is a structure within the drying apparatus 10 that generates a large amount of heat during operation, part of this structure can be designed as part of the airflow channel 13 so that the airflow passes through its surface to dissipate the heat.

[0018] In some embodiments, the drying apparatus 10 dries a target by airflow only without comprising the radiation sources 15. Accordingly, there is no coupling relationship between the mounting seat 12 and the radiation sources 15. The mounting seat 12 can form a structure such as an assembly, a connector, a decorative part, a cover, etc.

[0019] In some embodiments, the drying apparatus 10 further comprises an airflow generating element, a heating assembly, a sensor and a circuit. The mounting seat

12 is coupled to at least one of the airflow generating element, the heating assembly, the sensor, the circuit, and the housing 11.

[0020] In some embodiments, the drying apparatus 10 further comprises one or more accessories 17. Each of the accessory 17 is configured to be removably attached to the housing 11. The drying apparatus 10, therefore, has at least two states:

Removal State: the accessory 17 and the housing 11 are separate from each other. The drying apparatus 10 in the removal state is configured to be used normally. In some of the foregoing and following embodiments, if there is no mention of whether the removable accessories 17 can be attached to the drying apparatus 10, it shall be understood that the drying apparatus 10 is in the removal state.

[0021] Attaching State: the accessory 17 is attached to the housing 11 in a predetermined manner. In some specific embodiments, when a user uses the drying apparatus 10 in this state, the accessory 17 is configured to change the original function of the drying apparatus 10. For example, the drying apparatus 10 may be configured to adapt to one or more accessories 17, which have different types of air nozzles. These air nozzles may change the airflow speed, airflow direction, and air outlet shape of the output airflow. In some specific embodiments, the accessory 17 enables the drying apparatus 10 to provide new functions. For example, the accessory 17 is designed to accommodate one or more essential oils, conditioners, perfumes, or the like. When the user is drying the hair with the drying apparatus 10, such ingredients will be emitted to achieve one or more functions such as hair caring, conditioning or perfuming.

[0022] In other embodiments, the accessory 17 may be a holder, which itself is configured to be coupled to a wall, a desktop, a mirror cabinet, etc. In the attaching state, the housing 11 of the drying apparatus 10 and the holder are coupled to each other so that the drying apparatus 10 is configured in a preset position; in the removal state, the housing 11 is separated from the holder, and the user can use the drying apparatus 10 normally.

[0023] In different embodiments, the attaching method between the accessory 17 and the housing 11 can be any of the following:

(1) The mounting seat 12 is coupled to the housing 11 and the accessory 17 is configured to be removably attached to the mounting seat 12. In the removal state, the housing 11 and the mounting seat 12 remain coupled to each other, while the accessory 17 is separated from them.

(2) The mounting seat 12 is coupled to the accessory 17, and the mounting seat 12 is configured to be removably attached to the housing 11. In the removal state, the accessory 17 and the mounting seat 12 remain coupled to each other, while the housing 11 is separated from them.

(3) The mounting seat 12 is configured to be being removably coupled to the accessory 17 and the

housing 11 respectively. In the removal state, the mounting seat 12, the accessory 17, and the housing 11 are separated from each other.

(4) The accessory 17 is configured to be removably attached to the housing 11 directly. In other words, the attaching and removal of the accessory 17 with regard to the housing 11 has nothing to do with the mounting seat 12. In the removal state, the mounting seat 12 remains coupled to either the accessory 17 or the housing 11.

(5) There are at least two mounting seats 12, one of which is attached to the accessory 17 and another one is coupled to the housing 11. These at least two mounting seats 12 are coupled to each other when the accessory 17 is attached to the housing 11, realizing the attaching between the accessory 17 and the housing 11.

[0024] In some embodiments, the mounting seat 12 is substantially annular and configured to be detachably coupled to the housing 11 or the one or more accessories 17 by magnetic connection.

[0025] For clear description, the magnet in the following description refers to a structure that can form a magnetic field by itself, which can be a permanent magnet, an electromagnet, etc. Magnetic material refers to a material that may not form a magnetic field by itself but can be moved by a magnetic field. The magnetic material may be iron, cobalt, nickel, their alloys, and so on. The magnetic connection between the mounting seat 12 and the housing 11/accessory 17 comprise the following multiple embodiments:

(1) The mounting seat 12 comprises a magnetic material.

[0026] In some specific embodiments, the mounting seat 12 is fixedly coupled on the housing 11, and one or more magnets are configured on the accessory 17. When attaching the accessory 17, the mounting seat 12 is magnetically connected to the one or more magnets on the accessory 17, and the attaching process between the housing 11 and the accessory 17 is completed.

[0027] In some other specific embodiments, the mounting seat 12 is fixedly coupled on the accessory 17, and one or more magnets are configured on the housing 11. When attaching the accessory 17, the mounting seat 12 is magnetically connected to the one or more magnets on the housing 11, and the attaching process between the housing 11 and the accessory 17 is completed.

[0028] (2) The mounting seat 12 comprises a magnet.

[0029] In some specific embodiments, the mounting seat 12 is fixedly coupled on the housing 11, and the accessory 17 comprises one or more magnetic structures consisting of at least one magnetic material. When attaching the accessory 17, the mounting seat 12 is magnetically connected to the one or more magnetic

structures on the accessory 17, and the attaching process between the housing 11 and the accessory 17 is completed.

[0030] In some other specific embodiments, the mounting seat 12 is fixedly coupled on the accessory 17, and the housing 11 comprises one or more magnetic structures consisting of at least one magnetic material. When attaching the accessory 17, the mounting seat 12 is magnetically connected to the one or more magnetic structures on the housing 11, and the attaching process between the housing 11 and the accessory 17 is completed.

[0031] In the above two embodiments, the magnetic structure may also be a magnet with its magnetic pole opposite to that of the mounting seat 12, which may complete the above attaching process as well.

[0032] (3) There may be a plurality of mounting seat 12, which may at least comprise a first mounting seat and a second mounting seat. The first mounting seat may consist of a magnet. The second mounting seat may consist of at least one magnetic material, or may also be a magnet which magnetic pole is opposite to that of the first mounting seat. The first mounting seat and the second mounting seat are respectively fixedly coupled on the accessory 17 and the housing 11. When attaching the accessory 17, the first mounting seat is magnetically connected to the second mounting seat, and the attaching process between the housing 11 and the accessory 17 is completed.

[0033] In the above embodiments, at least one of the accessories 17 and the housing 11 has a generally annular mounting seat 12. In the attaching state, the accessory 17 can rotate relative to the housing 11 by any angle along the axis of the mounting seat 12, and keeps the attaching to the housing 11 by magnetic connection. In this way, the angle of the accessory 17 may be freely adjusted during operation.

[0034] In various embodiments of the present disclosure, the mounting seat 12 may consist of at least one metallic material. Magnets and magnetic materials can be metallic or non-metallic materials. For example, the mounting seat 12 may consist of iron, which is both a metallic material and a magnetic material. Therefore, the description that the mounting seat 12 consists of a metallic material in various embodiments does not include the limitation on whether the mounting seat 12 comprise a magnet or at least one magnetic material.

[0035] It is easy to understand that the mounting seat 12 itself can also be a magnetic structure. In this case, the housing 11/the accessory 17 can be configured with either a magnetic structure with opposite pole to the magnetic structure of the mounting seat 12, or a metallic structure subject to magnetic force of the mounting seat 12.

[0036] In other embodiments, the accessory 17 may also be attached to the housing 11 by means of snapping, threading, plugging, etc. The mounting seat 12 may be correspondingly configured with structures such as

snaps, threads, plugs/slots, etc., which play a role of providing fastening force when the accessory 17 is attached to the housing 11.

[0037] The technical features described above will not be repeated in the following. For repeated technical features, please refer to the above description.

[0038] Some embodiments of the present disclosure provide the mounting seat 12 as previously described, and hereinafter, unless otherwise noted, the mounting seat 12 is in a state of coupling to the drying apparatus 10. As shown in FIGS. 3a and 3b, there is at least one hollow portion 122 in any cross-section perpendicular to the first axis m of the mounting seat 12. The hollow portion 122 extends from a first edge 123 of the mounting seat 12 to a second edge 124. It may also be expressed as: in each cross section perpendicular to the first axis m, the hollow portion 122 extends from the first edge 123 of the mounting seat 12 to the second edge 124. In the corresponding drawings of the present application, FIG. 4, FIGS. 11 to 16, FIG. 18 and FIG. 19 are cross-sectional views of the mounting seat 12 perpendicular to the first axis m; FIGS. 2A to 2C are cross-sectional views of the drying apparatus 10 parallel to the first axis m

[0039] In all cross sections of the mounting seat 12 perpendicular to the first axis m, the shape formed by the hollow portion 122 may be the same or different, but all extend from the first edge 123 to the second edge 124, and the cross sections of the hollow portion 122 along the first axis m are continuous, so that the entire mounting seat 12 is penetrated. In other words, the hollow portion 122 penetrates the entire mounting seat 12 in the direction parallel to the first axis m; in the direction perpendicular to the first axis m, it penetrates from the first edge 123 of the mounting seat 12 to the second edge 124.

[0040] The first edge 123 and the second edge 124 refer to two different positions on the edge of the mounting seat 12. For example, in some embodiment, as shown in FIG. 3a, the mounting seat 12 is generally part of a ring, the first edge 123 is a part of the outer edge of the ring, and the second edge 124 is a part of the inner edge of the ring. They belong to different edges of the mounting seat 12. In some embodiment, as shown in FIG. 3B, the first edge 123 and the second edge 124 are different parts of the outer edge of the mounting seat 12. The naming of the first edge 123 and the second edge 124 is only to distinguish themselves, and there is no essential difference between them. The "ring shape" described in this disclosure is not limited to a ring shape with a circular outer edge and a circular inner edge, but includes any shape formed by a relatively positioned outer edge and inner edge, and the inner edge and outer edge are not limited to circular. The mounting seat 12 shown in FIG. 3B is generally ring-shaped, and the mounting seat 12 shown in FIG. 4 is generally rectangular, but still encloses an inner edge, and a part of its inner edge constitutes the second edge 124, therefore, it also belongs to the ring shape described in this disclosure.

[0041] The first axis m is a reference axis for designing

the mounting seat 12. In some embodiments, at least part of the airflow in the airflow channel 13 of the drying apparatus 10 passes along the first axis m. It is also understood that the airflow direction in the drying apparatus 10 is used as the reference axis for designing the mounting seat 12. In some embodiments, the light emitting direction of the one or more radiation sources 15 is parallel or coincident with the first axis m. In some embodiments, the axis of the housing 11 is parallel or coincident with the first axis m. In some embodiments, the mounting seat 12 is a rotationally symmetric structure with its axis of symmetry coinciding with or parallel to the first axis m, i.e., the shapes formed by the mounting seat 12 in each cross-section are perpendicular to the first axis m.

[0042] In some embodiments, as shown in FIGS. 3a and 3b, the hollow portion 122 extends along the first axis m to form a structure parallel to the first axis m. In this way, in any cross-section perpendicular to the first axis m, the position, shape, and size of the shape formed by the hollow portion 122 are the same. In some embodiment, as shown in FIG. 3b, the hollow portion 122 is a rectangular groove configured on the mounting seat 12. The rectangular groove extends from the first edge 123 of the mounting seat 12 to the second edge 124 of the mounting seat 12 in the length direction, and extends through the mounting seat 12 along the first axis m in the depth direction. In any cross-section perpendicular to the first axis m, the shaped formed by the rectangular groove is a rectangle, and the same position, shape, and size are the same.

[0043] In some embodiments, as shown in FIG. 7, the hollow portion 122 comprises a structure that is inclined relative to the first axis m. In this way, in any cross-section perpendicular to the first axis m, the shape and size of the hollow portion 122 are the same, but the position of the shape is different.

[0044] In some embodiments, as shown in FIG. 9, the hollow portion 122 is irregularly structured and extends in an irregular direction. In this way, in any cross-section perpendicular to the first axis m, the position, shape and size of the shape formed by the hollow portion 122 are all different, but the hollow portion 122 is continuous in the direction of the first axis m.

[0045] In other embodiments not shown, the hollow portion 122 may also be a structure that gradually expands or shrinks along the first axis m. In this way, in any cross-section perpendicular to the first axis m, the shapes formed by the hollow portion 122 are similar, but the sizes are different.

[0046] In multiple embodiments described above, as the hollow portion 122 extends through part of the mounting seat 12 along the first axis m, it cuts off the transmission path of the internal force within the mounting seat 12, reduces the overall rigidity of the mounting seat 12, and enables the whole mounting seat 12 to elastically deform when subjected to external impact. During the process, the space of the hollow portion 122 in various cross-

sections increases or decreases, thereby absorbing part of the external impact.

[0047] When a user uses the drying apparatus 10 and it falls or collides, the external impact is transmitted from the housing 11 to the mounting seat 12. Since the mounting seat 12 can absorb part of the impact by elastic deformation, it reduces the impact on the one or more radiation source 15, thus providing buffering and protection for the one or more radiation source 15.

[0048] In addition, when assembling the mounting seat 12 to the housing 11 of the drying apparatus 10, a force may also be applied to the mounting seat 12 to deform it, i.e., the space of the hollow portion 122 decreases in certain cross-sections and is released after the mounting seat 12 is coupled to the predetermined position of the housing 11. During the release process of the mounting seat 12, the reduced space on the hollow portion 122 will recover and increase to the original space. At this time, an elastic coupling is configured between the mounting seat 12 and the housing 11 to increase the coupling strength. Therefore, the mounting seat 12 in the embodiment of the present disclosure also has the characteristics of simple assembly and high coupling strength.

[0049] In some embodiments, the mounting seat 12 is a one-piece molded metallic portion. The mounting seat 12 may be configured by cutting and removing part of the material from a predetermined area of the mounting seat 12 to form the hollow portion 122, or the mounting seat 12 may be formed directly by casting, stamping, 3D printing, etc. The metallic mounting seat 12 has both good structural strength and elasticity, and can provide both firm coupling and absorb impact force. In addition, since metal generally has good heat resistance and thermal conductivity, the metallic mounting seat 12 may absorb the heat of the one or more radiation sources 15 and emit it outwardly, thus forming a heat dissipation structure for the one or more radiation sources 15 as a whole, effectively preventing overheating of the one or more radiation sources 15.

