



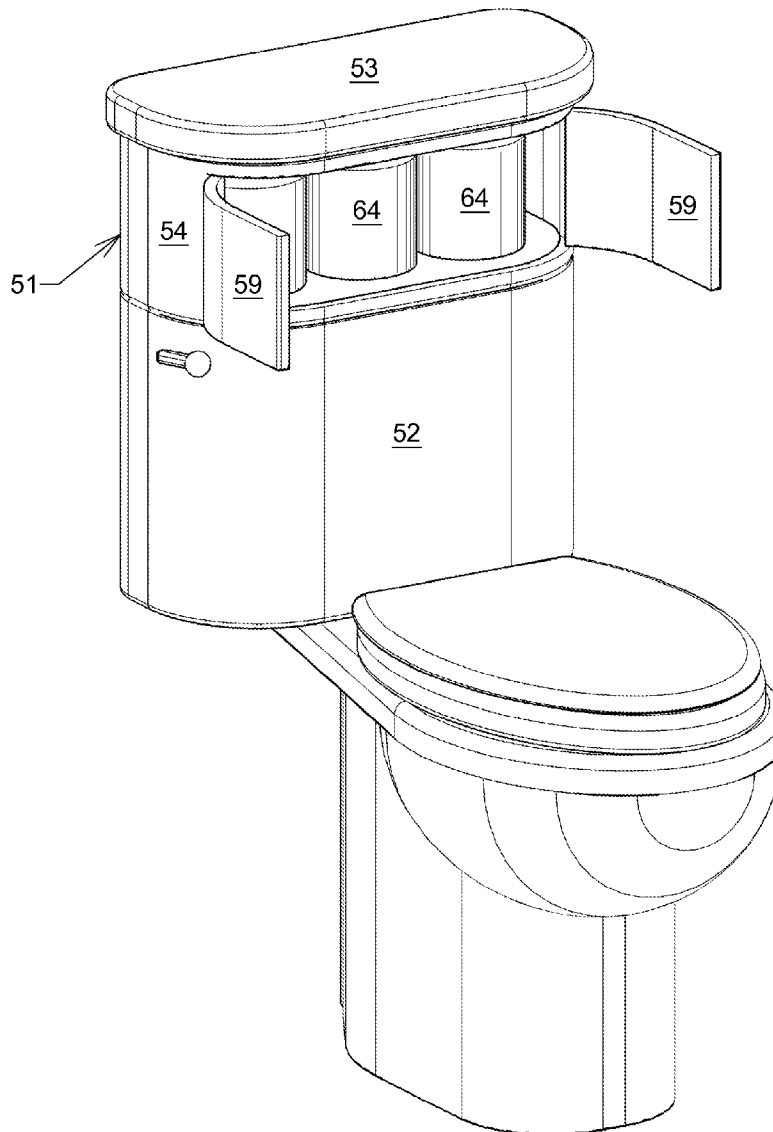
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(19) **United States**(12) **Patent Application Publication**
Harris(10) **Pub. No.: US 2009/0212674 A1**(43) **Pub. Date: Aug. 27, 2009**(54) **MODULAR CABINET STORAGE SYSTEM
FOR TOILETS****Publication Classification**(51) **Int. Cl.**
A47B 83/00 (2006.01)(52) **U.S. Cl.** 312/237(57) **ABSTRACT**

A modular cabinet storage system for toilets that has a modular outside design that allows it to be mounted onto a standard toilet water tank, and is shaped to match the tank so that it blends well with the existing toilet design for aesthetics. Its outside modular design also allows other modular cabinet storage units to be stacked above or below it. The modular cabinet storage system is modular internally as well, providing the means to allow a wide variety of modular subassemblies to be installed inside it, such as shelving, bins, drawers and panels. These subassemblies allow the storage system to provide storage space for articles and to help organize them for easy retrieval.

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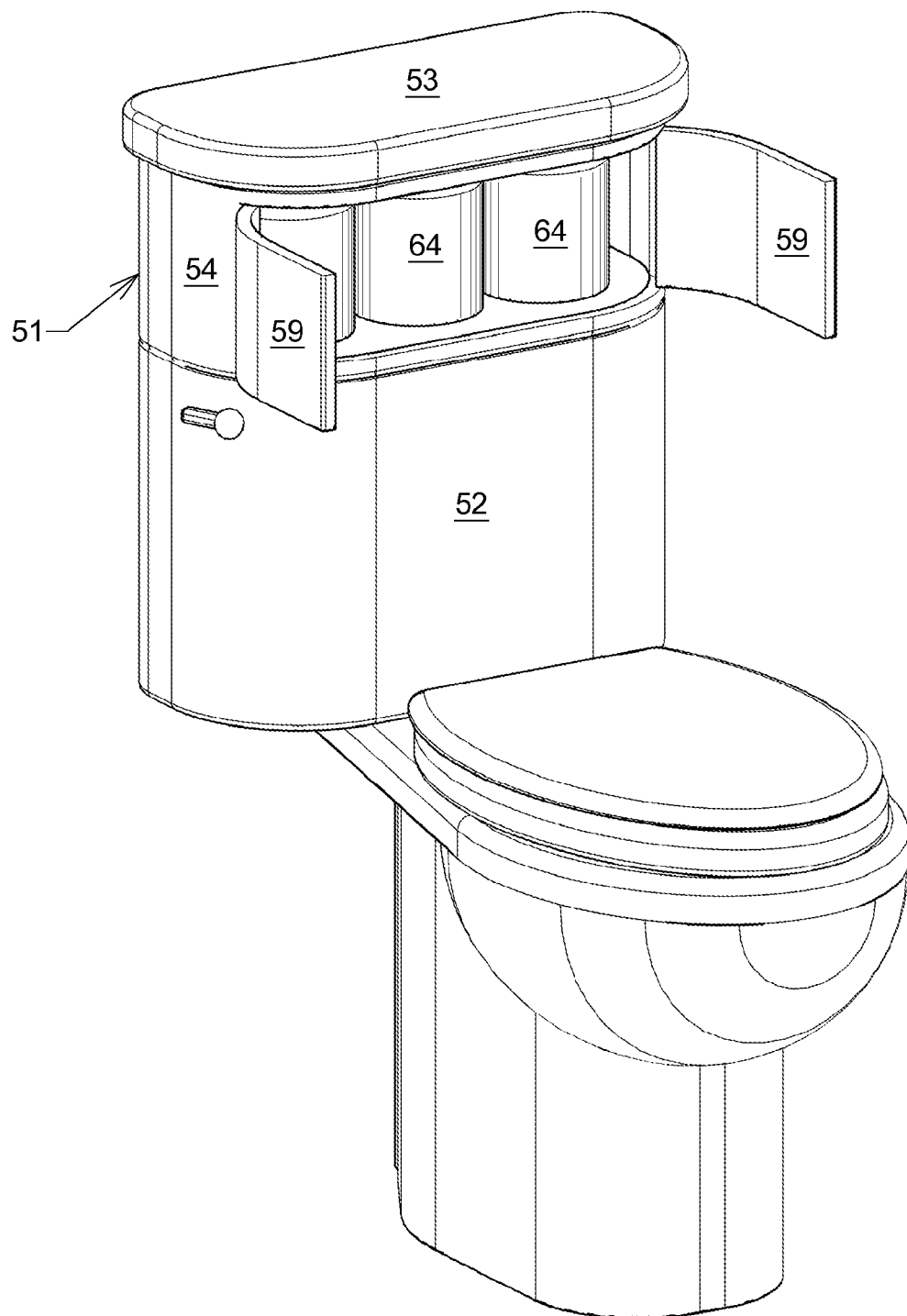


