



PDHonline Course G235 (3 PDH)

Applying For a Patent Online

Instructor: John R. Andrew, P.E.

2020

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Applying for a Patent Online

John Andrew, P.E.

This 3 Professional Development Hour (3 PDH) course provides step by instructions illustrating how to apply for a US Patent on the internet at www.uspto.gov.

Please note that Thomas Edison patented over 1000 inventions including: the light bulb, electric power distribution, improved motion pictures, a music recorder, and he was not a patent attorney nor did he employ a patent attorney. The US Patent Office will accept patent applications from any US citizen. However if you have not studied patents in the same field as your idea you should confer with a patent for legal assistance. US Patent law is given in CFR 37 and is available to the public for a small fee.

The Commissioner for Patents states “The patent application process is complex. The USPTO cannot assist in the preparation of patent application papers. If you are ready to apply for a patent, we strongly advise you contact a registered patent attorney or agent.”

Here is a link to General Information Concerning Patents

http://www.uspto.gov/patents/resources/general_info_concerning_patents.pdf

John Andrew PE is author of the related course: “How to Invent by the NCMR Method” illustrating where new and useful engineering ideas come from.

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4.0 Filing a Patent Online

1.0 Patent Disclosure has been replaced with the Provisional Application

Effective February 1, 2007, the Disclosure Document Program has been eliminated. Inventors may file a provisional application for patent rather than a disclosure document.

A provisional application for patent provides more benefits and protections to inventors than a disclosure document and can be used for the same purposes as a disclosure document if necessary.

The requirements for filing a provisional application are set forth in 35 U.S.C. 111(b) and 37 CFR 1.53(c).

A nonprovisional application must be filed within twelve months of the filing date of a provisional application in order for the inventor to claim the benefit of the provisional application under 35 U.S.C. 119(e)(3).

For more information on how to file a provisional application, please check the USPTO web site at <http://www.uspto.gov/web/offices/pac/provapp.htm> or <http://www.uspto.gov/web/offices/pac/ProvApp.pdf> or contact the Inventors Assistance Center at 800-786-9199.

2.0 Patents

A utility patent must be new and useful.

A patent application should be formatted:

Font: Arial

Font size: 12

Line spacing: Double

The following definition of, "Patent" is copied from the United States Patent and Trademark Office website at: www.uspto.gov.

"What Is a Patent?"

"A patent for an invention is the grant of a property right to the inventor, issued by the United States Patent and Trademark Office. Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the United States or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees. U.S. patent grants are effective only within the United States, U.S. territories, and U.S. possessions. Under certain circumstances, patent term extensions or adjustments may be available."

"The right conferred by the patent grant is, in the language of the statute and of the grant itself, "the right to exclude others from making, using, offering for sale, or selling" the invention in the United States or "importing" the invention into the United States. What is granted is not the right to make, use, offer for sale, sell or import, but the right to exclude others from making, using, offering for sale, selling or importing the invention. Once a patent is issued, the patentee must enforce the patent without aid of the USPTO."

"There are three types of patents:"

"1) Utility patents may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof;"

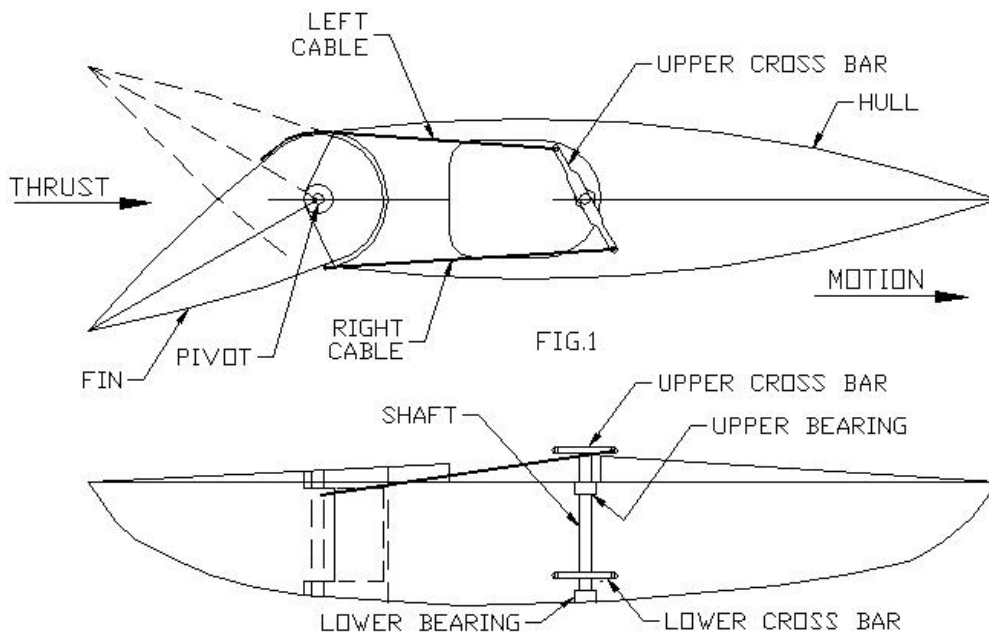
“2) Design patents may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture; and”

“3) Plant patents may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant.”