[0050] In some embodiments, the mounting seat 12 comprises a metallic portion and a non-metallic portion, with at least part of the hollow portion 122 being configured in the metallic portion. The non-metallic portion of the mounting seat 12 may made of rubber, plastic, silicone, ceramic, polymer material, and the like. In some embodiments, the non-metallic portion may be coupled to the hollow portion 122. In some embodiments, the non-metallic portion is designed to be the part where the mounting seat 12 is installed, connected, and coupled to the related electrical structure within the drying apparatus 10, such as the power supply circuit of the radiation sources 15, in order to avoid the mounting seat 12 from forming a short circuit or leakage risk.

[0051] As shown in FIG.1a and 20b, in some embodiments, the drying apparatus 10 further comprises a first antenna 141 within the housing 11. The drying apparatus 10 is configured to generate wireless signals for wireless communication and data transmission through the first

antenna 141. In some specific embodiments, the drying apparatus 10 may communicate wirelessly with a smart terminal. The user may control the drying apparatus 10 or reads the operation data of the drying apparatus 10 on the smart terminal. In some specific embodiments, the drying apparatus 10 comprises a plurality of air nozzles. In the attaching state, the first antenna 141 is used to establish wireless communication with the air nozzles to identify the type of air nozzles and obtain working modes. In some specific embodiments, the drying apparatus 10 can also establish wireless communication with other drying apparatuses 10. For example, after a drying apparatus 10 is updated with new firmware, it can transmit the new firmware to other drying apparatuses 10 with which it has established communication, ensuring that all drying apparatuses 10 have synchronized data and are updated.

[0052] In some specific embodiments, the first antenna 141 at least partially surrounds the first axis m . In other embodiments, the first antenna 141 comprises an annular portion, which is an annulus or a part of an annulus, and an axis of the annular portion is parallel to or coincident with the first axis m .

[0053] As shown in the Fig. 22, when the drying apparatus 10 is wireless communication through the first antenna 141, a changing magnetic field (hereinafter referred to as the communication magnetic field) is generated around the first antenna 141. In conjunction with some of the foregoing embodiments, when the mounting seat 12a (in the relevant drawings and descriptions of the present disclosure, in order to distinguish between the two types of mounting seats 12 and 12a, the mounting seat 12a does not have a hollow portion 122, while the mounting seat 12 does have a hollow portion 122) is a metallic structure and satisfies a certain distance and position relationship with the first antenna 141, the mounting seat 12a is at least partially within a magnetic field of the first antenna 141 and comprises a conductor placed in a changing magnetic field. According to the Faraday's law of electromagnetic induction, the interior of the mounting seat 12a will be induced by the communication magnetic field to generate an induced eddy current i . The induced eddy current i itself will also generate a changing magnetic field (hereinafter referred to as the induced magnetic field). The direction of the induced magnetic field is opposite to that of the communication magnetic field. The antagonism between the two will attenuate the signal strength of the first antenna 141, thereby interfering with the wireless communication of the drying apparatus 10. Moreover, the closer the location where the mounting seat 12a forms the induced eddy current i is to the first antenna 141, and the closer the size of the annular loop of the induced eddy current i is to the size of the first antenna 141, the greater the signal strength attenuation caused by the induced eddy current i on the first antenna 141.

[0054] In particular, when using high-frequency radio signals (such as RFID, Wi-Fi, Bluetooth, etc.) for com-

munication, the high-frequency alternating current flowing in the first antenna 141 will cause the skin effect. That is, the current will tend to be concentrated on the surface of the first antenna 141. Consequently, the mounting seat 12a will be affected by the skin effect, causing formation of a larger induced eddy current i in the area closer to the antenna 14, which will further aggravate the signal strength attenuation of the first antenna 141, resulting in a decrease in signal strength and communication stability. In other words, during high-frequency signal communication, greater signal strength attenuation experienced by the mounting seat 12a may result in lower communication stability of the drying apparatus 10.

[0055] It should be noted that in some embodiments of the present disclosure, the mounting seat 12a is not limited to having certain specific shapes, structures, positions or providing certain functions. When any metallic portion is configured in the drying apparatus 10, as long as it meets the conditions of forming an induced eddy current i and the signal strength attenuation on the first antenna 141 exceeds a predetermined threshold, the metallic portion can be regarded as the aforementioned mounting seat 12a. This signal attenuation may be measured by the following test method: after removing the metallic portion from its original position, the signal strength of the first antenna 141 is significantly improved, and the improvement amplitude is, for example, 130%, 140%, 150%, 180%, 185%, 200%, 300%, 500%, 1000%; then the metallic portion can be regarded as the aforementioned mounting seat 12.

[0056] In conjunction with some of the foregoing embodiments, the mounting seat 12a is not limited to a structure fixedly coupled within the housing 11. If the drying apparatus 10 is configured to be attachable by one or more removable accessories 17, which comprise metallic structures inside, in the attaching state, the metallic structure induces the aforementioned induced eddy currents i and causes the signal strength attenuation on the first antenna 141, then this metallic structure is also considered as the aforementioned mounting seat 12a.

[0057] In order to minimize the signal strength attenuation on the first antenna 141, in several embodiments of the present disclosure, a hollow portion 122 is configured on the mounting seat 12. The induced eddy currents i cannot pass through the hollow portion 122, and thus the hollow portion 122 may cut off the transmission path of the induced eddy current i within the mounting seat 12, thereby reducing the induced eddy currents i , and minimize the signal strength attenuation on the first antenna 141. The effect of the hollow portion 122 on the signal strength on the first antenna 141 can be measured by the following test method: replacing the mounting seat 12a with the mounting seat 12, the signal strength on the first antenna 141 is significantly improved, and the improvement amplitude is, for example, 130%, 140%, 150%, 180%, 185%, 200%, 300%, 500%, 1000%. Then, the hollow portion 122 is confirmed to be in effect.

[0058] In a specific scenario, the drying apparatus 10 is configured to be attachable to a plurality of accessories 17. The first antenna 141 reads the pre-stored information in the related storage device of the accessory 17 through wireless communication, thereby recognizing the type of the accessory 17 or reading the configuration data related therewith. When the mounting seat 12a is present, the signal strength on the first antenna 141 is low, making it difficult to accurately read the pre-stored information in the accessory 17, causing problems such as failure to recognize the accessory 17, incorrect recognition of the accessory 17, and incomplete data reading. After using the mounting seat 12, since the hollow portion 122 is set to reduce the wireless communication interference to the first antenna 141, the first antenna 141 can perform preset and sufficiently strong wireless communication, and completely and correctly read the preset information from the related storage device of the accessory 17.

[0059] The effect of the hollow portion 122 on the induced eddy currents i for two exemplary mounting seat 12a will be described in detail below in combination with the accompanying drawings of FIG. 20a, FIG. 20b, FIG. 21a, and FIG. 21b.

[0060] Specifically, FIG. 20A shows a generally circular mounting seat 12a. The mounting seat 12a forms a conductor as a whole, and allows current to flow freely inside. When the first antenna 141 performs wireless communication, the induced eddy current i is generated and stimulated inside the mounting seat 12a. The illustrated dashed line arrows indicate the closed loop and direction of the induced eddy current i . It is easy to understand that the direction of the induced eddy current i is only an example and not a limitation. Moreover, the direction of the actual induced eddy current i will alter periodically. The mounting seat 12a is improved to the mounting seat 12 shown in FIG. 20B according to some embodiments of this application, which is divided into two sub-parts 126 by the hollow portion 122. The original transmission path of the induced eddy current i is cut off by the hollow portion 122, and the induced eddy current i_1 and the induced eddy current i_2 are formed in the two sub-parts 126 respectively. Only a small portion of the induced eddy current i_1 and the induced eddy current i_2 are formed in the outer surface of the mounting seat 12 affected by the skin effect, and their total current is smaller than the original induced eddy current i . Moreover, in the region where the induced eddy current i_1 and the induced eddy current i_2 are close to each other (that is, at the opposite sidewall of the hollow portion 122), the two currents are in opposite directions, with each forming a magnetic field in the opposite direction and mutually excite the loss, resulting in an increase in the impedance of the loop, thereby reducing the current formed. Based on the above two reasons, compared with the induced eddy current i formed by the mounting seat 12a, the induced eddy current i_1 and the induced eddy current i_2 formed after the mounting seat 12 is cut off by the

hollow portion 122 greatly reduce the signal strength of the first antenna 141. The influence, thereby improving the signal strength and communication stability of the drying device 10.

[0061] Specifically, FIG. 21A shows a generally annular mounting seat 12b. The induced eddy current i is generated inside the mounting seat 12b by the magnetic excitation of the first antenna 141. The illustrated dashed line arrows indicate the closed loop and direction of the induced eddy current i . It is easy to understand that the direction of the induced eddy current i is only an example and not a limitation. Moreover, the direction of the actual induced eddy current i will alter periodically. The mounting seat 12b is improved to the mounting seat 12 shown in FIG. 21B according to some embodiments of this disclosure. The hollow portion 122 extends through from the outer edge to the inner edge, radially cuts off the annular mounting seat 12 and the closed loop of the original induced eddy current i . The induced eddy current i_3 formed on the mounting seat 12 cannot be closed along a complete circular loop, but forms a multi-layer closed loop with reciprocating path (only two layers are shown in the figure). The current flow directions between adjacent layers of the induced eddy current i_3 are opposite, and each will form a magnetic field in the opposite direction and mutually cause the loss, resulting in an increase in the impedance of the loop, causing the induced eddy currents i_3 to cancel itself out. As a result, there is a decrease in the current compared to the original induced eddy currents i . Therefore, the induced eddy currents i_3 formed within the mounting seat 12 can significantly reduce the signal strength attenuation on the first antenna 141, compared to the original induced eddy currents i , thereby improving the signal strength and communication stability of drying apparatus 10.

[0062] Only two exemplary embodiments are shown above. It should be noted that mounting seat 12a is not limited to a circular shape, but in other embodiments may be quadrilateral, hexagonal, irregularly shaped, etc. The annular mounting seat 12b is also not limited to an annulus or ring-shape, but in other un-shown embodiments may be quadrilateral, hexagonal, irregularly shaped, etc. The main difference between the mounting seat 12b and the mounting seat 12a is that the mounting seat 12b comprises a hollow space 125a inside. The hollow portion 122 extends from the outer edge of the mounting seat 12b to the hollow space 125a to reduce the induced eddy currents i . In contrast, the mounting seat 12a is substantially a complete structure, which needs to be extended through completely by the hollow portion to achieve the same effect. It is easy to understand that for the mounting seat 12b may be further divided by the hollow portion 122 into two separate subparts to further reduce the induced eddy currents i .

[0063] The hollow portion 122 mentioned anywhere in the preceding and following sections cuts off the path of the induced eddy currents i , similar to the above scenarios, and can effectively reduce the interference to the

wireless communication stability of the drying apparatus 12.

[0064] In some specific embodiments, the first antenna 141 is fixedly coupled to the housing 11. The mounting seat 12 is also coupled to the housing 11 and within the magnetic field of the first antenna 141. In some specific embodiments, the drying apparatus 10 further comprises one or more accessories 17, the first antenna 141 is fixedly coupled to the one or more accessories 17. The mounting seat 12 is within the magnetic field of the first antenna 141 when the drying apparatus 10 is in the attaching state. Accordingly, the induced eddy currents i within the mounting seat 12 is formed by the magnetic field of the first antenna 141.

[0065] In some embodiments, the drying apparatus 10 comprises a first antenna 141 and a second antenna 142. Both are used for wireless communication. Except name differentiation, there is no essential difference between the first antenna 141 and the second antenna 142. In some specific embodiments, the drying apparatus 10 communicates with other devices wirelessly via first antenna 141 and the second antenna 142, for example, communicates with smart terminals via Bluetooth, or accesses the network via Wi-Fi to communicate with cloud devices. In some specific embodiments, the first antenna and the second antenna 142 of the drying apparatus 10 communicate wirelessly. For example, the first antenna 141 is configured within the housing 10 and the second antenna 142 is configured within the accessory 17. When the drying apparatus 10 is in the attaching state, the first antenna 141 communicates with the second antenna 142. The mounting seat 12 is in the magnetic field of either the first antenna 141 or the second antenna 142, and accordingly, the induced eddy currents i is formed within the mounting seat 12.

[0066] As shown in FIGS. 5 and 6, in some embodiments, the mounting seat 12 further comprises a connecting portion 129, the connecting portion 129 fills at least part of the hollow portion 122, and the mounting seat 12 is made of a different material from the connecting portion 129. For example, the connecting portion 129 is made of metal, and the mounting seat 12 is made of non-metal. Or, the connecting portion 129 is made of non-metal and mounting seat 12 is made of metal. Or, the connecting portion 129 and mounting seat 12 are made of metal with different physical properties, such as different strengths, different electrical conductivity, and the like. Or, the connecting portion 129 and the mounting seat 12 are made of different non-metals. The connecting portion 129 may fill a part of the hollow portion 122, or it may fill the entire hollow portion 122, so that the mounting seat 12 has a complete outer and/or inner edge. The connecting portion 129 may also be formed by stitching together a plurality of materials and structures.

[0067] It needs to be explained that since the hollow portion 122 cuts off at least a local area of the mounting seat 12, it destroys the integrity of the mounting seat 12. Therefore, the material strength of the connecting portion

129 is not limited to being less than or equal to the material strength of the mounting seat 12. The material strength of the connecting portion 129 can also be greater than the material strength of the mounting seat 12.

[0068] According to some of the foregoing embodiments, it may also be known that in some embodiments, an insulating material can be filled in the hollow portion 122 to form a connecting portion 129. The connecting portion 129 itself may also play a role in cutting off the induced eddy current i , so that the mounting seat 12 does not have a significant missing part in appearance, and it can also achieve the purpose of reducing the interference to the wireless communication stability of the drying apparatus 12.

[0069] As shown in FIG. 3a, in some embodiments, the mounting seat 12 comprises an airflow portion 125. The first edge 123 comprises the outer edge of the mounting seat 12, and the second edge 124 comprises the outer edge of the airflow portion 125. The hollow portion 122 on the mounting seat 12 extends through the airflow portion 125 from first edge 123 to the second edge 124.

[0070] In some embodiments shown in FIGS. 2a and 3a, there is a separate airflow channel 13 within the drying apparatus 10, and the airflow channel 13 is coupled to the airflow portion 125 of the mounting seat 12. In other words, when the drying apparatus 10 is in operation, the airflow only passes through the airflow channel 13, and does not pass through the airflow portion 125, let alone enter the hollow portion 122. Thereby, the hollow portion 122 does not create additional airflow noise and ensures smoothness of the high-speed airflow as it passes through airflow channel 13.