FIG. 1

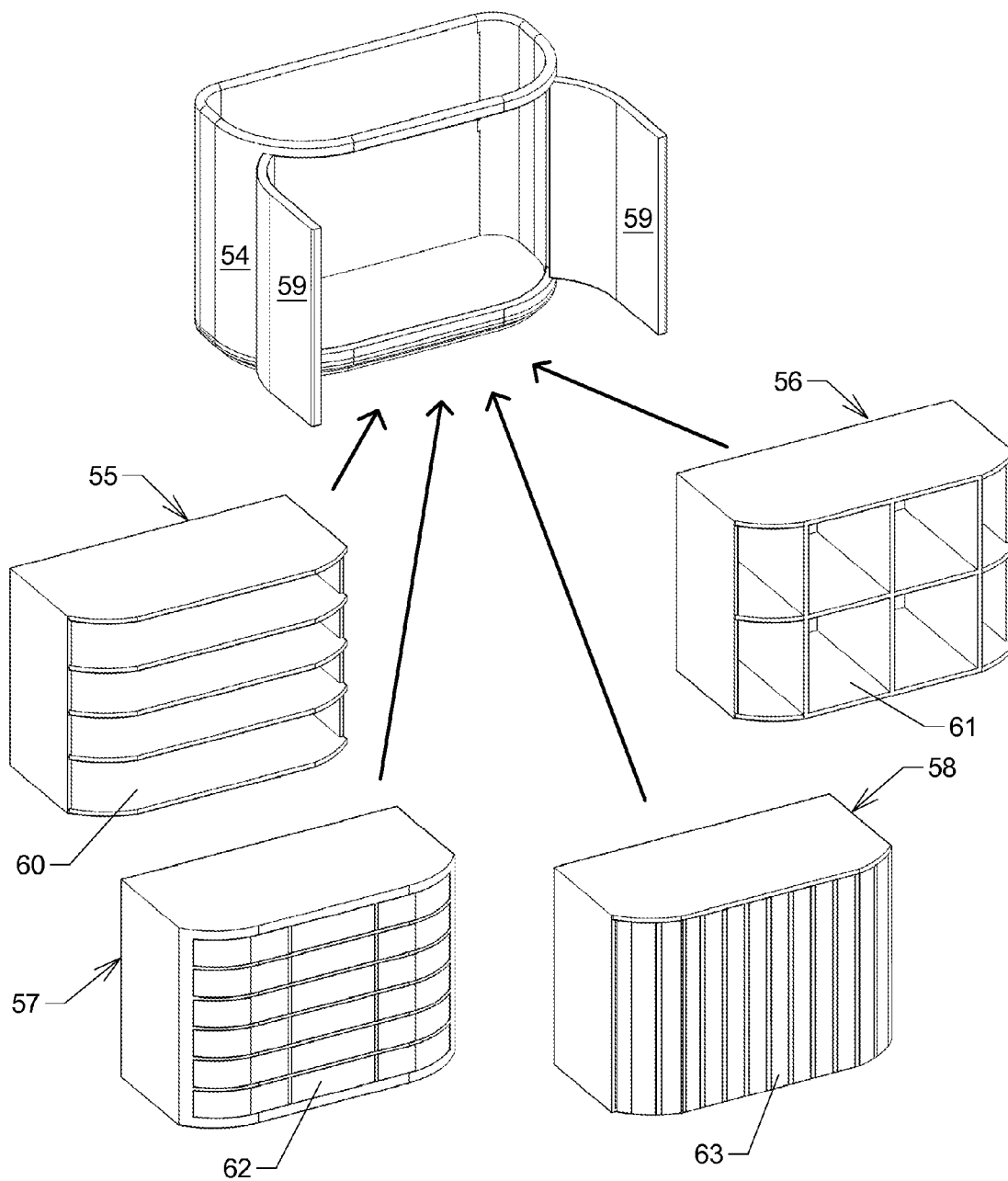


FIG. 2

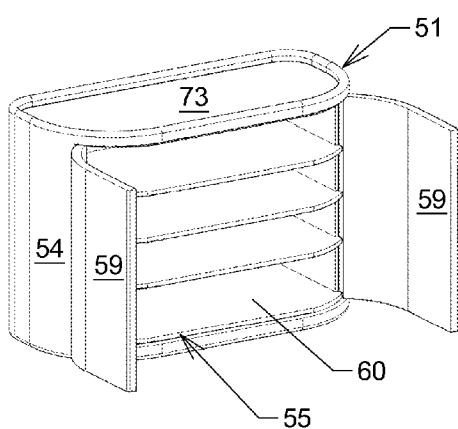


FIG. 3

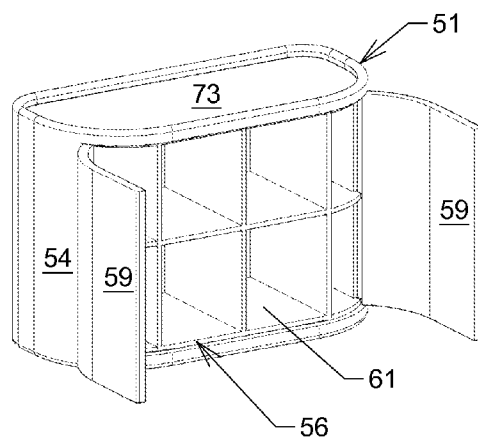


FIG. 4

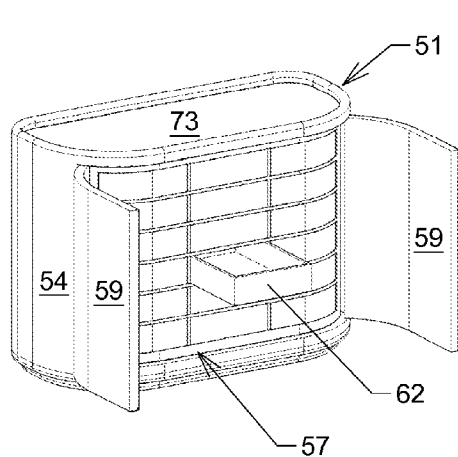


FIG. 5

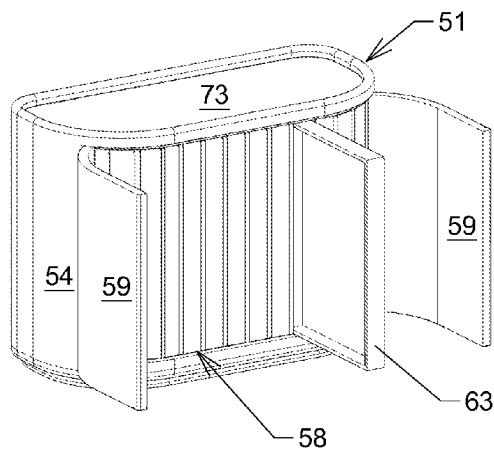


FIG. 6

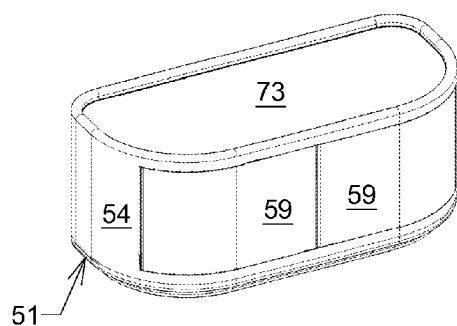


FIG. 7

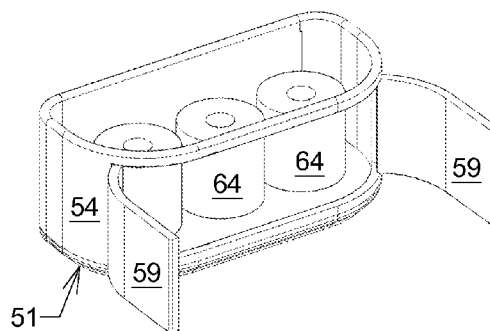


FIG. 8

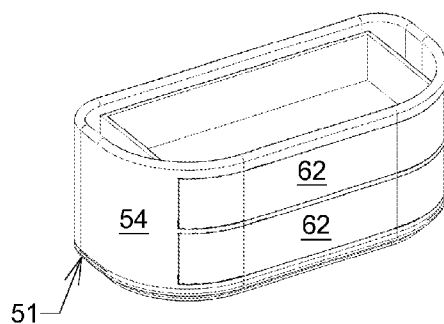


FIG. 9

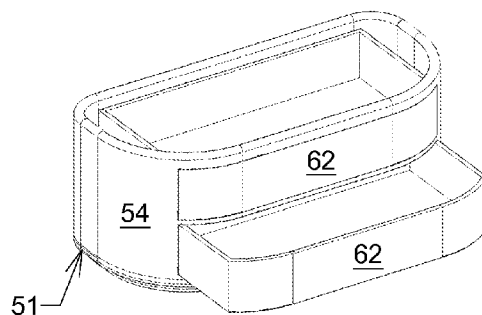


FIG. 10

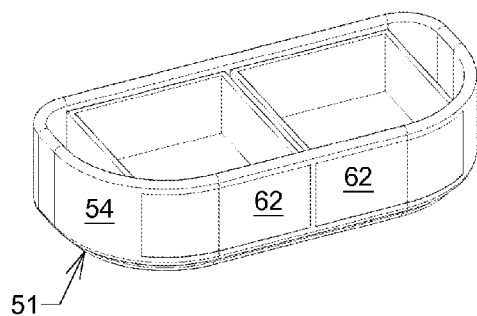


FIG. 11

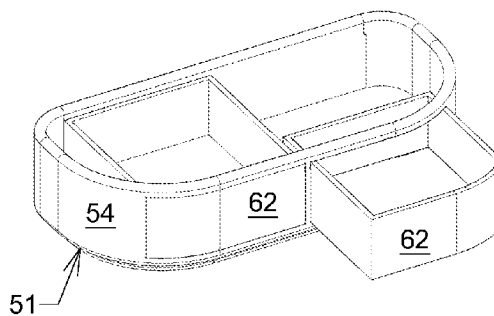


FIG. 12

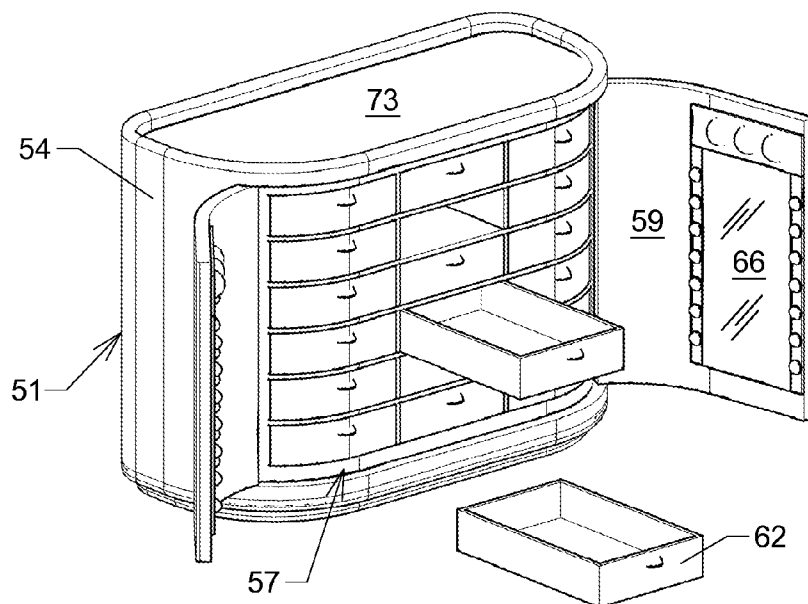


FIG. 13

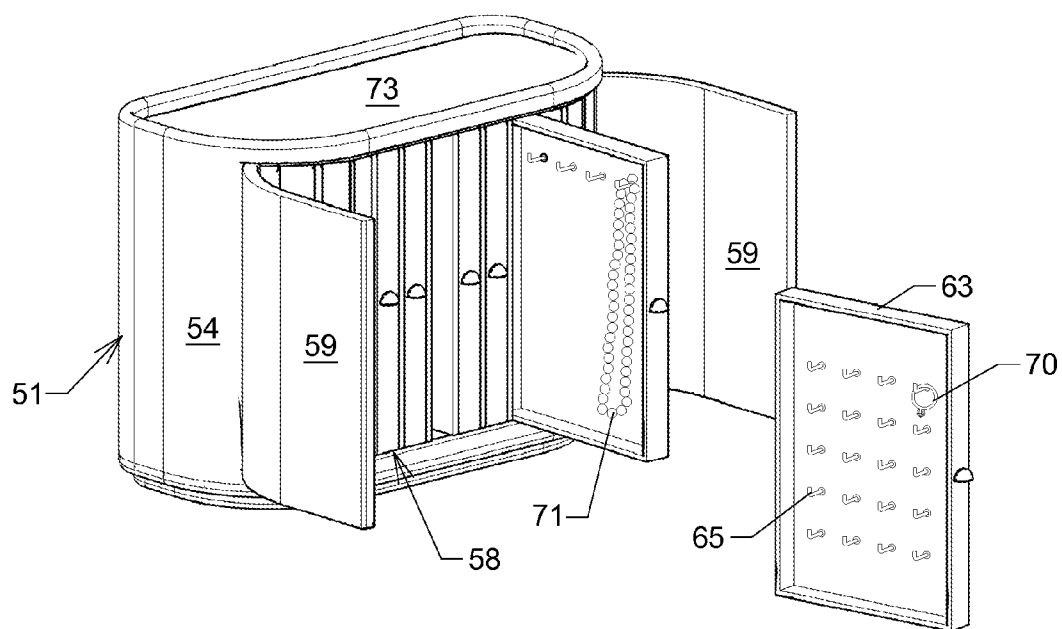


FIG. 14

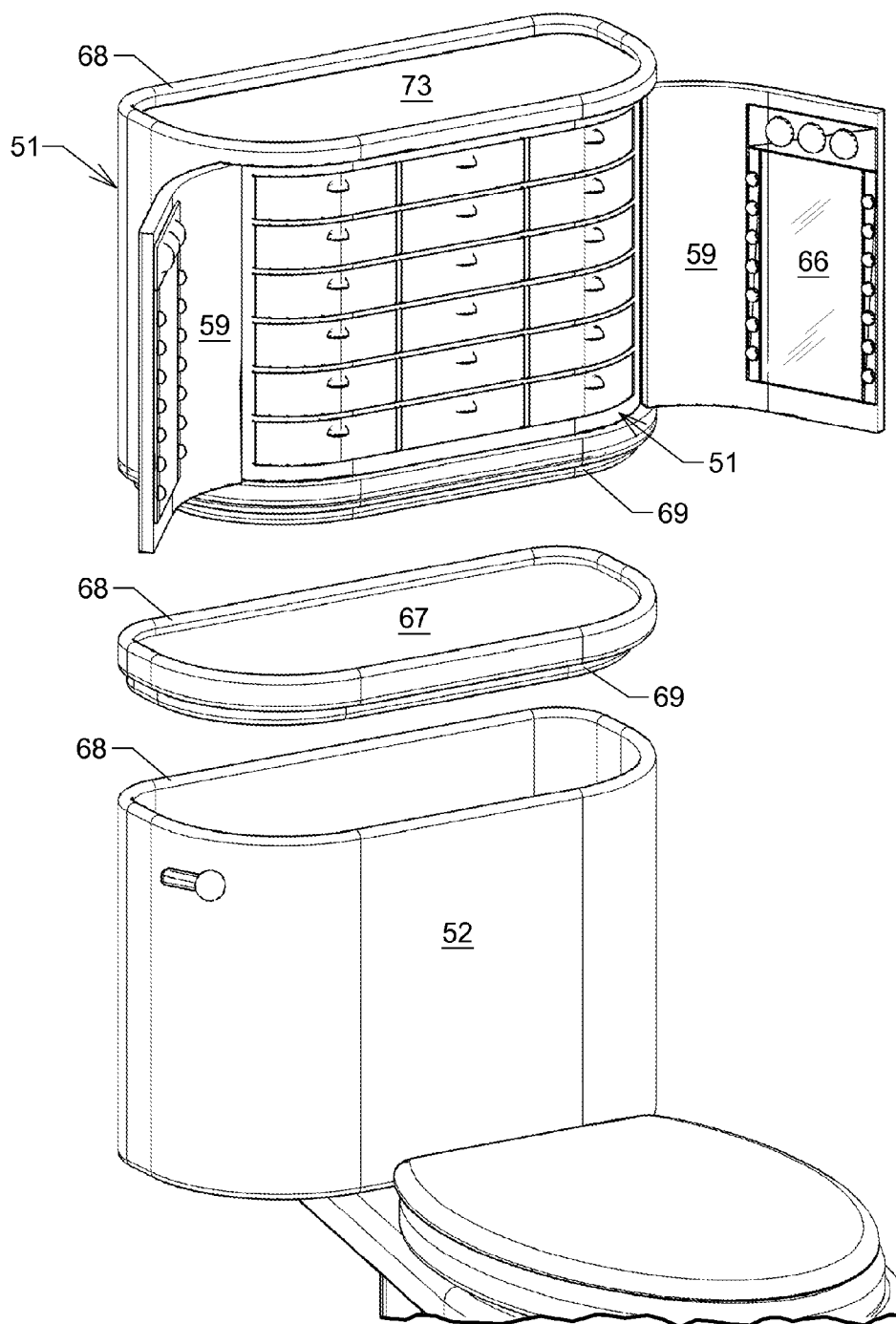


FIG. 15

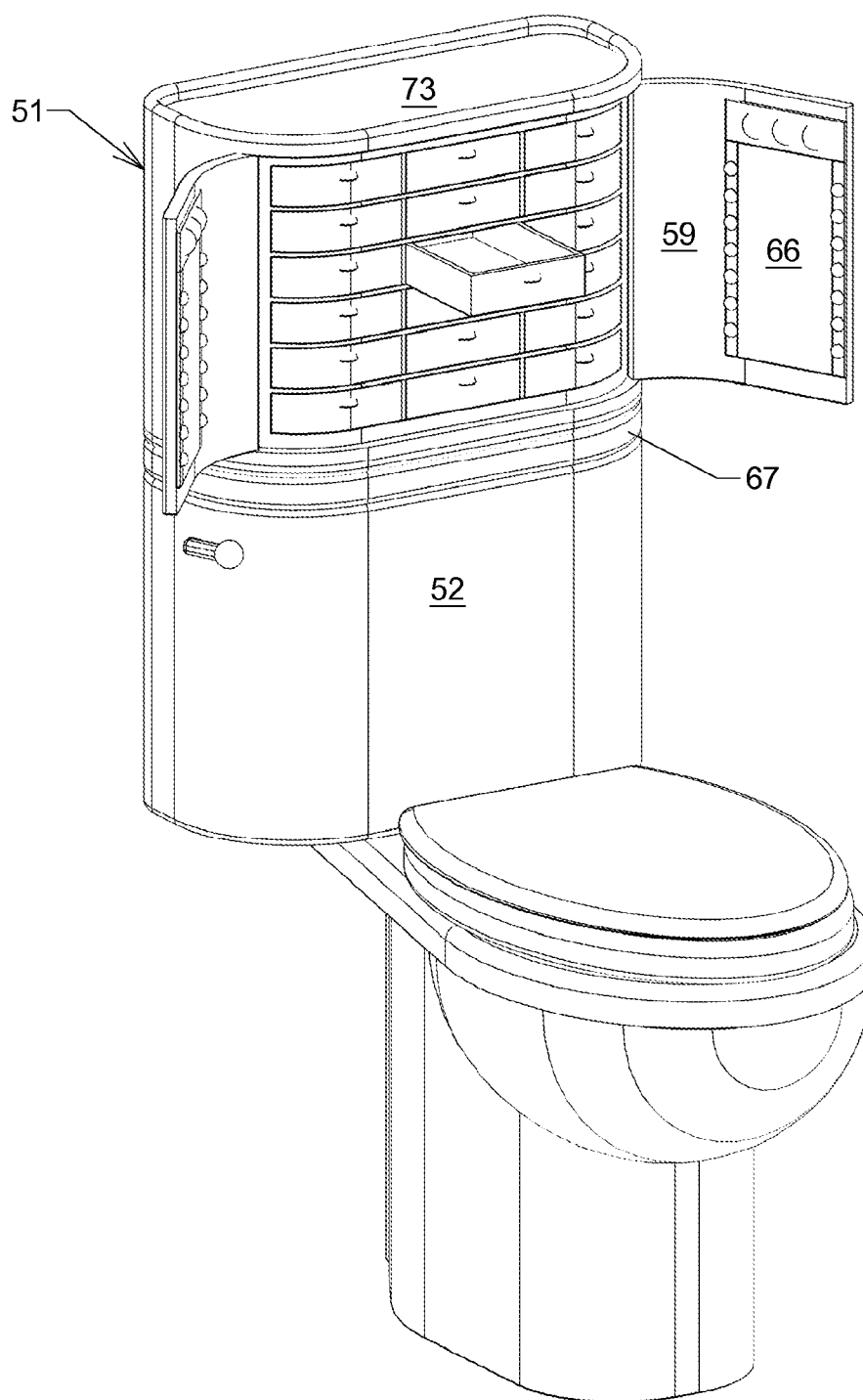


FIG. 16

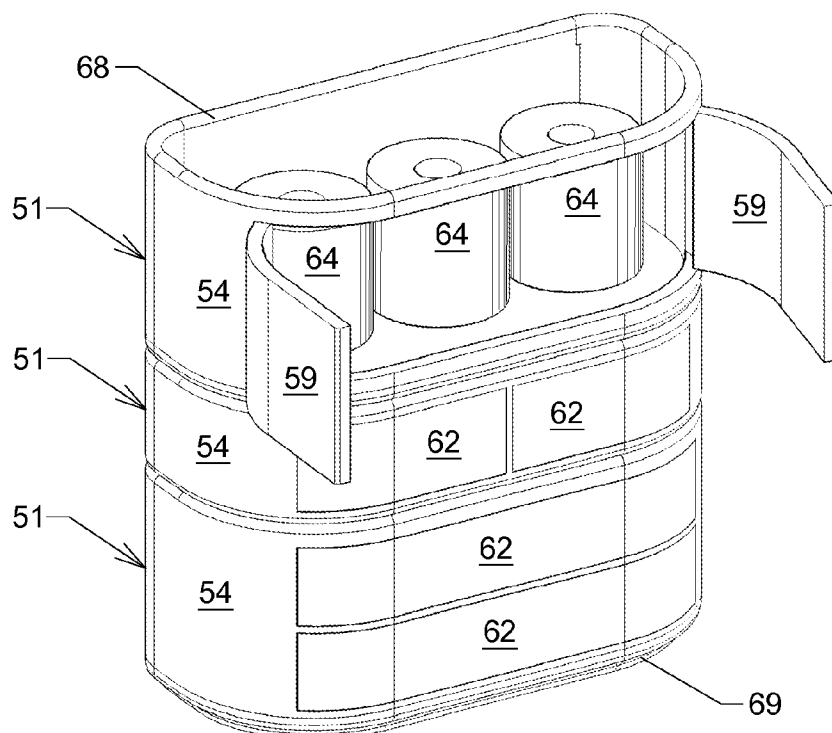


