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Phone holder for a vehicle cup holder

Abstract

The phone holder for a vehicle cup holder is a mechanical structure configured for use with a vehicle cup holder. The phone holder for a vehicle cup holder is configured for use with a first personal data device. The phone holder for a vehicle cup holder secures the first personal data device to a vehicle. The phone holder for a vehicle cup holder comprises a mounting structure, a pedestal, and a threaded connection. The threaded connection attaches the pedestal to the mounting structure. The pedestal anchors the mounting structure into the vehicle cup holder. The first personal data device mounts in the mounting structure. In some embodiments, the phone holder for a vehicle cup holder may be configured to secure a second personal data device to the vehicle.

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Background/Summary

CROSS REFERENCES TO RELATED APPLICATIONS (1) This application claims the benefit of priority to U.S. Provisional Application No. 63/296,198, filed 4 Jan. 2022, which is incorporated by reference herein in its entirety.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

(1) Not Applicable

REFERENCE TO APPENDIX

(2) Not Applicable

BACKGROUND OF THE INVENTION

Field of the Invention

(3) The present invention relates to the field of arrangements of passenger fittings for beverages and hand-held devices, more specifically, a phone holder for a vehicle cup holder.

Summary of Invention

- (4) The phone holder for a vehicle cup holder is a mechanical structure configured for use with a vehicle cup holder. The phone holder for a vehicle cup holder is configured for use with a first personal data device. The phone holder for a vehicle cup holder secures the first personal data device to a vehicle. The phone holder for a vehicle cup holder comprises a mounting structure, a pedestal, and a threaded connection. The threaded connection attaches the pedestal to the mounting structure. The pedestal anchors the mounting structure into the vehicle cup holder. The first personal data device mounts in the mounting structure. In some embodiments, the phone holder for a vehicle cup holder may be configured to secure a second personal data device to the vehicle.
- (5) An object of the invention is to provide a phone holder that detachably inserts into a vehicle cup holder.
- (6) Another object of the invention is to a phone holder that holds a first personal data device in a plurality of slots.
- (7) A further object of the invention is to provide a phone holder that secures the first personal data device using a retaining structure.
- (8) Yet another object of the invention is to provide a phone holder that holds a first personal data device in a plurality of front slots and holds a second personal data device in a plurality of rear slots.
- (9) These together with additional objects, features and advantages of the phone holder for a vehicle cup holder will be readily apparent to those of ordinary skill in the art upon reading the following detailed description of the presently preferred, but nonetheless illustrative, embodiments when taken in conjunction with the accompanying drawings.
- (10) In this respect, before explaining the current embodiments of the phone holder for a vehicle cup holder in detail, it is to be understood that the phone holder for a vehicle cup holder is not limited in its applications to the details of construction and arrangements of the components set forth in the following description or illustration. Those skilled in the art will appreciate that the concept of this disclosure may be readily utilized as a basis for the design of other structures, methods, and systems for carrying out the several purposes of the phone holder for a vehicle cup holder.
- (11) It is therefore important that the claims be regarded as including such equivalent construction insofar as they do not depart from the spirit and scope of the phone holder for a vehicle cup holder. It is also to be understood that the phraseology and terminology employed herein are for purposes of description and should not be regarded as limiting.
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Description

BRIEF DESCRIPTION OF DRAWINGS

- (1) The accompanying drawings, which are included to provide a further understanding of the invention are incorporated in and constitute a part of this specification, illustrate an embodiment of the invention and together with the description serve to explain the principles of the invention. They are meant to be exemplary illustrations provided to enable persons skilled in the art to practice the disclosure and are not intended to limit the scope of the appended claims.
- (2) FIG. 1 is a rear view of an embodiment of the disclosure.
- (3) FIG. 2 is a side view of an embodiment of the disclosure.
- (4) FIG. 3 is a front view of an embodiment of the disclosure.
- (5) FIG. 4 is an in-use view of an embodiment of the disclosure.
- (6) FIG. 5 is an isometric view of an alternative embodiment of the disclosure.
- (7) FIG. 6 is a front view of an alternative embodiment of the disclosure.
- (8) FIG. 7 is a rear view of an alternative embodiment of the disclosure.
- (9) FIG. 8 is a side view of an alternative embodiment of the disclosure.