[0071] In some embodiments shown in FIGS. 2b and 3a, the airflow portion 125 is combined with other structures within the housing 11 to form the airflow channel 13, or the airflow portion 125 forms the entire airflow channel 13. In other words, when the drying apparatus 10 is in operation, the airflow directly passes through the airflow portion 125 of the mounting seat 12. Since the hollow portion 122 extends through to the airflow portion 125, a small amount of airflow passes from the airflow channel 13 along the hollow portion 122, which dissipate heat from the sidewalls within the hollow portion 122, thereby increasing the heat dissipation area of the entire mounting seat 12. Alternatively, the airflow emits out of the mounting seat 12 through the hollow portion 122 to dissipate heat to other structures within the housing 11.

[0072] In addition, when the drying apparatus 10 is in operation, there is a possibility that the air outlet is blocked by foreign objects, at which time the airflow within the airflow channel 13 cannot emit out of the drying apparatus 10. If the drying apparatus 10 emits hot air, the heat generated within it cannot be carried away by the airflow, which will cause the temperature within drying apparatus 10 to rise rapidly. Even if the drying apparatus 10 emits airflow at ambient temperature, the increased resistance of the airflow within the airflow channel 13 will cause a rapid rise in the power of the airflow generating

element (such as the motor), which will also cause the airflow generating element to overheat and affect its life. In the above embodiment, the hollow portion 122 extending through the airflow channel 13 may act as a venting channel of the airflow channel 13. When the air outlet of the drying apparatus 10 is blocked by a foreign object, the airflow within the airflow channel 13 vents through the hollow portion 122, thereby avoiding the aforementioned problems.

[0073] In some embodiments shown in FIG. 4, a hollow space 125a is configured inside the mounting seat 12. More specifically, in any cross-section perpendicular to the first axis m, the mounting seat 12 extends radially around the hollow space 125a. In the direction along the first axis m, the mounting seat 12 extends axially around the hollow space 125a.

[0074] The first edge 123 comprises the outer edge of the mounting seat 12, and the second edge 124 comprises the outer edge of the hollow space 125a. In other words, the hollow portion 122 extends through to the hollow space 125a from the outer edge of the mounting seat 12 to the outer edge of the hollow space 125a. In some embodiment, as shown in FIG. 4, the mounting seat 12 extends around the hollow space 125a as a whole and in a rectangular shape. In other embodiments not shown, the extension shape of the mounting seat 12 can also be any one of a polygon, triangle, circle, ellipse, semicircle, or a part of any one of these shapes, or it can extend along an irregular shape. In some more specific embodiments, as shown in FIG. 4, the hollow space 125a comprises the aforementioned airflow portion 125, that is, the airflow passes through the middle of the mounting seat 12. In other embodiments not shown, although the hollow space 125a does not comprise an airflow portion 125, it can be configured with other structures of the drying apparatus 10, such as sensors, circuits, heating elements (such as resistance wires), etc.

[0075] As shown in FIG. 4, in some embodiments, the mounting seat 12 is specifically annular or a part of an annulus, and the middle of the annulus is the hollow space 125a. The axis of the mounting seat 12 can be parallel or coincident with the first axis m. In other embodiments, the shape of the mounting seat 12 can be a rotationally symmetric structure with the first axis m as the axis of symmetry. The mounting seat 12 is an annulus or a part of an annulus in any cross section perpendicular to the first axis m. The hollow portion 122 extends from the outer edge of the annulus to the inner edge, and partially cuts off the mounting seat 12.

[0076] In a more specific embodiment, the hollow portion 122 extends radially along the mounting seat 12. The radial direction is perpendicular to both the axis of the mounting seat 12 and the first axis m

[0077] In some embodiments shown in FIG. 3B, in any cross section perpendicular to the first axis m, the mounting seat 12 is divided by the hollow portion 122 into at least two mutually independent sub-parts 126. In other words, the mounting seat 12 includes at least two sub-

parts 126, and the two sub-parts 126 are spaced apart. The space between them comprises the hollow portion 122. It can also be understood that the drying apparatus 10 has multiple sub-parts 126 that are spaced apart, and these sub-parts 126 together form the mounting seat 12. The space between adjacent sub-parts 126 comprises the hollow portion 122. When the mounting seat 12 deforms from buffering due to external impact, the space of the hollow portion 122 in any cross section increases or decreases, but the sub-parts 126 themselves do not necessarily deform.

[0078] In conjunction with some of the foregoing embodiments, the mounting seat 12 may have an airflow portion 125, at least part of which is formed by at least one subpart 126.

[0079] In some embodiments shown in FIGS. 2c and 5, the mounting portion 121 comprises a light cup 127. A receiving chamber 128 is configured within the light cup 127 for the coupling of the one or more radiation sources 15. When the one or more radiation sources 15 are coupled to the receiving chamber 128, the light cup 127 is configured to converge, reflect, and guide the infrared radiation emitted by the one or more radiation sources 15 to generate a preset light field. The hollow portion 122 divides the light cup 127 into at least two sub-parts 126. It can also be understood that the light cup 127 has two sub-parts 126 that are spaced apart, and the space between them comprises the hollow portion 122.

[0080] Since the radiation source 15 emits heat when in operation, the light cup 127 needs to have a high heat resistance to avoid damage from heat deformation. In addition, the radiation source 15 will experience problems such as lifetime decay and spectral drift in a high temperature environment. The light cup 127 also needs to have a high thermal conductivity to quickly dissipate heat and reduce the temperature of the radiation source 15 during operation. According to the above description, in some embodiments, at least part of the light cup 127 is made of a metal material. In addition to having better heat resistance and thermal conductivity, metal materials are also easy to process to form a smooth light-guide surface, so that the light cup 127 can converge, reflect, and guide the infrared radiation emitted by the radiation source 15.

[0081] In some embodiments of the present disclosure, there is a first antenna 141 configured within the drying apparatus 10. Due to limited space within the drying apparatus 10, the first antenna 141 is in close proximity to the light cup 127. Consequently, the metallic portion of the light cup 127 will be excited by the magnetic field of the first antenna and generate the induced eddy currents. The induced eddy currents can cause the signal attenuation of the first antenna 141. This issue is mitigated by the hollow portion 122, which cut off the path of the induced eddy currents within the light cup 127, as described in preceding or subsequent relevant sections. The present disclosure also includes various embodiments with different types, quantities, and structures of the light cup 127, all of these embodiments can be

described with reference to the above description and will not be repeated in the following.

[0082] In combination with some of the aforementioned embodiments, a first antenna 141 is configured inside the drying apparatus 10. Since the internal space of the drying apparatus 10 is limited, the first antenna 141 is in close proximity to the light cup 127. This will cause the metallic portion of the light cup 127 to be affected by the magnetic field of the first antenna 141 and form an induced eddy current, which will cause signal strength attenuation on the first antenna 141. Therefore, it is necessary to cut off the transmission path of the induced eddy current inside the light cup 127 through a hollow portion 122. For specific details, please refer to the aforementioned and following descriptions. In other embodiments of this disclosure, there will be a plurality of light cups 127 with different types, quantities, and structures. Their features can refer to the above description, and will not be repeated in the following.

[0083] In some more specific embodiments as shown in FIG. 6, the mounting seat 12 further comprises a connecting portion 129 configured in the hollow portion 122. In the figure, The connecting portion 129 fills the entire hollow portion 122 and connects the adjacent subpart 126 to each other. The connecting portion 129 can be made of materials with a certain degree of elasticity, such as rubber, plastic, polymer material, and other, which ensures the mounting seat 12 can still form a complete whole after being extended through by the hollow portion 122 and the integrity of its structure while reducing the overall rigidity. In other embodiments, the connecting portion 129 may also fill part of the hollow portion 122. It shall be noted that the material strength of the connecting portion 129 is not limited to being less than or equal to the material strength of the mounting seat 12, and the material strength of the connecting portion 129 may also be greater than the material strength of the mounting seat 12.

[0084] In some embodiments, in combination with FIGS. 2C and 6, the connecting portion 129 is filled and configured in the hollow portion 122, keeping the outer edge of the mounting seat 12 intact. The airflow won't generate noise when passes through the hollow portion 122 in the airflow channel 13.

[0085] In some embodiments, one end wall of the connecting portion 129 and the inner wall of the receiving chamber 128 together form a reflecting surface for light convergence, so that the inner wall of the light cup 127 remains intact. After the infrared radiation emitted by the one or more radiation sources 15 coupled to the light cup 127 reaches the reflecting surface, it is reflected at a predetermined angle to converge and guide the infrared radiation. The reflecting surface may be a coating made of a high-reflectivity material, which is applied to the inner wall of the receiving chamber 128 and the corresponding end wall of the connecting portion 129 to form a complete and continuous reflecting surface. It thereby avoids any impact on the optical performance of the light cup 127

caused by the hollow portion 122.

[0086] In some embodiments, in combination with FIGS. 1B and 3C, the connecting portion 129 itself may also be configured for the coupling of the one or more radiation sources 15. Compared with the mounting seat 12 without the hollow portion 122, the mounting seat 12 in the illustrated embodiment may couple the same number of radiation sources 15. In other embodiments not shown, part of the radiation source 15 may also be coupled to the connecting portion 129. In other words, the radiation sources 15 coupled to the mounting seat 12 is partially coupled to the mounting portion 121 and partially coupled to the connecting portion 129.

[0087] In some embodiments shown in FIGS. 7 to 19, the mounting seat 12 comprises a plurality of light cups 127. Each light cup 127 comprises a receiving chamber 128 for coupling one or more radiation source 15. After the radiation source 15 is coupled to the receiving chamber 128, the light cup 127 may converge, reflect, and guide the infrared radiation emitted by the radiation source 15 to generate infrared radiation at predetermined light field. In different embodiments, other structures may also be combined the radiation source 15 to achieve functions such as heat dissipation, fixation, power supply and the like. In combination with FIGS. 1A and 1B, when the drying apparatus 10 with the mounting seat 12 is in operation, a plurality of radiation sources 15 simultaneously emit infrared radiation to generate a predetermined light field. To avoid confusion, the light field generated by a single radiation source 15 is referred to as a sub-light field hereinafter, and the light field generated by all radiation sources 15 together is referred to as a total light field. Compared with the embodiments shown in FIG. 5 or FIG. 6, in some embodiments shown in FIGS. 7 to 19, more radiation sources 15 can generate a total light field with a greater total power. In addition, in the light field generated by the radiation source 15, the closer the distance to the radiation source 15, the greater the radiation power density. In some embodiments, even if the total power is the same, as in the embodiments shown in FIGS. 7 to 19, the total power is provided by the plurality of radiation sources 15 together, so the power density of the sub-light field of each radiation source 15 is smaller. When the user is closer to any radiation source 15, it is only in the sub-light field of that radiation source 15, which reduces the risk of rapid temperature rise and burns. However, in the embodiments shown in FIG. 5 or FIG. 6, the total power is provided by a single radiation source 15, which may save overall space, but when the user is closer to the radiation source 15, they will be in a region of the light field with a higher power density, and there may be a risk of rapid temperature rise and burns.

[0088] In these embodiments, the mounting seat 12 is substantially annular and has an annular outer edge and an annular inner edge. Among them, the annular outer edge is used for coupling to the housing 11. A plurality of light cups 127 are arranged along the annular mounting seat 12. The outer edge of each light cup 127 is part of the

annular outer edge of the mounting seat 12, and the inner edge of each light cup 127 is part of the annular inner edge of the mounting seat 12.

[0089] In some more specific embodiments, as shown in FIGS. 1A, 1B, and 7, the annular inner edge of the mounting seat 12 forms the airflow portion 125, which forms at least part of the airflow channel 13, or is coupled to the airflow channel 13. When the drying apparatus 10 is in operation, the air emits from the area enclosed by the annular inner edge of the mounting seat 12. The infrared radiation emitted by a plurality of light cups 127 on the mounting seat 12 generates a total light field that surrounds the outside of the airflow. In order to maximize the light emitting area of the total light field, the plurality of light cups 127 are designed to fill the entire end wall of the house 11 except for the air outlet. The annular outer edge of the mounting seat 12 is tightly coupled to the inner wall of the housing 11. When the user drops or collides with the drying apparatus 10, the external impact will be directly transmitted from the housing 11 to the annular outer edge of the mounting seat 12. Since the mounting seat 12 itself can absorb the impact through deformation, the impact transmitted to the radiation source 15 is greatly reduced, thereby providing buffering and protection to the radiation source 15.

[0090] In some embodiments shown in FIG. 7, at least one part of the annular outer edge of the mounting seat 12 is a first edge 123, and at least another one part of the annular inner edge of the mounting seat 12 is a second edge 124. The hollow portion 122 generally extends substantially radially from the annular outer edge of the mounting seat 12 to the annular inner edge of the mounting seat 12. In some embodiments, as shown in FIG. 10, at least one part of the annular outer edge of the mounting seat 12 is the first edge 123, and another one part of the annular outer edge of the mounting seat 12 is the second edge 124, that is, the hollow portion 122 extends through the entire mounting seat 12, dividing the mounting seat 12 into two sub-parts 126.

[0091] Without increasing the size of the mounting seat 12, the configuration of the hollow portion 122 will reduce the size of the emitting area of the total-light field, thereby affecting the total-light field. Further, the larger the size of the hollow portion 122 itself, the greater the magnitude of deformation of the entire mounting seat 12, and the greater its buffering effect upon impact, but the greater the influence on the total-light field. On the contrary, the smaller the size of the hollow portion 122 itself, the smaller the influence on the total-light field, but the smaller the magnitude of deformation of the entire mounting seat 12, and the weaker its buffering effect upon impact. Therefore, different hollow portions 122 are designed according to actual needs in different embodiments.

[0092] In a plurality of embodiments provided in the present disclosure, a plurality of different configuration ways of coupling a plurality of the light cups 127 to the hollow portion 122 are disclosed. The relevant embodiments are described in detail below in conjunction with

the accompanying drawings.

[0093] In some embodiments shown in FIGS. 7 to 11, at least one of the pluralities of light cups 127 on the mounting seat 12 forms at least part of the hollow portion 122. In other words, the hollow portion 122 configured on the mounting seat 12 alters the structure of at least one light cup 127a. Compared with the other light cups 127, the light cup 127a has an incomplete inner and/or outer contour with missing portions forms at least part of the hollow portion 122. The missing portion of the light cup 127a affect its optical performance. Therefore, in these embodiments, the hollow portion 122 affects not only the total-light field, but also the sub-light field of the light cup 127a.