FIG. 17

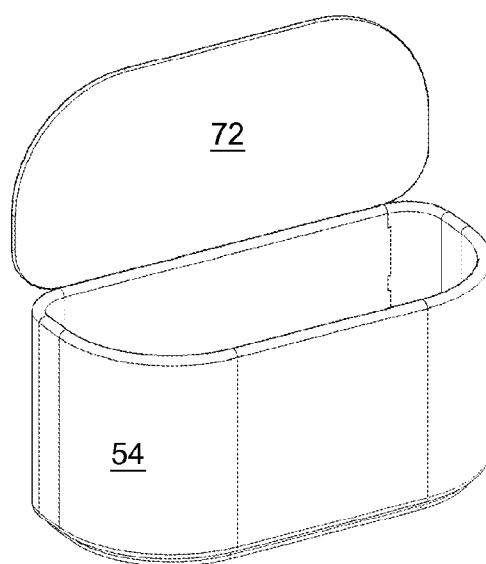


FIG. 18

MODULAR CABINET STORAGE SYSTEM FOR TOILETS

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] Not Applicable

FEDERALLY SPONSORED RESEARCH

[0002] Not Applicable

SEQUENCE LISTING OR PROGRAM

[0003] Not Applicable

BACKGROUND OF THE INVENTION

[0004] The present invention relates in general to a bathroom accessory storage cabinet and more particularly to a modular cabinet assembly which is placed onto a toilet's water tank that provides space for the storage of articles.

[0005] Modern bathrooms tend to be rather small rooms with limited storage capacity, especially those located in apartments. Half bathrooms tend to be even smaller rooms with very little to no storage areas. What few drawers that may be available with an existing sink cabinet could easily become cluttered with too many items piled in. Bathrooms that have pedestal sinks leave no place below them for storage.

[0006] There exists a great need for extra storage space for the placement of basic bathroom related articles in the bathroom.

SUMMARY OF THE INVENTION

[0007] It is the principal objective of the present invention to add extra storage space for articles related to the bathroom.

[0008] A further object of the present invention is to create a storage system that optimizes the use of this extra storage space. A wide variety of article containment arrangements can better utilize the available space and will help organize the articles for easy retrieval. Some bathroom related articles to store and help organize are:

[0009] 1) Storage of Reading Materials: It is common for some people to spend some amount of time using the toilet, so it is popular for them to read books or magazines there. Generally, people simply place these items where they can easily reach them while using the toilet. They store them on the lid of the toilet water tank or in a rack near the toilet which, in either case, can appear untidy. It is an objective of the present invention to provide storage for reading materials in the bathroom.

[0010] 2) Storage of Bathtub Related Articles: It is common for people to place bathtub related articles around the perimeter of the bathtub which can appear untidy. It is an objective of the present invention that can provide storage for bathtub related articles as well as spare supplies within easy reach from the tub for such items as soap bars, shampoo, conditioner and wash cloths.