Typical Patent Application Sections

- Declaration
- Abstract of the Invention
- Prior Art
- Background of the Invention
- Summary of the Invention
- Brief Description of the Drawings
- Preferred Embodiments
- Claims
- Figures or Drawings

Step-1 Make a sketch of your new-to-you idea and label the components



KAYAK PROPUSION AND STEERING MECHANISM
Inventor: John Robert Andrew

INITIAL INVENTION IDEA STAGE

Kayak Propulsion and Steering Example

Step-2 Search the existing US Patent office patents online.

2.1 Patent Search Online

All applications for patents must include a list of existing patents in the same category or **Class**. For example, let us say, your invention is a new type of cup handle. Go to the U.S. Patent Office web site and search for cup handles by following the steps given below.

A list of existing cup handle patents will open. Click on one patent title in the list.

The front page of this invention will be displayed. The, "Cup Handle" category or **Class** will be given as well as the sub-category or **Field of Search**.

The steps below illustrate how to make a search of existing patents on-line.

Patents

- 1 Patents Process**
Visit the Patents Process page
- 2 Search**
Search patent databases
- 3 View Fee Schedule**
Check on the current fees and information related to the patent process
- 4 File Online**
Apply for a patent using the Electronic Filing System (EFS-Web)
- 5 Check Status**
Check the status via the Patent Application Information Retrieval (PAIR) system
- 6 Maintain/Pay Fees**
Pay your maintenance fees

Patent Process

- Search for Patents
- View Fee Schedule
- File Online
- Check Status
- Maintain/Pay Fees
- Appeal
- Change Ownership

1. Begin by going to US Patent Office Home Page at; www.uspto.gov
2. Click on "Patents Process" above left > Click "Search for Patents" above right.

Search for Patents

Patents may be searched in the following methods:

- [USPTO Patent Full-Text and Image Database \(PatFT\)](#)
- [USPTO Patent Application Full-Text and Image Database \(AppFT\)](#)
- [Patent Application Information Retrieval \(PAIR\)](#)

3. Click "USPTO Patent Application Full-Text and Image Database (AppFT)"

- [Quick Search](#)
- [Advanced Search](#)
- [Publication Number Search](#)

4. Click "Quick Search" and the page below will appear.

Let us say you have an idea for an invention involving a new Tray for a Dishwasher.
Follow the instructions below:

Query [\[Help\]](#)

Term 1: in Field 1: ▾
 ▾
Term 2: in Field 2: ▾
Select years [\[Help\]](#) ▾

Type, "dishwasher" and "tray" in the spaces for Term 1 and Term 2 respectively.
Select, "Abstract" (patent summary paragraph) for Fields 1 and 2. The Abstract is a short one paragraph summary of the invention.

5. Click "Search" and the list of similar patents below will open.

2.2 List of Similar Patents

	PUB. APP. NO.	Title
1	20100155280	CUTLERY TRAY FOR A DISHWASHER
2	20090311149	UV Sanitizer for Tethered and Untethered Mouthguards
3	20080067905	GLIDE RAIL SYSTEM FOR SUPPORTING SLIDING EXTENSION
4	20070108081	Baby Bottle Organizer
5	20070039636	Device for placing silverware in dishwashers
6	20050247211	Cooker with latching drip tray for selectively opening and closing
7	20050076938	Sound sealing system for a dishwasher
8	20050045113	Snap N lap pet food dish holder
9	20040093667	Food preparation station
10	20030205258	Nipple and pacifier dishwasher basket

TO OPEN A PATENT WITH TEXT AND NO FIGURES

6. Select patent number with the left mouse button: **20100155280** and the patent text only below will open but without the drawings called figures.

(54) CUTLERY TRAY FOR A DISHWASHER

(75) Inventors: Bernhard Graute, Marienfeld (DE); Gregor Moch, Bielefeld (DE)

Correspondence Address:
LEYDIG, VOIT AND MAYER
TWO PRUDENTIAL PLAZA, SUITE 4900, 180
NORTH STETSON AVENUE
CHICAGO, IL 60601 (US)

(73) Assignee MIELE & [CIE. KG](#), (DE)

- (2 1 Appl. No.: 12/640,563
- (2 2 Filed: Dec. 17, 2009

(57) ABSTRACT

A cutlery tray for a dishwasher includes a frame extendably disposed in a washing tub and a plurality of inserts movably disposed on the frame and adapted to hold dishware. The plurality of inserts include a first horizontally displaceable insert and at least one vertically displaceable insert.