[0094] More specifically, in some embodiments shown in FIG. 7 or FIG. 8, the hollow portion 122 is integrally formed in the light cup 127a. In other words, among the plurality of light cups 127 on the mounting seat 12, there is only one light cup 127a, which forms the entire hollow portion 122. The first edge 123 and the second edge 124 are respectively the two edges of the light cup 127a. In this way, the impact of the hollow portion 122 on the total-light field is limited to affecting the sub-light field of only one light cup 127a.

[0095] In some embodiments, a radiation source 15 is coupled to the light cup 127a. The shape of the hollow portion 122 can be iteratively optimized through a combination of optical simulation, light field detection, etc., to minimize its impact on the sub-light field of the light cup 127a. For example, in some embodiments, as shown in FIG. 7, the hollow portion 122 extends along a direction inclined to the first axis m so that the light cup 127a has an inclined missing portion. In some embodiments, as shown in FIG. 8, the hollow portion 122 extends along a direction parallel to the first axis m so that the light cup 127a has a missing portion that extends in a direction parallel to the first axis m.

[0096] In some more specific embodiments, a connecting portion 129, as shown in FIG. 6, may also be configured in the hollow portion 122 so that the light cup 127a has a complete reflecting surface, which greatly reduces the impact of the hollow portion 122 on the sub-light field of the light cup 127a. The connecting portion 129 can be referenced as described above, and it fills part of or entire hollow portion 122, thereby prevent the hollow portion 122 from impacting the optical and aerodynamic performance of the mounting seat 12. The user may not be able to detect the presence of the hollow portion 122 when directly observing the mounting seat 12, giving the mounting seat 12 a better appearance consistency. The hollow portion 122 at any position in the following description can be reduced by configuring the connecting part 129, and the impact on the sub-light field, total light field and aerodynamic performance will not be repeated.

[0097] In other embodiments, the radiation source 15 is not coupled to the light cup 127a. In this way, there is no need to consider the impact of the hollow portion 122 on the sub-light field of the light cup 127a. The hollow portion

122 can be designed through mechanical simulation, mechanical testing and other methods to maximize its buffering effect. The relationship between the light cup 127a and the hollow portion 122 at any position in the foregoing or the following description can be referenced to the above description, and will not be repeated.

[0098] In the embodiments shown in FIG. 9 or FIG. 10, the hollow portion 122 is configured on two light cups 127a. Specifically, there are two affected light cups 127a among the plurality of light cups 127. Each light cup 127a has the first edge 123 and part of the second edge 124, and together they form the entire hollow portion 122. Consequently, the hollow portion 122 affects the sub-light fields of two light cups 127a.

[0099] Specifically, in some embodiment, as shown in FIG. 9, the hollow portion 122 is configured on two adjacent light cups 127a. In some more specific embodiments, the hollow portion 122 is configured uniformly on two light cups 127a, that is, the missing portion of the two light cups 127a are of the same size. In some other more specific embodiments, the hollow portion 122 is configured not uniformly on two light cups 127a, that is, the missing portion of the two light cups 127a are of different sizes.

[0100] Since the hollow portion 122 is configured on two adjacent light cups 127a, the hollow portion 122 may have a larger size to achieve a greater buffering effect. In addition, compared with some embodiments, as shown in FIG. 8, some embodiment, as shown in FIG. 9 has a smaller impact on the optical performance of the light cup 127a, because the missing portion of the light cup 127a is configured at its edge; while the missing portion of the light cup 127a in FIG. 8 is closer to its center, which has greater impact on the optical performance. Therefore, although the hollow portion 122 in some embodiment, as shown in FIG. 9 affects two light cups 127a, the impact on the total-light field may be less than or equal to that of some embodiment, as shown in FIG. 8.

[0101] In some embodiments, as shown in FIG. 10, the hollow portion 122 is configured on two non-adjacent light cups 127a. Part of the outer edge of the one light cup 127a comprises a first edge 123, and part of the outer edge of another light cup 127a comprises part of the second edge 124.

[0102] Compared with the embodiments shown in FIG. 9, the two light cups 127a affected by the hollow portion 122 in FIG. 10 are distributed in two areas on the mounting seat 12, which can avoid the impact of the hollow portion 122 on the total-light field of being too concentrated in one area, causing local radiation intensity of the total light field being too low.

[0103] More specifically, the hollow portion 122 extends through the entire mounting seat 12, dividing the mounting seat 12 into two sub-parts 126, of which relevant description may be referred to the description above. Therefore, compared with the embodiments shown in FIG. 9, the former may achieve a greater buffering effect.

[0104] In some embodiments, as shown in FIG. 10, it may also be understood that there are two hollow portions 122 on the mounting seat 12, each hollow portion 122 extending through a light cup 127a, and the two hollow portions 122 are arranged radially. In other embodiments, the number of the hollow portions 122 can be greater, and such hollow portions 122 may not be arranged radially. For example, in some embodiment, as shown in FIG. 19, the number of the hollow portions 122 is three, which form angles with each other.

[0105] In some embodiments, as shown in FIG. 11, a light cup 127b is configured on the mounting seat 12. The light cup 127b has the same shape and size as other light cups 127, and has a complete inner and/or outer contour. The difference from other light cups 127 is that the light cup 127b includes a first part b1 and a second part b2, wherein the first part b1 is made of the same material as other light cups 127, and the second part b2 is made of a different material from the first part b1. The second part b2 comprises a connecting portion in some of the aforementioned embodiments. In other words, some embodiment, as shown in FIG. 11 can be understood as: the light cup 127b has a missing portion forming a hollow portion, and then the second part b2 is made of another material to fill the missing portion, which supplements the light cup 127b a complete inner contour and/or outer contour.

[0106] In some embodiments, as shown in FIGS. 12 to 17, the hollow portion 12 is configured outside all light cups 127. In other words, the first edge 123 and the second edge 124 on the mounting seat 12 are both configured outside all light cups 127. That is, all light cups 127 have complete inner contours and/or outer contours. In this way, the optical performance of the light cup 127 is not affected by the hollow part 12 directly.

[0107] In some embodiment, as shown in FIG. 12, one of the pluralities of light cups 127 is missing, forming the hollow portion 122. In other words, the number of the light cups 127 on the mounting seat 12 is reduced by one, with the hollow portion 122 at a size equivalent to that of the missing light cup 127. It may also be understood that, based on some embodiments, as shown in FIG. 8, the size of the hollow portion 122 is increased until it is the same as the entire light cup 127a, and the missing portion of the light cup 127a is equivalent to its entirety, which is the embodiment, as shown in FIG. 12. In this embodiment, the impact of the hollow portion 122 on the total-light field is: reducing the sub-light field of one light cup 127. In other embodiments, more light cups 127 can be reduced, for example, two or three light cups 127 can be reduced to form a larger hollow portion 122.

[0108] In some embodiment, as shown in FIG. 13, the pluralities of light cups 127 comprises at least one light cup 127c (i.e., a second set of the light cups), which is of a different material from other light cups 127 (i.e., a first set of the light cups) and forms the connecting portion in some of the aforementioned embodiments. In other words, the embodiments can be understood as: the plurality of light cups 127 (i.e., the first set of the light

cups) form at least part of the mounting portion 121, and some positions in the plurality of light cups 127 are left empty to form the hollow portion. At least one light cup 127c (i.e., the second set of the light cups) is then made of another material and mounted on the hollow portion, and the mounting seat 12 is supplemented to have a structure with a complete inner and/or outer contour, so that the total-light field is not affected by the hollow portion. In other embodiments, there may also be a plurality of light cups 127c missing, such as two or three.

[0109] In some embodiment, as shown in FIG. 14, there are spaces between each adjacent light cup 127 on the mounting seat 12. In other words, the mounting seat is not comprised entirely by light cups 127. A plurality of light cups 127 are dispersed on the mounting seat 12 in a spaced apart manner. The hollow portion 122 is configured at any of the spaces. In this way, the hollow portion 122 does not affect any light cup 127, the number of light cups 127, and the total-light field at all. In other embodiments, a plurality of spaces may also be selected to form a plurality of hollow portions 122, such as two, three, and so forth.

[0110] In some embodiment, as shown in FIG. 15, there are two sizes of light cups on the mounting seat 12. For the sake of convenience, they are divided into: a first light cup 127, which is the same as the light cup in other embodiments; a second light cup 127d, which is smaller in size than the first light cup 127. The hollow portion 122 is adjacent to the second light cup 127d. Since the size of the second light cup 127d is smaller, it can save space to form the hollow portion 122. This configuration both takes into account the total number of light cups 127, and avoid the second light cup 127d from having an incomplete inner and/or outer contour due to being extended through by the hollow portion 122. In this embodiment, the impact of the hollow portion 122 on the total-light field is limited to the impact on the sub-light field of the second light cup 127d.

[0111] As shown in FIG. 15, for ease of description, the distance between the two ends of the first light cup 127 in the circumferential direction of the mounting seat 12 is defined as a first dimension a (hereinafter also referred to as the length direction), and the distance between the two ends in the radial direction of the mounting seat 12 is defined as a second dimension b (hereinafter also referred to as the width direction). In order to make each first light cup 127 having as large a reflecting surface as possible, the first light cups 127 arranged along the circumferential direction of the mounting seat 12 are elongated. That is, for any first light cup 127, the first dimension a is greater than the second dimension b. In some specific embodiments, as shown in FIG. 15, the second light cup 127d is smaller in size in the length direction, and its first dimension a is smaller than that of other light cups 127. In this way, part of the space can be saved in the circumferential direction of the mounting seat 12 to form the hollow portion 122. In addition, since the actual reflecting surface of the radiation source 15 is

approximately circular, the elongated light cup 127 has inconsistent energy density loss in the width direction and the length direction, which will cause uneven distribution of infrared radiation in the sub-light field. After the first dimension a of the second light cup 127d is reduced, the shape of its reflecting surface is closer to a circle, which is equivalent to optimizing the shape of the reflecting surface and reducing the impact of the hollow portion 122 on the sub-light field of the second light cup 127d. In other embodiments, the first dimension a and the second dimension b of the second light cup 127d can also be reduced at the same time. In other embodiments, the first light cup 127 can also be proportionally reduced as a whole (for example, the reduction coefficient is 0.8, 0.7, etc.) to obtain the second light cup 127d.

[0112] In some embodiment, as shown in FIG. 15, the second light cup 127d has a concave inner wall 1272 on the side close to the hollow portion 122. The concave inner wall 1272 is concave towards the inside of the second light cup 127d, making room for the hollow portion 122 and ensuring that the wall thickness of the light cup 127 is uniform, so as to maximize the light emitting area. The concave inner wall 1272 shown in the figure is flat and substantially parallel to the extending direction of the hollow portion 122. In some other embodiments, the concave inner wall 1272 comprises a concave surface, and the curvature is different from that of other areas of the inner wall of the second light cup 127d. It shall be noted that in some embodiments, as shown in FIG. 15, the two ends of any first light cup 127 form a structure similar to the concave inner wall, in order to increase the light emitting area. Compared with the similar structure of the first light cup 127, the concave inner wall 1272 of the second light cup 127d is more concave to make more room for the hollow portion 122.

[0113] In some embodiments, as shown in FIG. 16, there are two second light cups 127e on the mounting seat 12. The size of the second light cup 127e is smaller than that of the first light cup 127. The hollow portion 122 is configured between the two second light cups 127e. The size reduction of the second light cup 127e compared with the first light cup 127 can be one of the following three types: the first dimension a is reduced, the first dimension a and the second dimension b are both reduced, and the whole is proportionally reduced. The relevant technical effects can be referred to the description above. The difference from some embodiment, as shown in FIG. 15 is that there are two second light cups 127e with reduced size in some embodiment, as shown in FIG. 16, which reduces the impact of the hollow portion 122 on the optical performance of each second light cup 127e and optimizes the impact of the hollow portion 122 on the total-light field.

[0114] In some embodiments shown in FIG. 17, there is a common sidewall 1271 between two adjacent light cups 127. The two end walls of the common sidewall 1271 are respectively configured inside the two light cups 127, each forming part of the inner wall of the corresponding

receiving chamber 128. There are at least two light cups 127f on the mounting seat 12, and the common sidewall 1271a between them is thicker than other common sidewalls 1271. The hollow portion 122 is configured inside the common sidewall 1271a. For ease of description, the plurality of light cups 127 are divided into: the first light cup 127, which is not adjacent to the common sidewall 1271a; the second light cup 127f, which is directly adjacent to the common sidewall 1271a.

[0115] On the mounting seat 12, the distance between the two second light cups 127f is farther (compared to the distance between the two first light cups 127, or between the first light cup 127 and the second light cup 127f), and a thicker common sidewall 1271a is configured between them. A hollow portion 122 is configured inside the common sidewall 1271a. In other embodiments not shown, there can be more second light cups 127f, and correspondingly more common sidewalls 1271a.

[0116] More specifically, the above-mentioned common sidewall 1271a can be implemented by one of the following manners:

(1) Keeping the size of each first light cup 127 and second light cup 127f unchanged, and increase the size of the entire mounting seat 12. In this way, the total-light field can be kept unaffected by the hollow portion 122, however, the coupling space of the mounting seat 12 needs to be increased.

(2) Keeping the size of the entire mounting seat 12 unchanged, and reduce the size of all first light cups 127 and second light cups 127f. In this way, the impact of the hollow portion 122 on the total-light field can be evenly distributed to all sub-light fields, and the energy density distribution of the total-light field can be kept uniform.

(3) Keeping the overall dimensions of the mounting seat 12 constant, reducing only the dimensions of the second light cup 127f and not the dimensions of the first light cup 127 to give the common sidewall 1271a a greater thickness relative to the other common sidewall 1271. Specifically, this may be implemented by any one of the following manners: reducing the overall dimensions of the second light cup 127f, reducing the first dimension a of the second light cup 127f, and making the end of the common sidewall 1271a deeper into the inside of the second light cup 127f (as compared to the other common sidewall 1271 and the first light cup 127).

(3) Keep the size of the entire mounting seat 12 unchanged, and only reduce the size of the second light cup 127f, not the size of the first light cup 127, so that the common sidewall 1271a has a greater thickness than other common sidewalls 1271. Specifically, it can be: to reduce the overall size of the second light cup 127f, to reduce the first dimension of the second light cup 127f, and to make the end face of the common sidewall 1271a protrude more deeply into the second light cup 127f (compared to

other common sidewalls 1271 and the first light cup 127).