[0011] 3) Storage of Hygiene Products: A storage unit for articles that are typically used by a person using the toilet needs to be within convenient reach. This space could be used to hold rolls of toilet paper, wet wipes, diapers and feminine products. It is an objective of the present invention that can provide storage for hygiene products within easy reach of the toilet.

[0012] 4) Storage of General Toiletries: A storage unit would be a perfect place to store extra toiletry supplies, such as shaving cream, razor blades, nail clippers, dental floss, tooth paste, tooth brushes, cologne, mouth wash, hairbrushes, combs and hair dryers. It is an objective of the present invention that can provide storage of general toiletries.

[0013] 5) Storage of Jewelry: Women often have numerous small articles of jewelry such as rings, earrings, bracelets, necklaces and brooches. As these items can be rather small and many in number, a specially designed storage system can store and organize these items. It is an objective of the present invention that can provide storage of Jewelry.

[0014] 6) Storage of Cosmetics: Women often have numerous small articles of cosmetics as well, such as lipstick, lotions, perfumes, nail polish and makeup. It would be beneficial to have all of these beauty essentials in one organized storage place. It is an objective of the present invention that can provide storage of cosmetics.

[0015] 5) Storage of General Cleaning Supplies: Without adequate storage space in the bathroom, often cleaning supplies would have to be stored in another room. Extra bathroom storage space can be utilized for many purposes, such as storing bathroom spray cleaners, deodorizers and toilet bowl sanitizers. It is an objective of the present invention that can provide storage of general cleaning supplies.

[0016] Another object of the present invention is to provide the most inconspicuous and unobtrusive product as to maintain look the traditional bathroom.

[0017] Another object of the present invention is to provide a product that requires no bathroom alterations or special tools to install it.

[0018] The present invention achieves the above objectives and others as described below.

[0019] Toilet Area Storage System:

[0020] The present invention is designed to take advantage of the unused space that exists above the average toilet water tank for a storage location. This location is perfect as a central storage place in many small bathrooms because it is within easy reach of the bathtub, the toilet and the sink area. It is a cabinet assembly that consists of a unique modular cabinet housing and an optional internal modular subassembly. This storage system can help virtually any bathroom to provide a convenient place to store things and to help organize them.

[0021] Modular Cabinet Housing:

[0022] The present invention is a unique modular cabinet housing that is designed to mount onto the top rim of a standard toilet water tank, inserted between the water tank and the water tank's lid. It is shaped to blend in with the design of the water tank for aesthetics. The bottom of the cabinet has guides that allow the cabinet to fit onto the water tank without the need for fasteners. The top edge of the cabinet housing is a rim just like that of the water tank to allow the original toilet's lid to be re-installed. This allows the stock toilet lid to be reused so that the general design of the toilet can be maintained and to help the cabinet to blend into the existing bathroom decor. The cabinet can have its own custom top as well.

[0023] The general design of the cabinet is modular in nature so that a maximum of utility can be achieved. This modular design allows other modular cabinets housing assemblies to be installed above or below it. There can be

many cabinet size and shape variations, depending on how much space that is desired along with the type of article that is to be stored. This cabinet can be simply used as a bare housing, whereby bulk items can be easily placed inside or the cabinet can use a subassembly to provide convenient compartmental storage for smaller articles.

[0024] Modular Cabinet Subassembly:

[0025] The modular cabinet housing is designed to accommodate an optional interior modular subassembly. The subassembly can contain a plurality of compartments that take any form, such as commonly used drawers, shelves, bins, panels and partitions. These compartments can help more efficiently utilize the available internal storage space for small articles and to help keep them organized therein. A wide range of article storage needs can be achieved with a variety of cabinet housing shapes and with the makeup of the subassembly compartments.

[0026] Strategic Location of Cabinet:

[0027] The present invention is strategically placed onto a toilet water tank to take advantage of the unused space above the tank and also provides a central location for storage for convenient access from most places within a typical bathroom. This storage area on the toilet would allow placement of reading material and basic hygiene supplies within easy reach from the toilet. Storage above the toilet would be a perfect place to store toilet paper and feminine products.

[0028] Bathroom and Toilet Aesthetics:

[0029] One important object of the present invention is to provide the most inconspicuous and unobtrusive cabinet as to maintain look the traditional bathroom. The present invention achieves this because the toilet water tank mounted modular cabinet is shaped like the water tank so as to blend in with the existing facility, making it inconspicuous. The aesthetics of the toilet then appear normal, with the appearance of only a slightly taller than usual water tank. The modular cabinet could be provided with its own detachable lid, but reusing the original stock toilet lid will better preserve the original toilet aesthetics.

[0030] Universal Applications:

[0031] For universal applications, this modular cabinet can be offered in a generic cabinet shape or "skin" that is designed to work and look good with a wide range of brands and models of toilets. Adjustable mounting guides can assure a secure fit with a wide variety of tanks shapes. This will enhance the present invention's ability to be used on large numbers of existing toilets.

[0032] Storage Cabinet Mobility:

[0033] An embodiment of the present invention allows the modular cabinet assembly to function as mobile storage unit, whereby it can be pulled from its place above the toilet and moved to another location. In this case, a special modular lid adapter can be placed onto the toilet tank so that the cabinet can be placed securely onto it and whereby removing the cabinet allows the lid adapter to remain in order to keep the tank covered for aesthetics. This feature may be of benefit if the cabinet takes the form of a vanity.

[0034] Cabinet Top Storage Area:

[0035] The toilet tank lid can be left off the modular cabinet to allow the top surface of the cabinet to be utilized for even more storage space. The cabinet can be designed with an attractive top surface that will allow it to be displayed without a lid. For example, a multi-drawer cabinet could function as a vanity and its top could simply be an open rimmed, felt lined

surface that would allow cosmetics and jewelry to be securely placed there without rolling off.

[0036] Ease of Installation:

[0037] The modular cabinet's position on the water tank also allows easy installation of the device as it merely sits on the tank, requiring no fasteners. Guides on the cabinet's bottom mates with the water tank's rim to keep the cabinet securely in place. The top of the modular cabinet has a rim just like the water tank so that the original lid can be attached to it. This modular design also allows it to be easily removed so that quick service to the components inside the water tank can be made such as freeing up a stuck flush valve.

[0038] Expandable Storage:

[0039] Another feature of the modular nature of the present invention is that other modular cabinets can be added for additional storage. More cabinets can simply be stacked onto each other in any sequence.

SUMMARY

[0040] The present invention is modular in two ways: 1) It is a cabinet that has a modular shape so that it can be stacked with other modular units onto a standard toilet water tank; 2) The cabinet is modular internally as well so that a variety of modular subassemblies can be installed therein.