TO OPEN A COMPLETE PATENT WITH TEXT AND FIGURES

7. The invention figures will not appear until you download, "AlternatIF", free software available at <http://www.alternatiff.com/>.

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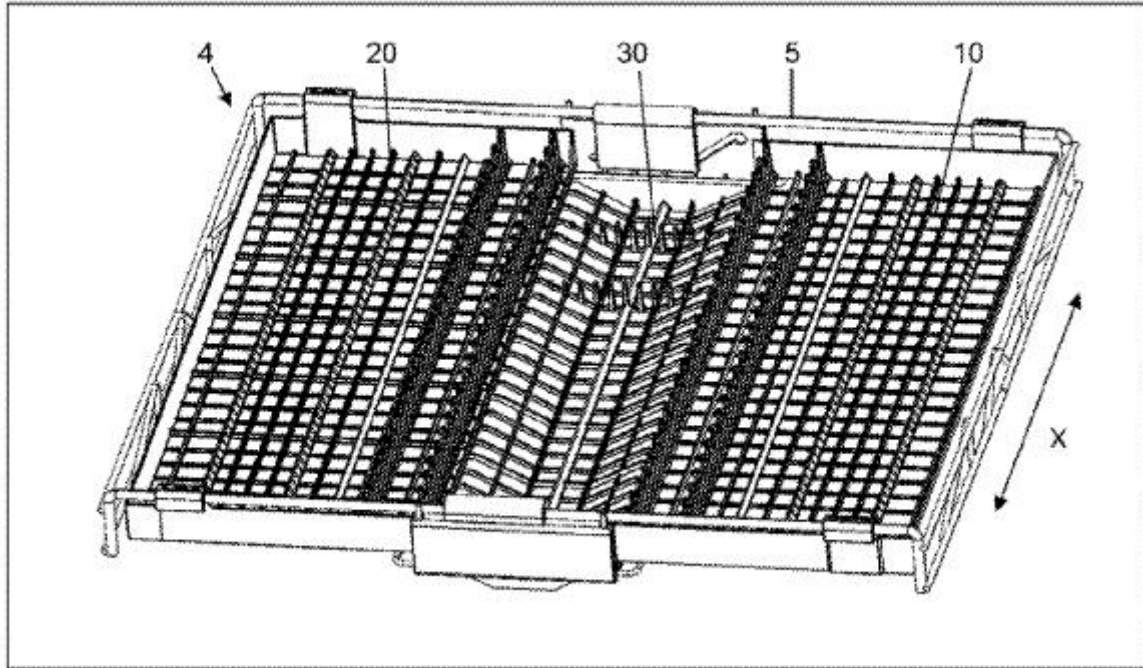


(19) **United States**
(12) **Patent Application Publication** (10) **Pub. No.: US 2010/0155280 A1**
Graute et al. (43) **Pub. Date: Jun. 24, 2010**

<p>(54) CUTLERY TRAY FOR A DISHWASHER</p> <p>(75) Inventors: Bernhard Graute, Marienfeld (DE); Gregor Moch, Bielefeld (DE)</p> <p>Correspondence Address: LEYDIG, VOIT AND MAYER TWO PRUDENTIAL PLAZA, SUITE 4900, 180 NORTH STETSON AVENUE CHICAGO, IL 60601 (US)</p> <p>(73) Assignee: MIELE & CIE. KG, Guetersloh (DE)</p> <p>(21) Appl. No.: 12/640,563</p> <p>(22) Filed: Dec. 17, 2009</p>	<p>(30) Foreign Application Priority Data</p> <p>Dec. 18, 2008 (DE) 10 2008 062 761.5</p> <p style="text-align: center;">Publication Classification</p> <p>(51) Int. Cl. B65D 85/00 (2006.01)</p> <p>(52) U.S. Cl. 206/372</p> <p>(57) ABSTRACT</p> <p>A cutlery tray for a dishwasher includes a frame extendably disposed in a washing tub and a plurality of inserts movably disposed on the frame and adapted to hold dishware. The plurality of inserts include a first horizontally displaceable insert and at least one vertically displaceable insert.</p>
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9. The example patent front page text is shown above.

333



10. The example patent front page picture is shown above.

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19 Jul 2011 at 15:40 EST								
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7307360	19 Jul 2011	In-Process	19 Jul 2011	IDON874226				
Docket Number or Customer Reference Number				Payment Method	Total Cost			
				Credit Card	\$3.00			
Name and Address				Phone Number				
Mildred A Andrew PO Box 16611 Greenville, SC 29606 USA				(864) 593-3404				
				 USPTO Office of Public Records Document Services Division				
Email Address				Fax Number				
mandrew1122@gmail.com								
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Patent Application Publication								
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1	1	2010-0155280	None	PDF File	1 day	Internet	\$3.00	In-Process
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2.3 Patent Front Page



US 20100155280A1

(19) **United States**

(12) **Patent Application Publication**
Graute et al.