[0117] Wherein all of the first light cup 127, the second light cup 127f in schemes (1) and (2) have the same optical performance, and the first light cup 127 and the second light cup 127f also have the same size. The size of the second light cup 127f in scheme (3) is smaller than that of the first light cup 127, the optical performance of the second light cup 127f is affected, and the optical performance of the first light cup 127 is not affected.

[0118] In schemes (1) and (2), all first light cups 127 and second light cups 127f have the same optical performance, and the first light cup 127 and the second light cup 127f can also have the same size. In scheme (3), the size of the second light cup 127f is smaller than that of the first light cup 127, the optical performance of the second light cup 127f is affected, and the optical performance of the first light cup 127 is not affected.

[0119] In some embodiments as shown in FIG. 18, the mounting seat 12 includes at least two separate subparts 126, and at least one subpart 126 has at least two light cups 127, the adjacent subpart 126 are spaced apart from each other, and the spaced areas constitute at least a part of the hollow portion 122. In some embodiment, as shown in FIG. 18, the hollow portion 122 is not a slot configured on the mounting seat 12, but is configured by a space between the plurality of separate subparts 126. The mounting seat 12 in FIG. 18 has three subparts 126, and each subpart 126 has two light cups 127. In other embodiments not shown, only one subpart 126 having two light cups 127, and the other subparts 126 having only one light cup 127. In other embodiments not shown, the number of the light cups 127 on each subpart 126 exceeding two.

[0120] In some embodiments shown in FIG. 18, the mounting seat 12 includes at least two independent subparts 126, and at least one subpart 126 has at least two light cups 127. The adjacent subparts 126 are spaced apart from each other, and the spaced areas constitute at least part of the hollow portion 122. The difference from the above-mentioned embodiments is that in the embodiments shown in FIG. 18, the hollow portion 122 is not a groove configured on the mounting seat 12, but is configured by the spaced areas between multiple independent subparts 126. The mounting seat 12 shown in FIG. 18 has three subparts 126, and each subpart 126 has two light cups 127. In other unshown embodiments, only one subpart 126 has two light cups 127, and other subparts 126 each have only one light cup 127. In other unshown embodiments, the number of light cups 127 on each subpart 126 exceeds two.

[0121] In some embodiments, as shown in FIG. 19, the mounting seat 12 includes at least two separate subparts 126, with at least one subpart 126a having at least a part of one light cup 127 and another entire light cup 127g. It is also to be understood that the subpart 126a has a complete the light cup 127 and an incomplete light cup 127g.

The other part of the light cup 127g may independently form a subpart 126 or may be configured on the other subpart 126 with other the light cups 127. Two adjacent subparts 126 are spaced apart from each other and the spaced area constitute at least a part of the hollow portion 122. The space between the two parts of the light cup 127g also comprises at least part of the hollow portion 122.

[0122] In some embodiments shown in FIG. 19, the mounting seat 12 includes at least two independent subparts 126, and at least one subpart 126a has at least part of a light cup 127 and another light cup 127g. It can also be understood that subpart 126a has a complete light cup 127 and an incomplete light cup 127g. The other part of the light cup 127g can independently constitute a subpart 126, or it can be configured on another subpart 126 with other light cups 127. The adjacent subparts 126 are spaced apart from each other, and the spaced areas constitute at least part of the hollow portion 122. The space between the two parts of the light cup 127g also constitutes at least part of the hollow portion 122.

[0123] As shown in FIG. 1, in some embodiments, the drying apparatus 10 further comprises an optical element 16 made of a light-equalizing material, which is coupled to the mounting seat 12 and covers the emitting area of each of the one or more radiation sources 15. The infrared radiation emitted by each of the one or more radiation sources 15 during operation enters the optical element 16 from the entrance surface of the optical element 16; and the optical element 16 is configured to diffuse the infrared radiation passing through it uniformly, the effect of the hollow portion 122 on the total-light field can be reduced except that the infrared radiation is more uniform and dispersed, so that the infrared radiation emitted by each of the one or more radiation source 15 is uniformly emitted from the emitting area of the optical element 16, and the energy distribution of the total-light field is relatively uniform.

[0124] As shown in FIG. 1, in some embodiments, the drying device 10 also comprises an optical element 16. The optical element 16 is made of a light-diffusing material and is mounted on the mounting seat 12 and covers the emitting area of each radiation source 15. When each radiation source 15 is in operation, the infrared radiation emitted from the entrance surface of the optical element 16 enters the optical element 16, and after being uniformly diffused in the optical element 16, it is emitted from the emitting area of the optical element 16 and the drying device 10. In addition to making the infrared radiation more uniform and dispersed, the optical element 16 can also reduce the influence of the hollow portion 122 on the total light field, so that the infrared radiation emitted from each radiation source 15 is uniformly emitted from the emitting area of the optical element 16, and the energy distribution of the total light field is more uniform.

[0125] In some embodiments, the light emitted by the radiation source 15 has a visible light band, so that the user can observe whether the radiation source 15 oper-

ates from the emitting area of the optical element 16. In some embodiments as shown in FIG. 7 to FIG. 10, the hollow portion 122 affects the sub-light field of the one or more light cups 127a, which may cause the light emitted from the light cup 127a to be lower in brightness than the other light cups 127, so that the user perceives that there is a brightness difference between the plurality of radiation sources 15. After the optical element 16 is added, after the optical element 16 is homogenized, the local brightness can be prevented from falling, so that the user is difficult to perceive the influence of the hollow portion 122 on the light cup 127a, and the appearance consistency of the drying apparatus 10 is ensured.

[0126] In some embodiments, the light emitted by the radiation source 15 includes a visible light band, so that the user can observe from the emitting area of the optical element 16 whether the radiation source 15 is operating. In some embodiments shown in FIGS. 7 to 10, the hollow portion 122 affects the sub-light field of one or more light cups 127a, which may cause the light emitted from the light cup 127a to be lower in brightness than other light cups 127, so that the user perceives that there is a brightness difference between multiple radiation sources 15. After the optical element 16 is added, it can avoid local brightness drop after homogenization, so that the user can hardly perceive the influence of the hollow portion 122 on the light cup 127a, ensuring the consistency of the appearance of the drying device 10.

[0127] In the description of this specification, reference to the terms "an embodiment", "some embodiments", "schematic embodiments", "examples", "specific examples", or "some examples" means that the specific features, structures, orientations, positions, materials, or characteristics described in conjunction with the embodiments or examples are included in the description of the embodiments or examples. ", "specific examples", or "some examples" means that specific features, structures, orientations, positions, materials, or characteristics described in conjunction with the embodiments or examples are included in at least one embodiment or example of the present disclosure. examples. In this specification, schematic expressions of the above terms do not necessarily refer to the same embodiment or example. Moreover, specific features, structures, orientations, positions, materials, or characteristics described may be combined in any one or more of the embodiments or examples in a suitable manner. Moreover, without contradicting each other, those skilled in the art may combine and combine different embodiments or examples and features of different embodiments or examples described in this specification.

[0128] In the description of this specification, the reference terms "an embodiment", "some embodiments", "illustrative embodiment", "example", "specific example" or "some examples" etc. refer to the specific features, structures, orientations, positions, materials or characteristics described in the embodiment or example description. At least one embodiment or example of the

present application is included. In this specification, the illustrative expressions of the above terms do not necessarily refer to the same embodiment or example. Moreover, the specific features, structures, orientations, positions, materials or characteristics described can be appropriately combined in any one or more embodiments or examples. In addition, where there is no conflict, those skilled in the art may combine and combine the different embodiments or examples and the features of different embodiments or examples described in this specification.

[0129] Although embodiments of the present disclosure have been shown and described above, it is to be understood that the above embodiments are exemplary and are not to be construed as a limitation of the present disclosure, and that one of ordinary skill in the art may make changes, modifications, substitutions, and variations of the above embodiments within the scope of the present disclosure.

[0130] Although embodiments of the present application have been shown and described above, it is understood that the above embodiments are exemplary and are not to be construed as limiting the present application. Those skilled in the art can make changes, modifications, replacements and variations to the above embodiments within the scope of the present application.

Claims

1. A mounting seat for coupling to a drying apparatus comprising an airflow channel, the mounting seat comprising:
 - a hollow portion configured to cut off a path of induced eddy currents within the mounting seat, wherein in any cross-section of the mounting seat perpendicular to a first axis, the hollow portion extends from a first edge of the mounting seat to a second edge of the mounting seat.
2. The mounting seat of claim 1, wherein a hollow space is configured within the mounting seat in any cross-section of the mounting seat perpendicular to the first axis, the first edge is configured at the outer edge of the mounting seat, and the second edge is configured at the outer edge of the hollow spaces; or,
 - wherein the mounting seat is divided by the hollow portion into at least two mutually independent sub-parts in any cross-section perpendicular to the first axis.
3. The mounting seat of claim 1 or 2, wherein the drying apparatus further comprises one or more radiation sources, the mounting seat comprises a mounting portion configured for coupling of the one or more radiation sources;
 - wherein the mounting portion comprises a plurality of light cups, each of which comprises a receiving chamber configured for coupling the one or more radiation sources;
 - wherein at least one light cup is divided by the hollow portion into at least two mutually independent sub-parts; or,
 - at least one of the plurality of light cups comprises at least part of the hollow portion; or,
 - the hollow portion is configured outside all of the plurality of light cups.
4. The mounting seat of claim 3, wherein the plurality of light cups is arranged along the annular mounting seat, the hollow portion is configured between two adjacent light cups and extends radially along the mounting seat.
5. The mounting seat of claim 3 or 4, wherein the mounting seat comprises an airflow portion, which forms at least part of the airflow channel, or is coupled to the airflow channel;
 - the first edge comprises an outer edge of the mounting seat and the second edge comprises an outer edge of the airflow portion.
6. The mounting seat of one of the preceding claims, wherein the mounting seat further comprises a connecting portion filling at least part of the hollow portion, and the mounting seat is made of a different material from the connecting portion.
7. The mounting seat of one of the preceding claims, wherein an axis of the mounting seat is parallel to or coincident with the first axis; and/or,
 - the hollow portion extends radially along at least part of the mounting seat; and/or,
 - at least part of the airflow in the airflow channel passes along the first axis.
8. A drying apparatus, the drying apparatus comprising:
 - a housing;
 - a mounting seat according to any of the claims 1 to 7..
9. The drying apparatus of claim 8, wherein the drying apparatus further comprises a first antenna;
 - the mounting seat is at least partially within a magnetic field of the first antenna, and induced eddy currents within the mounting seat is formed by the magnetic field of the first antenna.
10. The drying apparatus of claim 9, wherein the first antenna at least partially surrounds the first axis; and/or,

the first antenna comprises an annular portion, which is an annulus or a part of an annulus, wherein an axis of the annular portion is parallel to or coincident with the first axis.

- 5
- 11.** The drying apparatus of one of the claims 8 or 10, wherein the drying apparatus further comprises an airflow generating element, a heating assembly, a sensor, and a circuit;
- 10
- the mounting seat is coupled to at least one of the airflow generating element, the heating assembly, the sensor, the circuitry, and the housing.
- 12.** The drying apparatus of claim 8, wherein the drying apparatus further comprises one or more accessories, each of which is configured to be removably attached to the housing in at least one of the following ways:
- 15
- the mounting seat is coupled to the housing and the accessory is configured to be removably attached to the mounting seat; or,
- the mounting seat is coupled to the accessory and the mounting seat is configured to be removably attached to the housing; or,
- 20
- the mounting seat is configured to be removably coupled to the accessory and the housing respectively; or,
- 25
- the accessory is configured to be removably attached to the housing directly.
- 30
- 13.** The drying apparatus of claim 12, wherein the mounting seat is substantially annular and configured to be detachably coupled to the housing or the one or more accessories by magnetic connection.
- 35
- 14.** The drying apparatus of claim 12, wherein the mounting seats is coupled to the one or more accessories, and/or the mounting seats is coupled to the housing.
- 40
- 15.** The drying apparatus of one of the claims 12 to 14, wherein the drying apparatus further comprises a first antenna for wireless communication, the first antenna is fixedly coupled to the one or more accessories, and induced eddy currents within the mounting seat is formed by the magnetic field of the first antenna; or,
- 45
- wherein the drying apparatus further comprises a first antenna and a second antenna for wireless communication, with the first antenna configured within the housing and the second antenna configured within the accessory, induced eddy currents within the mounting seat is formed by the magnetic field of either the first antenna or the second antenna.
- 50
- 55