[0041] Although only a few embodiments of the present invention have been described, it should be understood that the present invention may be embodied in many other specific forms without departing from the spirit or the scope of the present invention. The present examples are to be considered as illustrative and not restrictive, and the invention is not to be limited to the details given herein, but may be modified within the scope of the appended claims along with their full scope of equivalents.

[0042] The above mentioned objectives and advantages of this invention and the manner of attaining them will become more apparent and the invention itself will be best understood by reference to the following detailed descriptions of the invention taken in conjunction with the accompanying drawings

BRIEF DESCRIPTION OF THE DRAWINGS

[0043] Various other objects, advantages, and features of the invention will become more readily apparent to those skilled in the art from the following detailed description when read in conjunction with the accompanying drawings, in which:

[0044] FIG. 1 is a front perspective view of the invention as mounted on a standard toilet with its swing doors hinged open to reveal several rolls of toilet paper stored within it.

[0045] FIG. 2 is a front perspective view of the modular cabinet housing illustrating how an assortment of modular subassemblies can be installed into it.

[0046] FIG. 3 is a front perspective view of the modular cabinet with a shelf style modular subassembly storage unit installed.

[0047] FIG. 4 is a front perspective view of the modular cabinet with a bin style modular subassembly storage unit installed.

[0048] FIG. 5 is a front perspective view of the modular cabinet with a drawer style modular subassembly storage unit installed.

[0049] FIG. 6 is a front perspective view of the modular cabinet with a panel style modular subassembly storage unit installed.

[0050] FIG. 7 is a front perspective view of a shorter version of the modular cabinet with the swing doors as shown in the closed position.

[0051] FIG. 8 is the same perspective view as in FIG. 7 but is shown with its top removed and its swing doors open to reveal several rolls of toilet paper stored inside.

[0052] FIG. 9 is a front perspective view of a cabinet assembly without its top and shows two vertically mounted drawers.

[0053] FIG. 10 is the same front perspective view as FIG. 9 but shows one of the drawers pulled out to illustrate its removability.

[0054] FIG. 11 is a front perspective view of a cabinet assembly without its top and shows two horizontally mounted drawers.

[0055] FIG. 12 is the same front perspective view as FIG. 11 but shows one of the drawers pulled out to illustrate its removability.

[0056] FIG. 13 is a front perspective view of the modular cabinet with a chest of drawers style modular subassembly storage unit installed.

[0057] FIG. 14 is a front perspective view of the modular cabinet with a panel style modular subassembly storage unit installed.

[0058] FIG. 15 is an exploded front perspective view of the modular cabinet with a drawer style modular subassembly storage unit installed that is equipped with lights and mirrors to function a vanity cabinet. An adapter lid is shown between the tank and cabinet, which allows the cabinet to be removed and used remotely without leaving the toilet tank open.

[0059] FIG. 16 is the same front perspective view as FIG. 15 but illustrates the assembly together, with the modular cabinet placed upon the lid adapter which is then installed onto a toilet's water tank.

[0060] FIG. 17 is a front perspective view several modular cabinets that are stacked together where each have different styles of subassemblies installed into them to illustrate the modular nature of the cabinets and the expandability of the storage space.

[0061] FIG. 18 is a front perspective view of a hamper style modular cabinet that has a hinged lid.

[0081] 70 Ring

[0082] 71 Necklace

[0083] 72 Lid, Hamper

[0084] 73 Cover, Modular Cabinet Top

DETAILED DESCRIPTION OF THE DRAWINGS

[0085] Various other objects, advantages, and features of the invention will become more readily apparent to those skilled in the art from the following detailed description when read in conjunction with the accompanying drawings, in which like reference numerals designate like parts throughout the figures thereof.

[0086] Modular Cabinet Invention:

[0087] FIG. 1 illustrates the basic idea of this invention, where a modular cabinet assembly 51 is mounted onto a standard toilet water tank 52. The cabinet housing 54 is shaped to fit the shape of the water tank 52 so that it helps to blend in with the decor of the bathroom. Swing doors 59 are utilized to allow access to the interior space for the storage of articles. For a storage example, FIG. 1 illustrates several rolls of toilet paper 64 that are stored inside the cabinet assembly 51.

[0088] FIG. 2 is a front perspective view of the modular cabinet housing illustrating how an assortment of modular subassemblies can be installed into it. This illustrates the modular nature of the internal components of the cabinet housing 54. Modular subassemblies, such as shelf subassembly 55, bin subassembly 56, drawer subassembly 57 and panel subassembly 58 are designed to be inserted into the cabinet housing 54. Combinations of these compartment styles can be utilized, such as a subassembly design that can contain bins, drawers and shelves all in one unit. This allows limitless storage containment possibilities.

[0089] FIG. 3 illustrates a modular shelf subassembly 55 as installed into a cabinet housing 54 to create a modular cabinet assembly 51. The removable and adjustable shelves 60 can be used to store such articles such as magazines, newspapers and wash clothes.

[0090] FIG. 4 illustrates a modular bin subassembly 56 as installed into a cabinet housing 54 to create a modular cabinet assembly 51. Bins 61 can be used to store articles such as books, shampoo and bathroom cleaners.

[0091] FIG. 5 illustrates a modular drawer subassembly 57 as installed into a cabinet housing 54 to create a modular cabinet assembly 51. Drawers 62 can be used to store such articles as razor blades, nail clippers, dental floss, tooth paste, and tooth brushes. The small drawers 62 that are shown can be any size and/or shape.

[0092] FIG. 6 illustrates a modular panel subassembly 58 as installed into a cabinet housing 54 to create a modular cabinet assembly 51. Panels 63 can be used to store jewelry or any other small articles that can be hung on hooks 65, shown in FIG. 14.

[0093] FIG. 7 a front perspective view that illustrates a shorter version of the modular cabinet 54 with swing doors 59 to create a modular cabinet assembly 51 with the swing doors 59 shown in the closed position.

[0094] FIG. 8 is the same illustration as shown in FIG. 7 but with its top cover 74 removed and its swing doors 59 open to reveal the internal storage space. Several rolls of toilet paper 64 can be seen inside to suggest a good purpose for the modular cabinet assembly 51.

DRAWINGS—REFERENCE NUMERALS

[0062] 51 Modular Cabinet Assembly
 [0063] 52 Water tank
 [0064] 53 Lid, Water tank
 [0065] 54 Housing, Cabinet
 [0066] 55 Subassembly, Shelf Module
 [0067] 56 Subassembly, Bin Module
 [0068] 57 Subassembly, Drawer Module
 [0069] 58 Subassembly, Panel Module
 [0070] 59 Door, Swing
 [0071] 60 Shelf
 [0072] 61 Bin
 [0073] 62 Drawer
 [0074] 63 Panel
 [0075] 64 Roll, Toilet Paper
 [0076] 65 Hook, Jewelry
 [0077] 66 Mirror, Lighted
 [0078] 67 Adapter, Lid
 [0079] 68 Rim
 [0080] 69 Guide, Mounting

[0095] FIG. 9 illustrates a modular cabinet assembly 51 without the use of swing doors 59 to cover two vertical drawers 62.