DETAILED DESCRIPTION OF THE EMBODIMENT

(10) The following detailed description is merely exemplary in nature and is not intended to limit the described embodiments of the application and uses of the described embodiments. As used herein, the word “exemplary” or “illustrative” means “serving as an example, instance, or illustration.” Any implementation described herein as “exemplary” or “illustrative” is not necessarily to be construed as preferred or advantageous over other implementations. All of the implementations described below are exemplary implementations provided to enable persons skilled in the art to practice the disclosure and are not intended to limit the scope of the appended claims. Furthermore, there is no intention to be bound by any expressed or implied theory presented in the preceding technical field, background, brief summary or the following detailed description. As used herein, the word “or” is intended to be inclusive.

(11) Detailed reference will now be made to a first potential embodiment of the disclosure, which is illustrated in FIGS. 1 through 8.

(12) The phone holder for a vehicle cup holder **100** (hereinafter invention) is a mechanical structure configured for use with a vehicle cup holder **105**. The invention **100** is configured for use with a first personal data device **104**. The invention **100** secures the first personal data device **104** to a vehicle. The invention **100** comprises a mounting structure **101**, a pedestal **102**, and a threaded connection **103**. The threaded connection **103** attaches the pedestal **102** to the mounting structure **101**. The pedestal **102** anchors the mounting structure **101** into the vehicle cup holder **105**. The first personal data device **104** mounts in the mounting structure **101**. In some embodiments, the invention **100** may be configured to secure a second personal data device **106** to the vehicle.

(13) The vehicle cup holder **105** is a negative space that is formed in the cab of a vehicle. The vehicle cup holder **105** is a prism shaped structure. The vehicle cup holder **105** may be pan shaped. The vehicle cup holder **105** forms a storage structure intended to contain a beverage. The pedestal **102** is geometrically complementary to the vehicle cup holder **105** such that the pedestal **102** inserts into the vehicle cup holder **105**. The vehicle cup holder **105** forms an anchor point used to anchor the pedestal **102** into a fixed position relative to the vehicle cup holder **105**.

(14) The first personal data device **104** is a programmable electrical device. The first personal data device **104** further comprises an application. The first personal data device **104** provides data management and communication services through one or more functions referred to as an application. The application is a set of logical operating instructions that are performed by the first personal data device **104**. The addition of an application will provide increased functionality for the first personal data device **104**. Methods to design and implement an application on the first personal data device **104** are well known and documented in the electrical arts. The first personal data device **104** is defined elsewhere in this disclosure.

(15) The threaded connection **103** is a fastening structure. The threaded connection **103** removably attaches the pedestal **102** to the mounting structure **101**. The threaded connection **103** allows the mounting structure **101** to rotate relative to the pedestal **102** such that the position of the first personal data device **104** relative to the vehicle cup holder **105** can be adjusted into a desired fixed position. The threaded connection **103** is defined elsewhere in this disclosure.

(16) The pedestal **102** is a mechanical structure. The pedestal **102** is a prism shaped structure. The pedestal **102** is geometrically complementary to the negative space formed by the vehicle cup holder **105**. The pedestal **102** is sized such that the pedestal **102** inserts into the vehicle cup holder **105**. The insertion of the pedestal **102** into the vehicle cup holder **105** anchors the mounting structure **101** and the first personal data device **104** into a fixed position relative to the vehicle cup holder **105**.

(17) The mounting structure **101** is a mechanical structure. The mounting structure **101** forms the superior structure of the invention **100**. The mounting structure **101** forms the structure that secures the first personal data device **104** in a fixed position relative to the vehicle cup holder **105**. The mounting structure **101** comprises a mounting ring **111**, a vertical support **112**, and a retaining

structure **113**.

(18) The mounting ring **111** is a disk shaped structure. The mounting ring **111** has a semi-enclosed disk structure. The mounting ring **111** has a ring shape. The mounting ring **111** forms a ring shape. The threaded connection **103** attaches the mounting ring **111** to the pedestal **102** such that the congruent ends of the mounting ring **111** are horizontally oriented. The threaded connection **103** secures the mounting ring **111** to the pedestal **102** such that the mounting structure **101** rotates relative to the pedestal **102**. The threaded connection **103** attaches the mounting ring **111** to the pedestal **102** such that the mounting ring **111** and the pedestal **102** form a composite prism structure. The mounting ring **111** comprises a perimeter structure **121**, a characteristic aperture **122**, and a plurality of slots **123**.

(19) The perimeter structure **121** forms the physical structure of the mounting ring **111**. The perimeter structure **121** forms the exterior surfaces of the mounting ring **111**. The perimeter structure **121** forms the lateral faces of the disk structure of the mounting ring **111**.