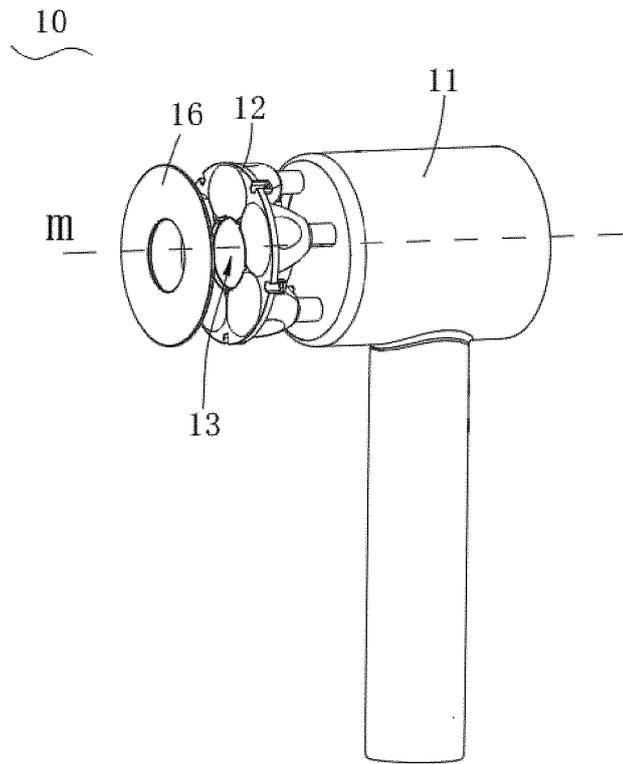


FIG. 1a

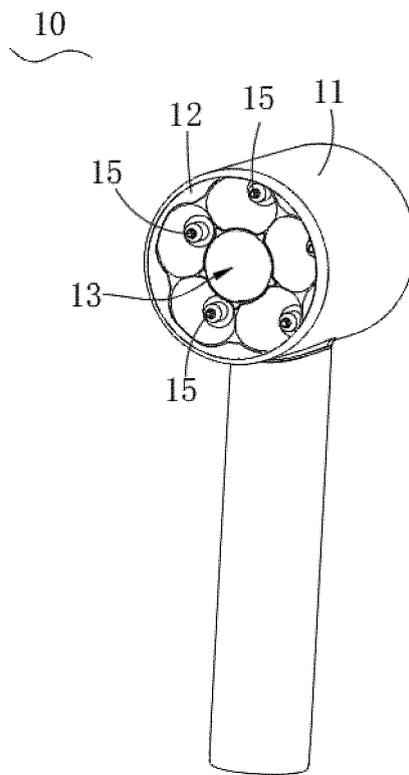


FIG. 1b

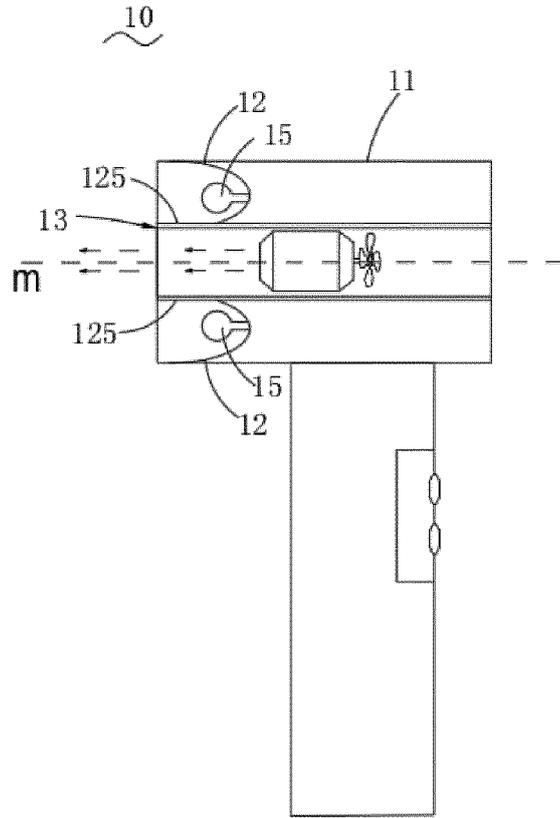


FIG. 2a

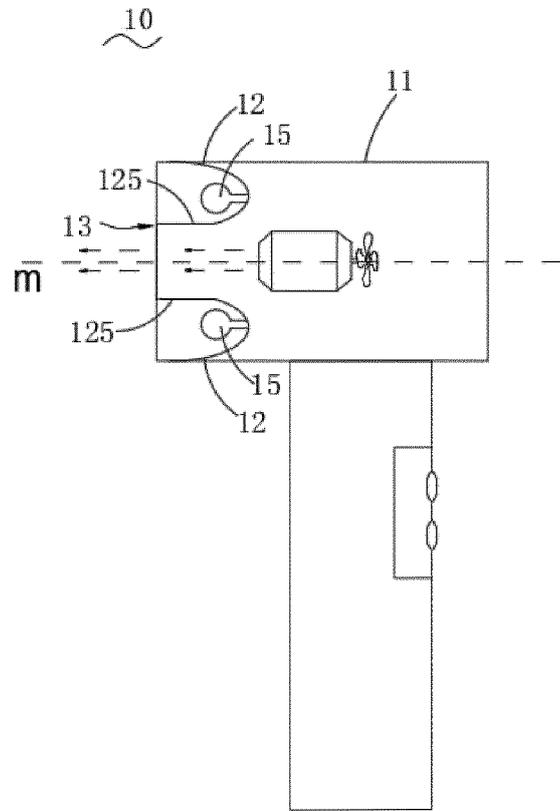


FIG. 2b

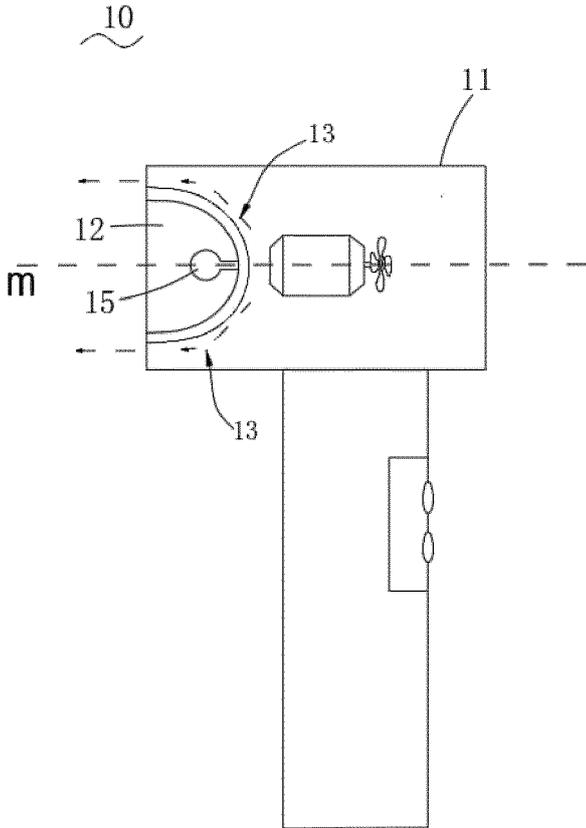


FIG. 2c

12

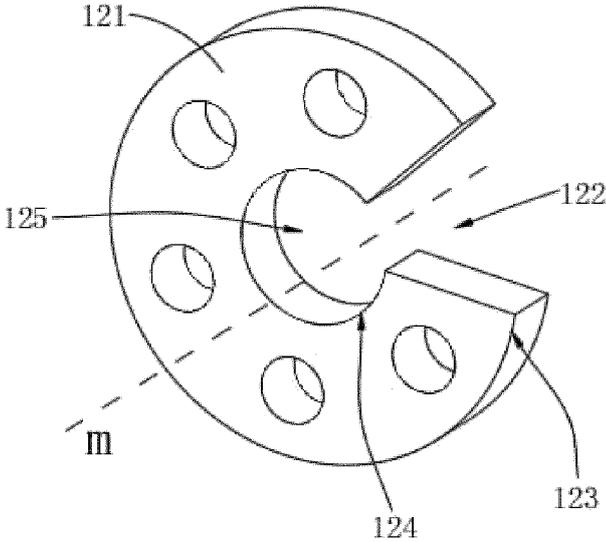


FIG. 3a

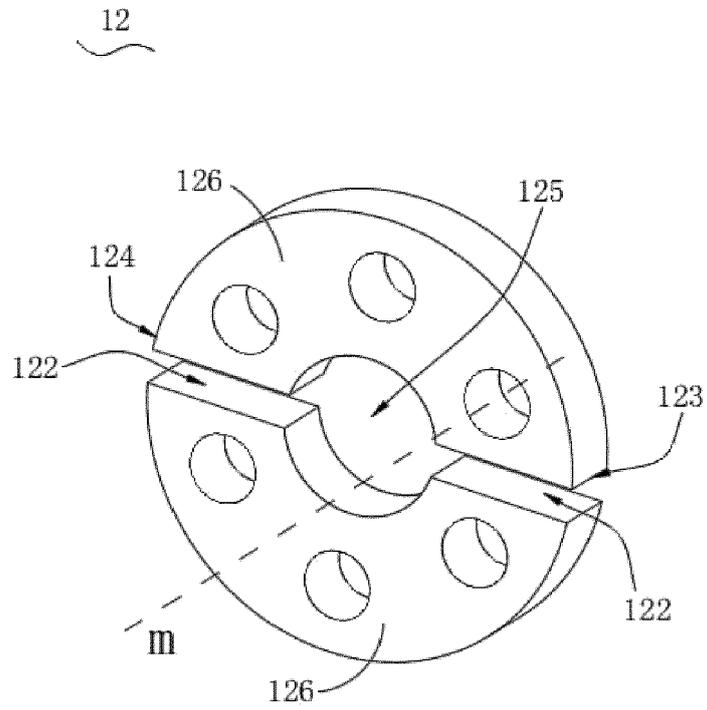


FIG. 3b

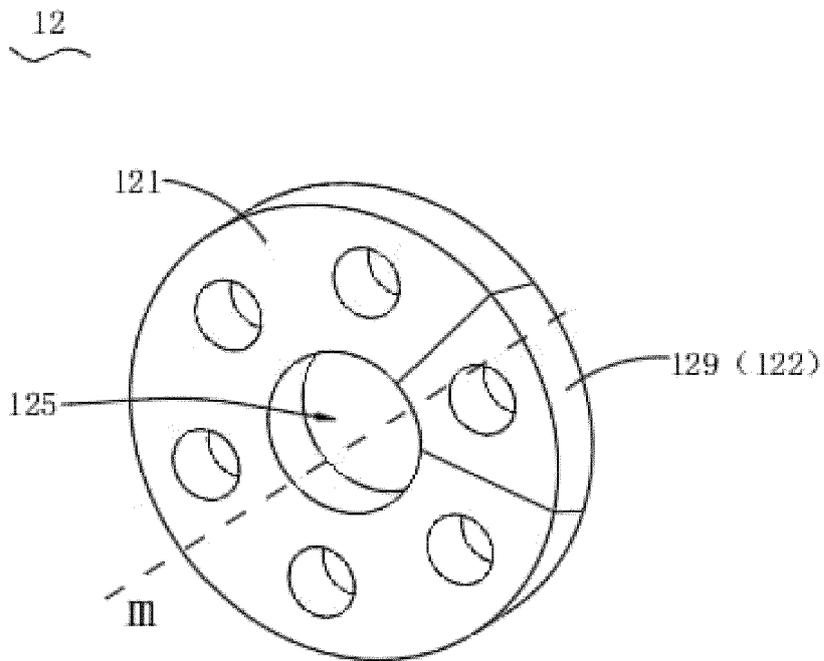


FIG. 3c

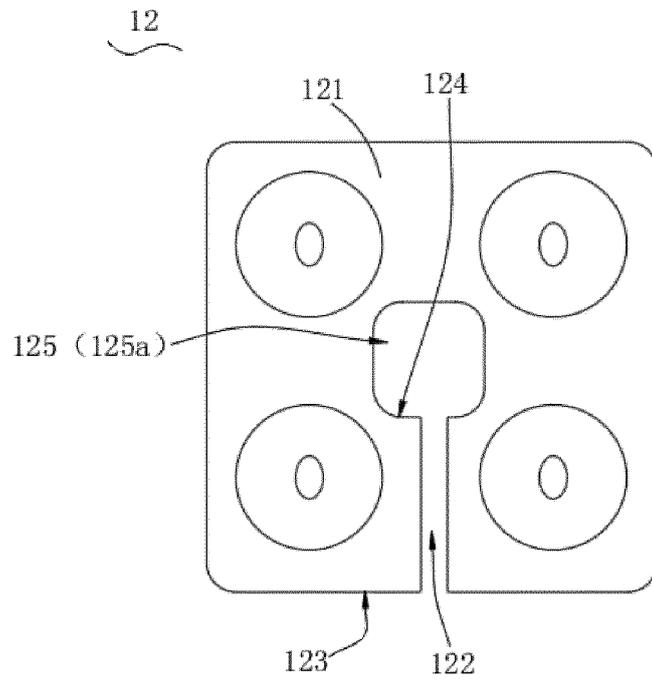


FIG. 4

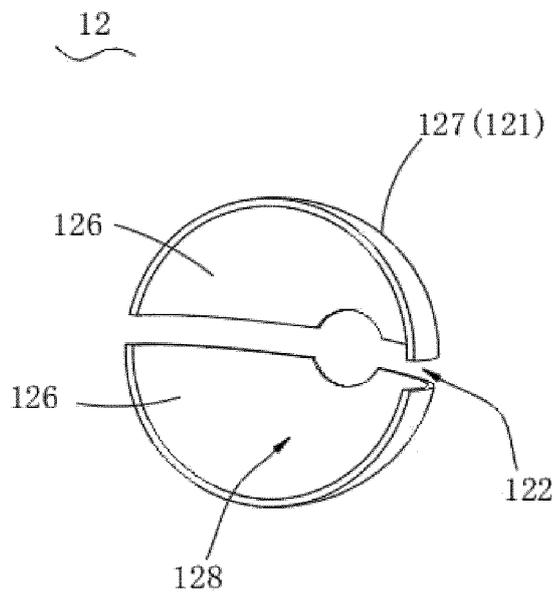


FIG. 5

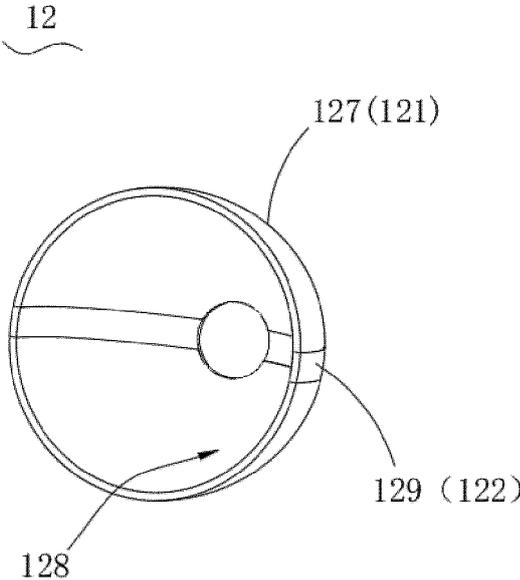


FIG. 6

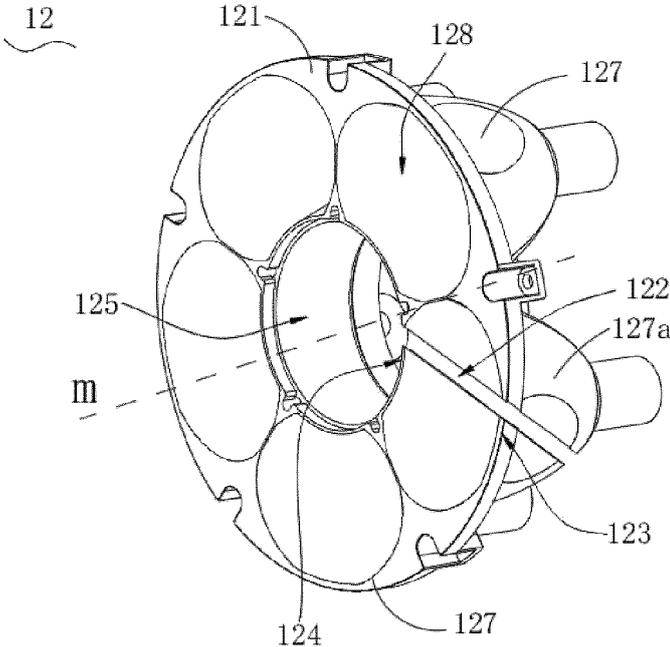


FIG. 7