[0096] FIG. 10 is the same illustration as shown in FIG. 9 but with one of its drawers 62 pulled out to illustrate its removability.

[0097] FIG. 11 illustrates a modular cabinet assembly 51 without the use of swing doors 59 to cover two horizontal drawers 62.

[0098] FIG. 12 is the same illustration as shown in FIG. 11 but with one of its drawers 62 pulled out to illustrate its removability.

[0099] FIG. 13 is the same front perspective view as FIG. 5, with a modular drawer subassembly 57 that is installed into a cabinet housing 54 to create a modular cabinet assembly 51, but now is shown with more detail such as a lighted mirror 59 to demonstrate how this assembly can function as a vanity.

[0100] FIG. 14 is the same front perspective view as shown in FIG. 6, with a modular panel subassembly 58 that is installed into a modular cabinet housing 54 to create a modular cabinet assembly 51, but now adds more detail such as hooks 65 to demonstrate how this assembly can function as a jewelry organizer. Hooks 65 are shown mounted into removable panels 63 to illustrate their ability to hold jewelry such as a ring 70 and a necklace 71.

[0101] FIG. 15 is a front perspective, exploded view of a modular cabinet assembly 51 that is oriented over an adapter lid 67 and a toilet water tank 52. The cabinet assembly 51 includes a modular drawer subassembly 57 with lighted mirrors 66 to function as a vanity cabinet. This view illustrates how the cabinet assembly 51 can sit down on an adapter lid 67 that would cover the water tank 52 so that the cabinet assembly 51 can be removed and used remotely without leaving the toilet tank open.

[0102] FIG. 16 is the same front perspective view as FIG. 15 but illustrates the assemblies mounted together, with the modular cabinet assembly 51 placed upon the adapter lid 67 which is then installed onto the toilet water tank 52.

[0103] FIG. 17 is a front perspective view of several modular cabinets that are stacked together whereby each have different styles of subassemblies installed into them to illustrate the modular nature of the cabinets and the expandability of the storage space.

[0104] FIG. 18 is a front perspective view of a hamper style cabinet that has a hinged lid 72.

[0105] The previous illustrations depicts only a few standard modular subassembly designs, such as shelves 60 for storing magazines, bins 61 for the storage of books, drawers 62 for storing small articles, and panels 63 for the storage of small items such as jewelry. Virtually any style and combination of compartments can be utilized in the subassemblies.

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)

10. A modular cabinet storage system for toilets with structural features to allow a plurality of said cabinets to modularly fit and be stacked together for expandability and with other structural features to allow said cabinet to be internally modu-

lar as well for versatility, and then to be removably stacked onto a toilet water tank, comprising a modular cabinet housing having a top side with a modular rimmed edge and bottom side with a modular mounting guide and defining an interior modular compartment and modular subassembly, comprising:

- a) said modular rimmed edge that is shaped to allow the engagement of a mating modular mounting guide that protrudes from a similar modular cabinet (or the original water tank lid) for the purpose of the engagement, positioning and secure mounting of said similar modular cabinet (or said tank lid) thereof and whereby said cabinet system can then expand externally and also have the capability to reuse said original tank lid;
- b) said modular mounting guide that protrudes from said bottom side of said modular cabinet housing that is shaped to allow the engagement, positioning and secure mounting of a mating top modular rimmed edge from a similar modular cabinet (or the rim of said water tank) thereof and whereby said cabinet system can securely mount onto said toilet water tank;
- c) said modular interior compartment that provides space for the storage of articles and that is shaped for the mounting and integration of modular subassemblies in order to provide the ability to subdivide its space into a variety of ways to more efficiently organize, store and retrieve articles, comprising:
 - i) a means to gain access to said modular interior compartment;
 - ii) a modular cabinet subassembly that is shaped to allow the engagement, positioning and secure mounting within said modular interior compartment, comprising:
 - (a) at least one subassembly interior compartment with a method to gain access to said compartment;
 - (b) a means for fastening said cabinet subassembly to into said interior compartment of said cabinet housing to form a complete cabinet assembly;
 - (c) whereby said subassembly can modularly engage and securely fit within said cabinet interior compartment and enables the storage and retrieval of articles;
 - iii) whereby said modular interior compartment can be accessed to store and retrieve articles;
 - iv) whereby said modular interior compartment's subassembly can be installed and secured, and can be accessed to store and retrieve articles;
- d) whereby said cabinet housing exterior forms a modular structure so that other modular cabinet housings can be engaged, positioned and securely mounted thereof for expandability;
- e) whereby said cabinet housing can be securely and removably mounted onto said water tank while retaining the ability to reuse the original toilet water tank lid;
- f) whereby said cabinet housing interior forms a modular structure so that modular cabinet subassemblies can be installed therein for versatility and efficient optimization of space;

11. The modular cabinet storage system of claim 10 whereby said modular cabinet housing is shaped to fit and blend in with said water tank for aesthetics.

12. The modular cabinet storage system of claim **10** whereby said cabinet is shaped in a generic package to fit a wide variety of water tank designs for the versatility of a universal fit.

13. The modular cabinet storage system of claim **10** whereby a lid adapter can be utilized as part of said modular cabinet system to keep said water tank covered thereby enabling said cabinet assembly to be removed from said lid adapter thereby enabling said cabinet's mobility for its remote usage from the bathroom, comprising a lid with a top planar side with a modular rimmed edge and a bottom side with a modular mounting guide, comprising;

- a) said modular rimmed edge that is shaped to allow the mating of a modular mounting guide that protrudes from said modular cabinet for the purpose of engaging, positioning and securely mounting said cabinet onto said rimmed edge;
- b) said modular guide that is shaped to protrude from said bottom side of said lid adapter and is shaped to engage the rim of said water tank for the purpose of engaging, positioning and securely mounting said lid adapter onto said tank;

c) whereby said lid adapter can securely mount onto said water tank and provide a base for said modular cabinet housing to be securely mounted upon it;

d) whereby said lid adapter enables said cabinet assembly to be removed from said lid adapter thereby allowing its mobility for the remote usage of said cabinet while keeping said water tank covered.

14. The modular cabinet storage system of claim **10** whereby said cabinet interior compartment is formed to accommodate shelves, bins, drawers, panels or any combination thereof.

15. The modular cabinet storage system of claim **10** whereby said cabinet subassembly compartments are formed to accommodate shelves, bins, drawers, panels or any combination thereof.

16. The modular cabinet storage system of claim **10** whereby said modular cabinet interior subassembly is removable.

17. The modular cabinet storage system of claim **10** whereby said means of attachment of said cabinet interior subassembly into said cabinet includes glue, staples, nails and fasteners.

* * * * *