(20) The characteristic aperture **122** is a disk shaped negative space. The characteristic aperture **122** is formed through the congruent ends of the disk structure of the mounting ring **111**. The characteristic aperture **122** forms the characteristic aperture **122** structure that is characteristic of a ring structure. The first personal data device **104** partially inserts into the negative space formed by the characteristic aperture **122**.

(21) Each of the plurality of slots **123** is a negative space that is formed through the lateral face structure of the perimeter structure **121**. Each of the plurality of slots **123** is formed through the superior congruent end of the ring structure formed by the first personal data device **104**. Each of the plurality of slots **123** is sized such that the edge of the first personal data device **104** will insert into the negative spaces formed by the plurality of slots **123**. The plurality of slots **123** hold the first personal data device **104** in a fixed position when the first personal data device **104** is secured to the mounting structure **101**.

(22) The vertical support **112** is a disk shaped structure. The vertical support **112** attaches to the perimeter structure **121** of the mounting ring **111**. The vertical support **112** attaches to the mounting ring **111** such that the congruent ends of the disk structure of the vertical support **112** have a roughly vertical orientation. The vertical support **112** attaches to the mounting ring **111** such that the vertical support **112** projects above the superior surface of the mounting ring **111**. The vertically oriented congruent ends of the vertical support **112** forms a supporting surface that prevents the first personal data device **104** from rotating towards a horizontal orientation.

(23) The retaining structure **113** is a mechanical structure. The retaining structure **113** permanently attaches to the exterior lateral surface of the disk structure of the mounting ring **111**. The retaining structure **113** removably attaches to the first personal data device **104** when the first personal data device **104** inserts into the mounting ring **111**. The retaining structure **113** is an elastic structure. The retaining structure **113** deforms when the retaining structure **113** attaches to the first personal data device **104**. The first personal data device **104** prevents the retaining structure **113** from fully returning to a relaxed shape. The resulting counterforce applied by the retaining structure **113** to the first personal data device **104** holds the first personal data device **104** in a fixed position relative to the mounting ring **111**. The retaining structure **113** comprises an elastic band **131** and a band hook **132**.

(24) The band hook **132** is a fastening structure. The band hook **132** removably attaches to the superior surface of the first personal data device **104**. The elastic band **131** is a loop structure formed from an elastomeric material. The elastic band **131** permanently attaches to the exterior lateral surface of the disk structure of the mounting ring **111**. The elastic band **131** is deformed as the band hook **132** is attached to the first personal data device **104**. The counterforce generated by the elastic band **131** as the elastic band **131** is prevented from returning to a relaxed shape by the first personal data device **104** secures the first personal data device **104** into a fixed position within the mounting structure **101**.

(25) In an alternative embodiment, the invention **100** may comprise a flanged pedestal **150** that may be configured to be inserted into the vehicle cup holder **105**. A flange **151** may be a projecting rim located at the top of the flanged pedestal **150**. The flange **151** may be operable as the mounting structure **101**. The retaining structure **113** may couple directly to the flange **151** of the flanged pedestal **150**. The flange **151** may comprise a plurality of front slots **124** and a plurality of rear slots **125**. The plurality of front slots **124** may be configured to hold the first personal data device **104** adjacent to the retaining structure **113**. The plurality of rear slots **125** may be configured to hold the second personal data device **106**. The plurality of rear slots **125** may be sized such that the edge of the second personal data device **106** will insert into the negative spaces formed by the plurality of rear slots **125**. The plurality of rear slots **125** hold the second personal data device **106** in a fixed position when the second personal data device **106** is secured to the mounting structure **101**. The plurality of rear slots **125** may orient the second personal data device **106** at an oblique angle such that the second personal data device **106** tilts away from a cup **140** placed into the vehicle cup holder **105**.

Definitions

(26) Unless otherwise stated, the words “up”, “down”, “top”, “bottom”, “upper”, and “lower” should be interpreted within a gravitational framework. “Down” is the direction that gravity would pull an object. “Up” is the opposite of “down”. “Bottom” is the part of an object that is down farther than any other part of the object. “Top” is the part of an object that is up farther than any other part of the object. “Upper” may refer to top and “lower” may refer to the bottom. As a non-limiting example, the upper end of a vertical shaft is the top end of the vertical shaft.

(27) As used in this disclosure, an “anchor” may be a device that holds an object in place. When used as a verb, “anchor” may refer to holding an object firmly or securely.

(28) As used in this disclosure, an “anchor point” may be a location to which a first object can be securely attached to a second object.