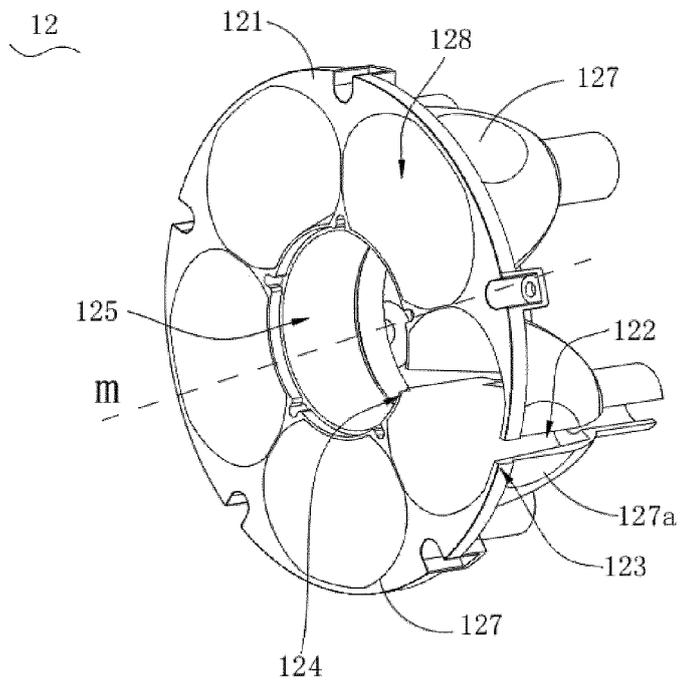


FIG. 8

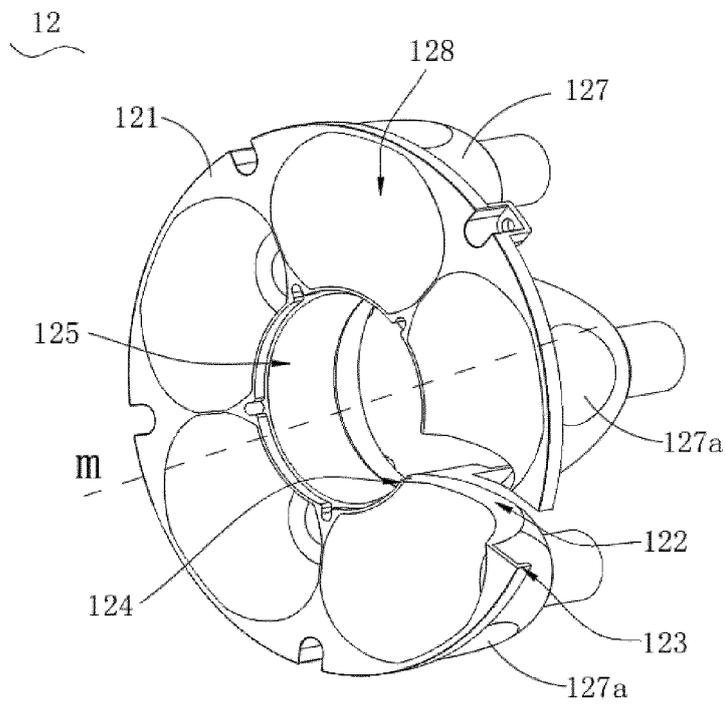


FIG. 9

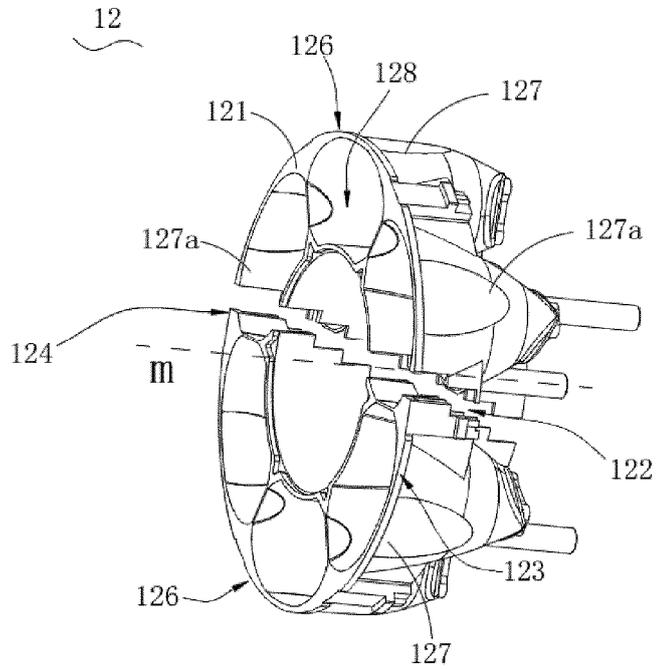


FIG. 10

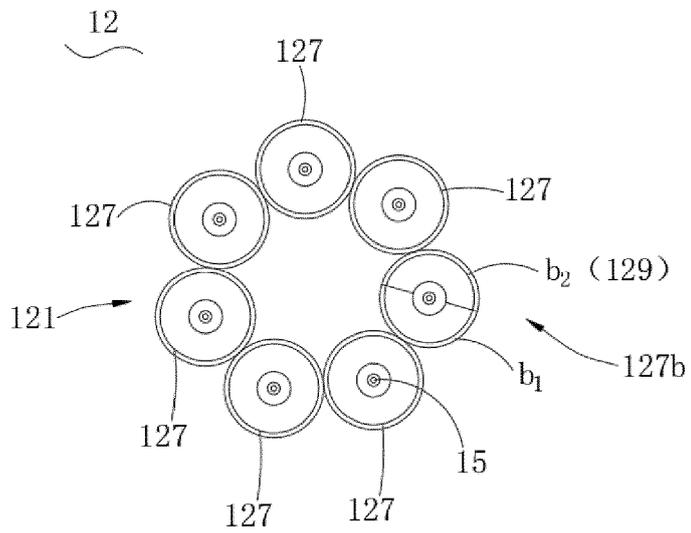


FIG. 11

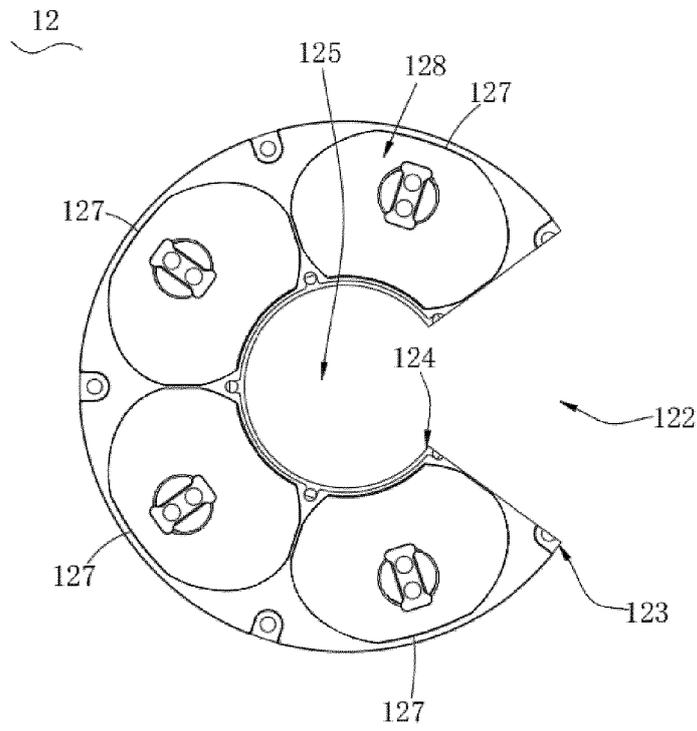


FIG. 12

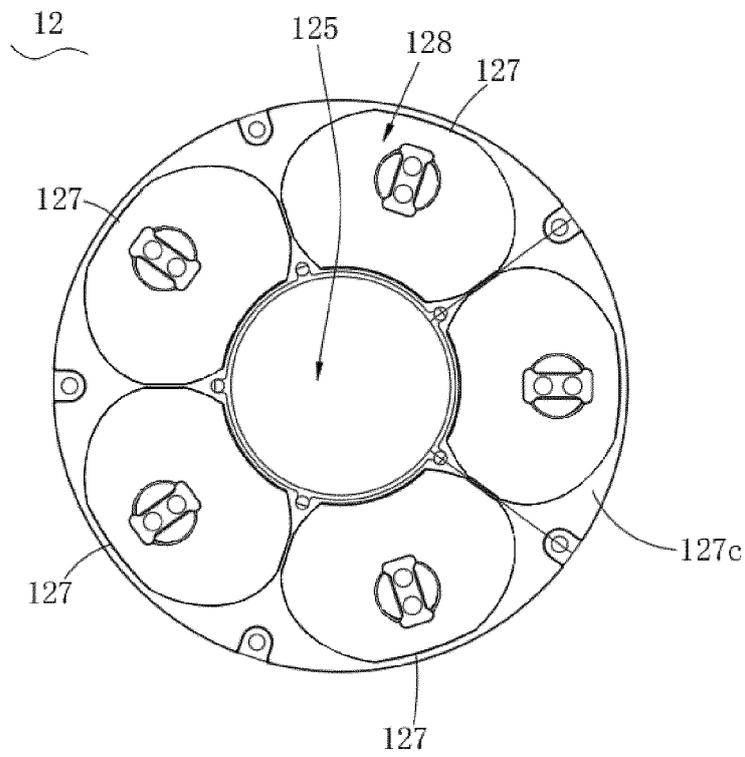


FIG. 13

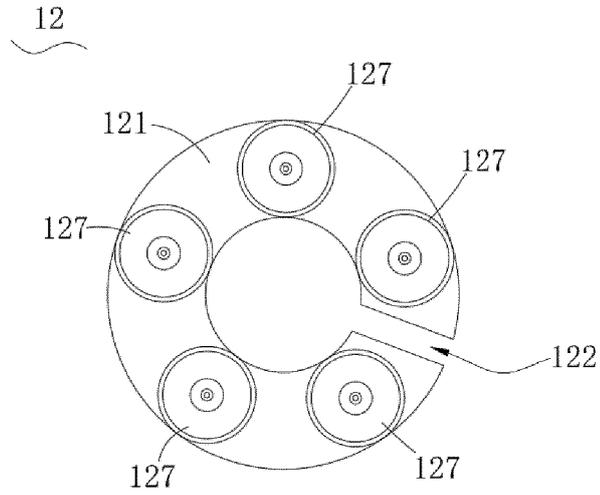


FIG. 14

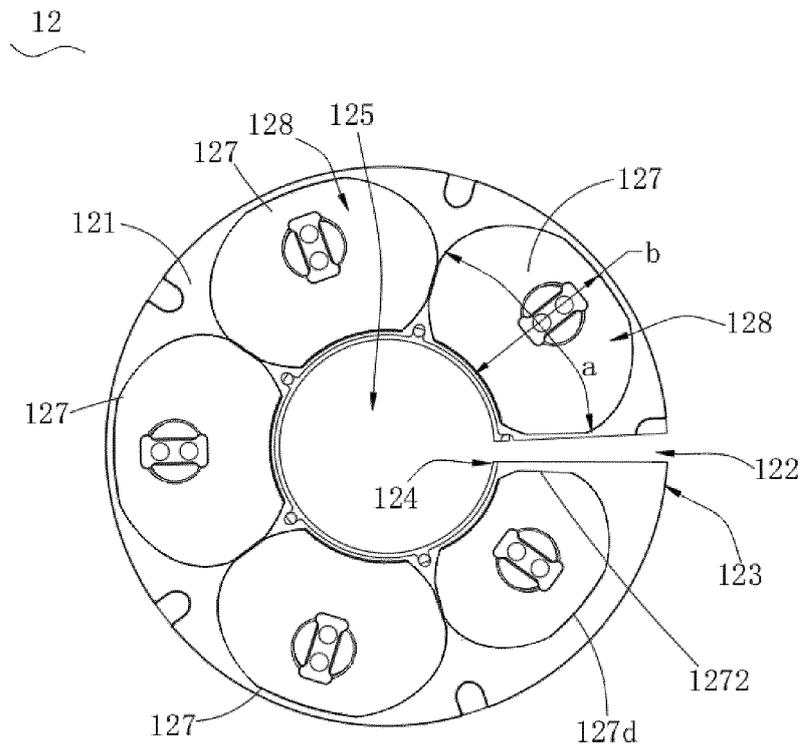


FIG. 15

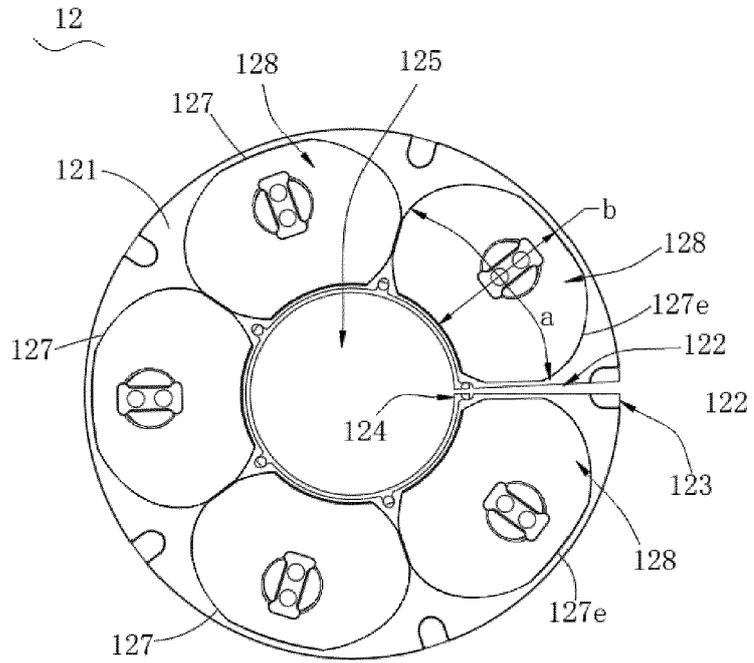


FIG. 16

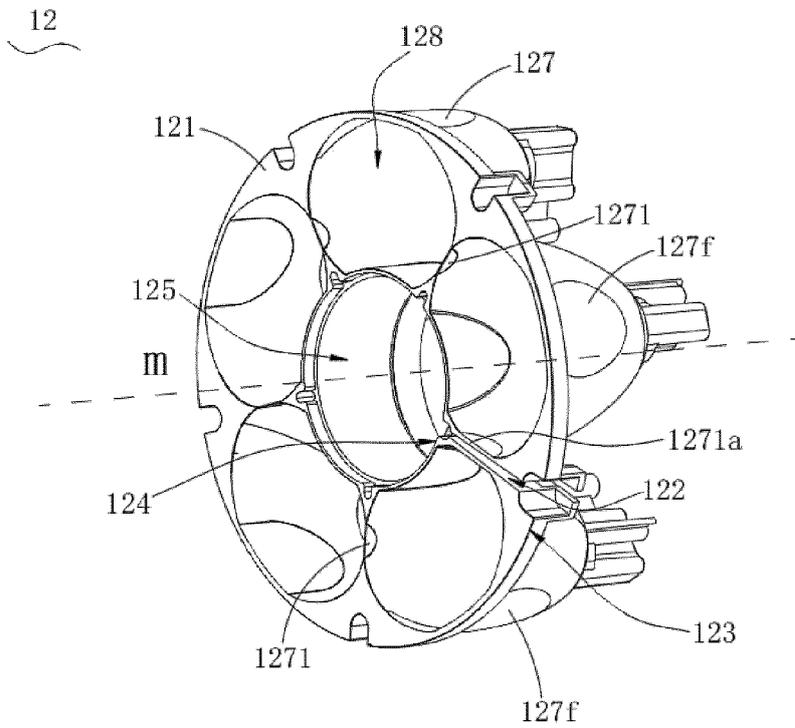


FIG. 17

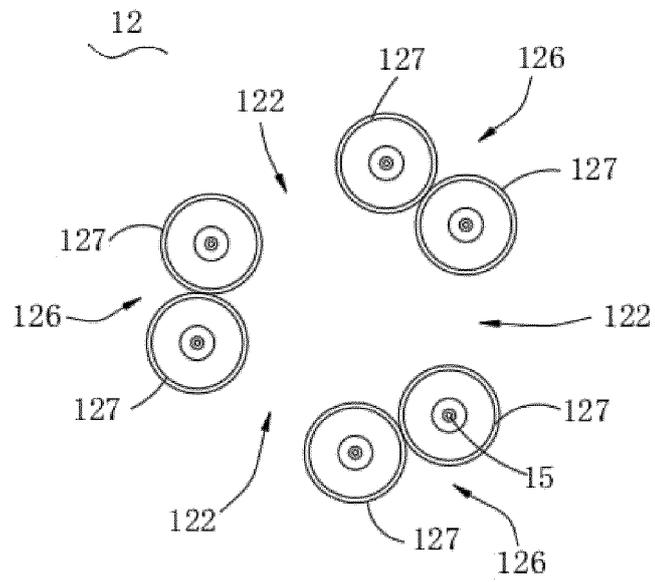


FIG. 18

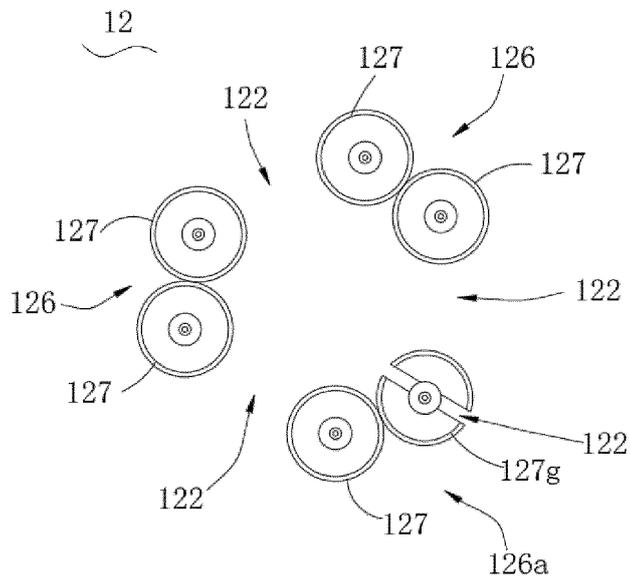


FIG. 19

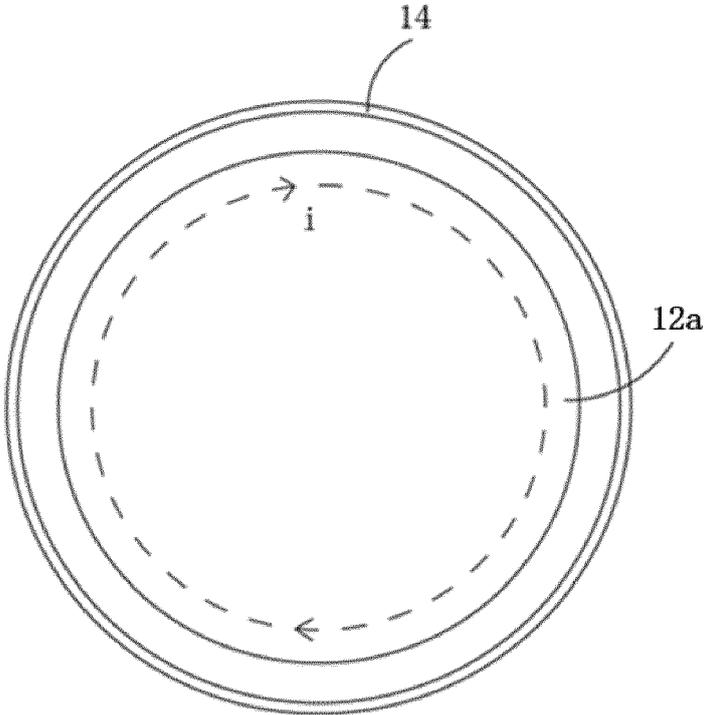


FIG. 20a

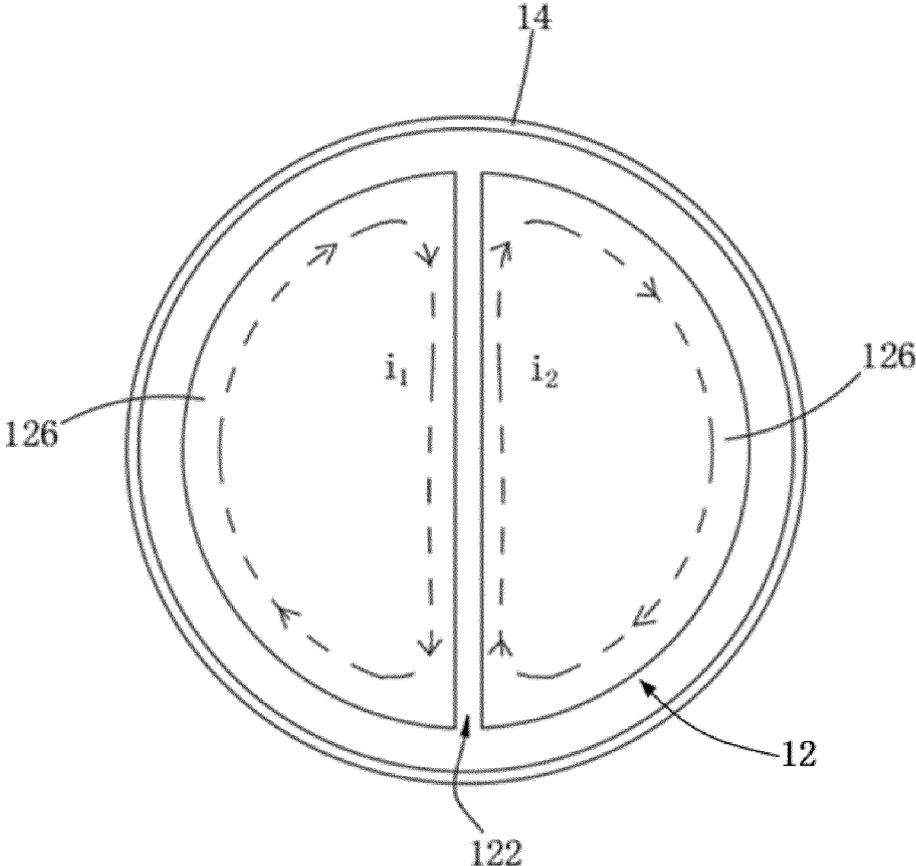


FIG. 20b

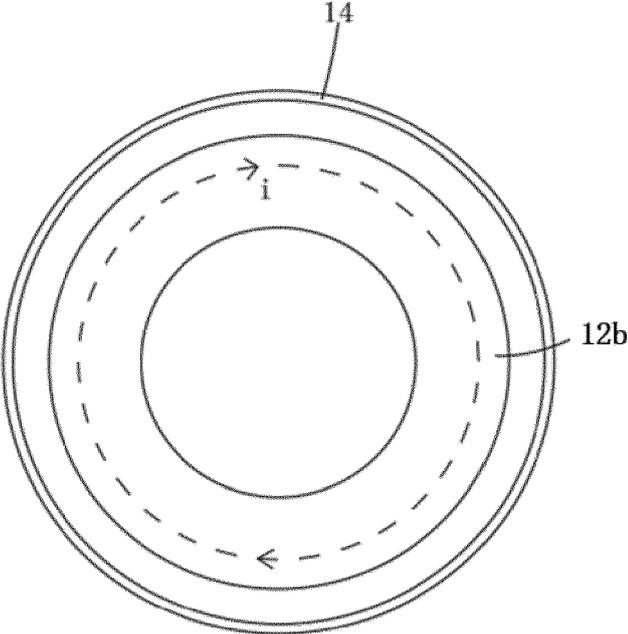


FIG. 21a

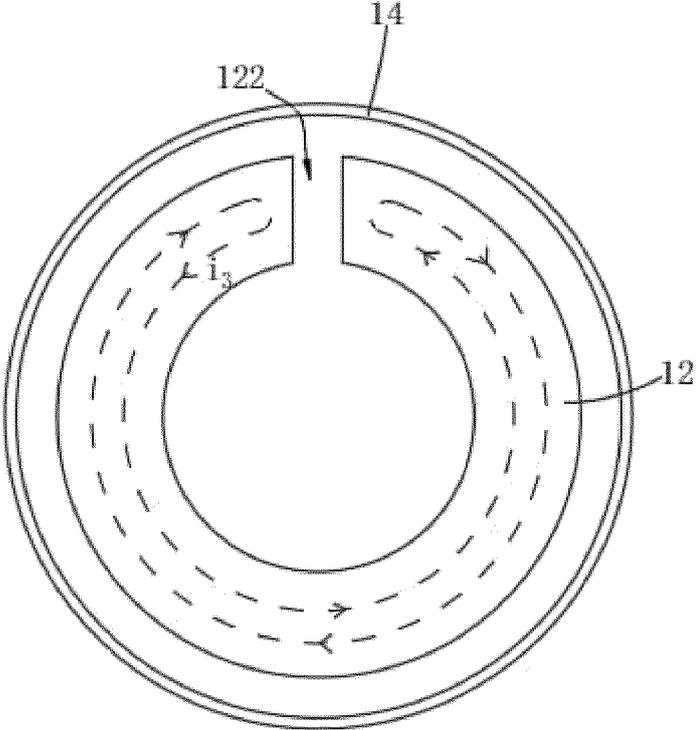


FIG. 21b

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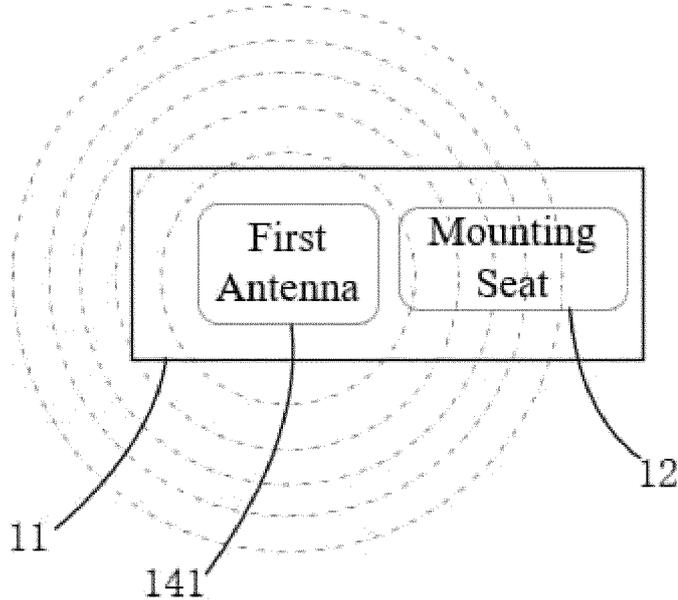


FIG. 22

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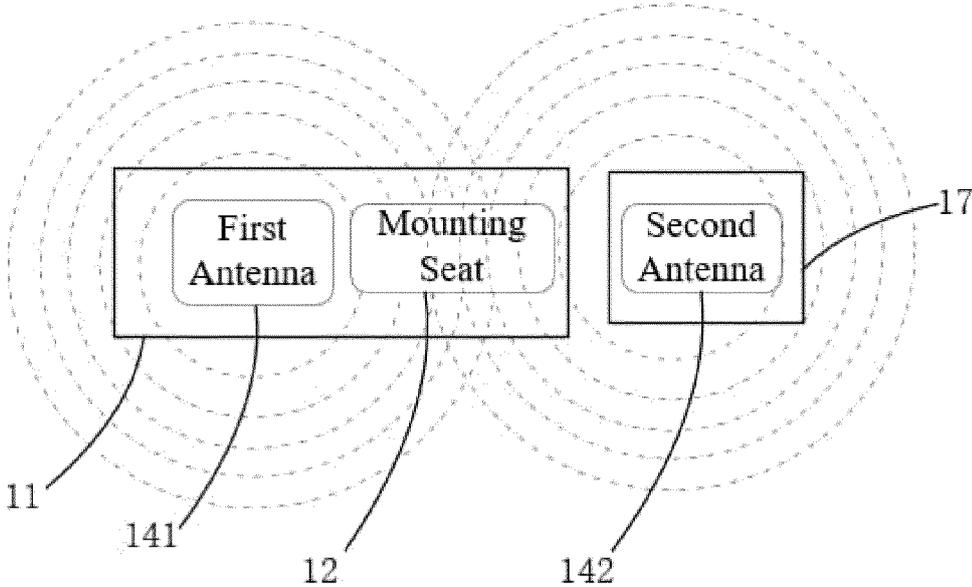


FIG. 23



EUROPEAN SEARCH REPORT

Application Number
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Place of search The Hague		Date of completion of the search 4 March 2025	Examiner Nicolás, Carlos
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