(29) As used in this disclosure, “composite prism” may refer to a structure that is formed from a plurality of structures selected from the group consisting of a prism structure and a pyramid structure. The plurality of selected structures may or may not be truncated. The plurality of prism structures are joined together such that the center axes of each of the plurality of structures are aligned. The congruent ends of any two structures selected from the group consisting of a prism structure and a pyramid structure need not be geometrically similar.

(30) As used in this disclosure, “congruent” may be a term that compares a first object to a second object. Specifically, two objects are said to be congruent when: 1) they are geometrically similar; and, 2) the first object can be superimposed over the second object such that the first object aligns, within manufacturing tolerances, with second object. Always use Geometrically similar, correspond and one to one

(31) As used herein, the words “couple”, “couples”, “coupled” or “coupling”, may refer to connecting, either directly or indirectly, and does not necessarily imply a mechanical connection.

(32) As used in this disclosure, a “disk” may be a cylindrically shaped object with parallel opposing sides. A disk generally has a thickness (as measured from flat side to flat side) that is less than the radius of the cylinder.

(33) As used in this disclosure, “elastic” may refer to a material or object that deforms when a force is applied to stretch or compress the material and that returns to its relaxed shape after the force is removed. A material that exhibits these qualities is also referred to as an elastomeric material.

(34) As used in this disclosure, an “elastic band” may be a loop of textile that is formed using elastic material that can stretched. Alternatively, the elastic band can be a sheeting that is formed from latex, spandex, or an elastic plastic film that can be stretched.

(35) As used in this disclosure, the word “exterior” may be used as a relational term that implies that an object is not located or contained within the boundary of a structure or a space.

(36) As used in this disclosure, a “flange” may be a protruding rib, edge, or collar that is used to

hold an object in place or to attach a first object to a second object.

(37) As used herein, “front” may indicate the side of an object that is closest to a forward direction of travel under normal use of the object or the side or part of an object that normally presents itself to view or that is normally used first. “Rear” or “back” may refer to the side that is opposite the front.

(38) As used in this disclosure, a “hook” may be an object that is curved or bent at an angle such that items can be hung on or caught by the object or such that the object may be suspended from another object.

(39) As used in this disclosure, “horizontal” may be a directional term that refers to a direction that is perpendicular to the local force of gravity. Unless specifically noted in this disclosure, the horizontal direction is always perpendicular to the vertical direction.

(40) As used in this disclosure, “negative space” may be a method of defining an object through the use of open or empty space as the definition of the object itself, or, through the use of open or empty space to describe the boundaries of an object.

(41) As used herein, “oblique angle” may refer to any angle that is not a right angle or a multiple of a right angle.

(42) As used in this disclosure, “orientation” may refer to the positioning and/or angular alignment of a first object relative to a second object or relative to a reference position or reference direction.

(43) As used herein, “pan” may refer to a hollow and prism-shaped containment structure. The pan has a single open face. The open face of the pan is often, but not always, the superior face of the pan.

(44) As used in this disclosure, a “pedestal” may be an intermediary load bearing structure that is placed between a supporting surface and an object, structure, or load.

(45) As used in this disclosure, a “perimeter” may be one or more curved or straight lines that bound an enclosed area on a plane or surface. The perimeter of a circle is commonly referred to as a circumference.

(46) As used in this disclosure, a “personal data device” may be a handheld device that is used for managing personal information and communication. Examples of personal data device include, but are not limited to, cellular phones, tablet computers, and smart phones.

(47) As used in this disclosure, a “prism” may be a 3 dimensional geometric structure wherein the form factor of two faces of the prism are congruent and the two congruent faces are parallel to each other. The two congruent faces are also commonly referred to as the ends of the prism. The surfaces that connect the two congruent faces are called that lateral faces. In this disclosure, when further description is required, a prism will be named for the geometric or descriptive name of the form factor of the two congruent faces. If the form factor of the two corresponding faces has no clearly established geometric or descriptive name, the term irregular prism will be used. The center axis of a prism is defined as a line that joins the center point of the first congruent face of the prism to the center point of the second corresponding congruent face of the prism. The center axis of a prism is otherwise analogous the center axis of a cylinder. A prism wherein the ends are circles is commonly referred to as a cylinder.

(48) As used in this disclosure, a structure is considered to be in its “relaxed state” when no shear, strain, or torsional forces are being applied to the structure.

(49) As used in this disclosure, a “rim” may be an outer edge or border that follows along the perimeter of an object.

(50) As used in this disclosure, a “slot” may be a prism-shaped negative space formed as a groove, cut, opening, or aperture in or through an object.

(51) As used in this disclosure, the term “superior” may refer to a directional reference that is parallel to and in the opposite direction of the force of gravity.

(52) As used in this disclosure, a “supporting surface” may be a horizontal surface upon which an object is placed. Within this disclosure, it is assumed that the object is placed on the supporting

surface in an orientation that is appropriate for the normal or anticipated use of the object.

(53) As used in this disclosure, a “threaded connection” may be a type of fastener that is used to join a first tube shaped and a second tube shaped object together. The first tube shaped object is fitted with a first fitting selected from an interior screw thread or an exterior screw thread. The second tube shaped object is fitted with the remaining screw thread. The tube shaped object fitted with the exterior screw thread is placed into the remaining tube shaped object such that: 1) the interior screw thread and the exterior screw thread interconnect; and, 2) when the tube shaped object fitted with the exterior screw thread is rotated the rotational motion is converted into linear motion that moves the tube shaped object fitted with the exterior screw thread either into or out of the remaining tube shaped object. The direction of linear motion is determined by the direction of rotation. The term threaded connection could also be some mechanical arrangement whereby one part rotates (quarter turn, e.g.) with respect to the second part to lock in place.

(54) As used in this disclosure, “vertical” may refer to a direction that is parallel to the local force of gravity. Unless specifically noted in this disclosure, the vertical direction is always perpendicular to horizontal.

(55) With respect to the above description, it is to be realized that the optimum dimensional relationship for the various components of the invention described above and in FIGS. through 8, include variations in size, materials, shape, form, function, and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the invention.

(56) It shall be noted that those skilled in the art will readily recognize numerous adaptations and modifications which can be made to the various embodiments of the present invention which will result in an improved invention, yet all of which will fall within the spirit and scope of the present invention as defined in the following claims. Accordingly, the invention is to be limited only by the scope of the following claims and their equivalents.

Claims

1. A phone holder for a vehicle cup holder comprising: a mounting structure and a pedestal; wherein the phone holder for a vehicle cup holder is a mechanical structure configured for use with a vehicle cup holder; wherein the phone holder for a vehicle cup holder is configured for use with a first personal data device; wherein the phone holder for a vehicle cup holder secures the first personal data device to a vehicle; wherein the pedestal anchors the mounting structure into the vehicle cup holder; wherein the first personal data device mounts in the mounting structure; wherein each of the plurality of slots is a negative space that is formed through a lateral face structure; wherein each of the plurality of slots is formed through a superior congruent end of a ring structure formed by the first personal data device; wherein each of the plurality of slots is sized such that an edge of the first personal data device will insert into the negative spaces formed by the plurality of slots; wherein the plurality of slots hold the first personal data device in a fixed position when the first personal data device is secured to the mounting structure.
2. The phone holder for a vehicle cup holder according to claim 1 wherein the phone holder for a vehicle cup holder further comprises a threaded connection; wherein the threaded connection attaches the pedestal to the mounting structure.
3. The phone holder for a vehicle cup holder according to claim 2 wherein the pedestal is geometrically complementary to the vehicle cup holder such that the pedestal inserts into the vehicle cup holder; wherein the vehicle cup holder forms an anchor point used to anchor the pedestal into a fixed position relative to the vehicle cup holder.
4. The phone holder for a vehicle cup holder according to claim 3 wherein the threaded connection is a fastening structure; wherein the threaded connection removably attaches the pedestal to the

mounting structure; wherein the threaded connection allows the mounting structure to rotate relative to the pedestal such that the position of the first personal data device relative to the vehicle cup holder can be adjusted into a desired fixed position; wherein the threaded connection is defined elsewhere in this disclosure.

5. The phone holder for a vehicle cup holder according to claim 4 wherein the pedestal is a mechanical structure; wherein the pedestal is a prism shaped structure; wherein the pedestal is geometrically complementary to the negative space formed by the vehicle cup holder; wherein the pedestal is sized such that the pedestal inserts into the vehicle cup holder; wherein the insertion of the pedestal into the vehicle cup holder anchors the mounting structure and the first personal data device into a fixed position relative to the vehicle cup holder.

6. The phone holder for a vehicle cup holder according to claim 5 wherein the threaded connection attaches the mounting ring to the pedestal such that the congruent ends of the mounting ring are horizontally oriented; wherein the threaded connection secures the mounting ring to the pedestal such that the mounting structure rotates relative to the pedestal; wherein the threaded connection attaches the mounting ring to the pedestal such that the mounting ring and the pedestal form a composite prism structure; wherein the mounting ring comprises a perimeter structure, a characteristic aperture, and a plurality of slots.

7. The phone holder for a vehicle cup holder according to claim 6 wherein the mounting ring is a disk shaped structure; wherein the mounting ring has a semi-enclosed disk structure; wherein the mounting ring has a ring shape; wherein the mounting ring forms a ring shape; wherein the perimeter structure forms the physical structure of the mounting ring; wherein the perimeter structure forms the exterior surfaces of the mounting ring; wherein the perimeter structure forms the lateral faces of the disk structure of the mounting ring.

8. The phone holder for a vehicle cup holder according to claim 1 wherein the mounting structure is a mechanical structure; wherein the mounting structure forms the superior structure of the phone holder for a vehicle cup holder; wherein the mounting structure forms the structure that secures the first personal data device in a fixed position relative to the vehicle cup holder; wherein the mounting structure comprises a mounting ring, a vertical support, and a retaining structure.

9. The phone holder for a vehicle cup holder according to claim 8 wherein the characteristic aperture is a disk shaped negative space; wherein the characteristic aperture is formed through the congruent ends of the disk structure of the mounting ring; wherein the characteristic aperture forms the characteristic aperture structure that is characteristic of the ring structure.

10. The phone holder for a vehicle cup holder according to claim 9 wherein the first personal data device partially inserts into the negative space formed by the characteristic aperture.

11. The phone holder for a vehicle cup holder according to claim 10 wherein the vertical support is a disk shaped structure; wherein the vertical support attaches to the mounting ring; wherein the vertical support attaches to the mounting ring such that the congruent ends of the disk structure of the vertical support have a vertical orientation; wherein the vertical support attaches to the mounting ring such that the vertical support projects above the superior surface of the mounting ring; wherein the vertically oriented congruent ends of the vertical support forms a supporting surface that prevents the first personal data device from rotating towards a horizontal orientation.

12. The phone holder for a vehicle cup holder according to claim 11 wherein the retaining structure is a mechanical structure; wherein the retaining structure permanently attaches to the exterior lateral surface of the disk structure of the mounting ring; wherein the retaining structure removably attaches to the first personal data device when the first personal data device inserts into the mounting ring.

13. The phone holder for a vehicle cup holder according to claim 12 wherein the retaining structure is an elastic structure; wherein the retaining structure deforms when the retaining structure attaches to the first personal data device; wherein the first personal data device prevents the retaining structure from fully returning to a relaxed shape; wherein the resulting counterforce applied by the

retaining structure to the first personal data device holds the first personal data device in a fixed position relative to the mounting ring; wherein the retaining structure comprises an elastic band and a band hook.

14. The phone holder for a vehicle cup holder according to claim 13 wherein the band hook is a fastening structure; wherein the band hook removably attaches to the superior surface of the first personal data device; wherein the elastic band is a loop structure formed from an elastomeric material; wherein the elastic band permanently attaches to the exterior lateral surface of the disk structure of the mounting ring; wherein the elastic band is deformed as the band hook is attached to the first personal data device; wherein the counterforce generated by the elastic band as the elastic band is prevented from returning to a relaxed shape by the first personal data device secures the first personal data device into a fixed position within the mounting structure.

15. The phone holder for a vehicle cup holder according to claim 1 wherein the phone holder for a vehicle cup holder comprises a flanged pedestal that is configured to be inserted into the vehicle cup holder; wherein a flange is a projecting rim located at the top of the flanged pedestal; wherein the flange is operable as the mounting structure; wherein the retaining structure couples directly to the flange of the flanged pedestal.

16. The phone holder for a vehicle cup holder according to claim 15 wherein the flange comprises a plurality of front slots and a plurality of rear slots; wherein the plurality of front slots are configured to hold the first personal data device adjacent to a retaining structure; wherein the plurality of rear slots are configured to hold a second personal data device.

17. The phone holder for a vehicle cup holder according to claim 16 wherein the plurality of rear slots are sized such that the edge of the second personal data device will insert into the negative spaces formed by the plurality of rear slots; wherein the plurality of rear slots hold the second personal data device in a fixed position when the second personal data device is secured to the mounting structure.

18. The phone holder for a vehicle cup holder according to claim 17 wherein the plurality of rear slots orient the second personal data device at an oblique angle such that the second personal data device tilts away from a cup placed into the vehicle cup holder.