(10) **Pub. No.: US 2010/0155280 A1**
(43) **Pub. Date: Jun. 24, 2010**

(54) **CUTLERY TRAY FOR A DISHWASHER**

(30) **Foreign Application Priority Data**

(75) **Inventors:** **Bernhard Graute**, Marienfeld (DE); **Gregor Moch**, Bielefeld (DE)

Dec. 18, 2008 (DE) 10 2008 062 761.5

Publication Classification

Correspondence Address:
LEYDIG, VOIT AND MAYER
TWO PRUDENTIAL PLAZA, SUITE 4900, 180
NORTH STETSON AVENUE
CHICAGO, IL 60601 (US)

(51) **Int. Cl.**
B65D 85/00 (2006.01)

(52) **U.S. Cl.** 206/372

(73) **Assignee:** **MIELE & CIE. KG**, Guetersloh (DE)

(57) **ABSTRACT**

(21) **Appl. No.:** **12/640,563**

A cutlery tray for a dishwasher includes a frame extendably disposed in a washing tub and a plurality of inserts movably disposed on the frame and adapted to hold dishware. The plurality or inserts include a first horizontally displaceable insert and at least one vertically displaceable insert.

(22) **Filed:** **Dec. 17, 2009**

Patent Application Publication US 2010/0155280 A1

Jun. 24, 2010 Sheet 1 of 5

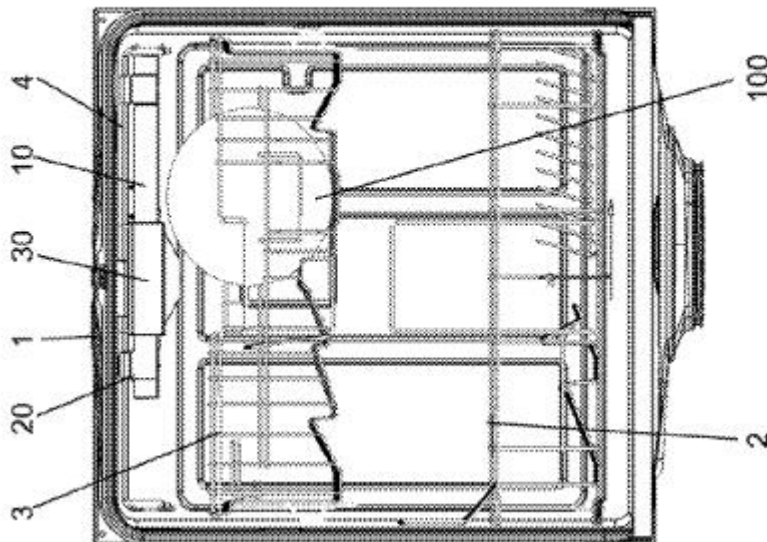


Fig. 3

US 2010/0155280 A1

Jun. 24, 2010

1

CUTLERY TRAY FOR A DISHWASHER

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] Priority is claimed to German Patent Application No DE 10 2008 062 76L5-15, filed Dec. 18, 2008.

FIELD

[0002] The present invention relates to a cutlery tray for a dishwasher, including a frame extendably supported within a washing tub.

BACKGROUND

[0003] DE 3721689 A1 describes a cutlery tray that is formed by a flat basket-like framework having the base dimensions of a dish rack and is extendably supported within the washing tub of the dishwasher.

[0004] Such a cutlery tray may limit the space available for the placement of dishware in the dish rack located immediately therebelow. Due to the lack of vertical space, it may not be possible to place, for example, larger glasses in this rack.

[0005] Prior attempts to solve this problem have included providing cutlery trays that are formed by several sections removably disposed within a frame. However, this approach has the disadvantage that the space available for cutlery to be washed is reduced when individual sections are removed. This also reduces the ease-of-use, and sections that have been removed may be lost.

[0015] FIGS. 11 through 13 are perspective views of the cutlery tray, showing the inserts in different positions.

DETAILED DESCRIPTION

[0016] In an embodiment the present invention is related to a cutlery tray including a frame extendably supported within a washing tub and a plurality of inserts which are movably mounted on said frame and on which may be placed dishware items to be washed, especially cutlery, at least one of the inserts being mounted on the frame in such a way that it is horizontally displaceable.

[0017] in accordance with an embodiment of the present invention, the cutlery tray includes a frame extendably supported within the washing tub of the dishwasher and a plurality of inserts which are movably mounted on said frame and on which may be placed dishware items to be washed, especially cutlery, at least one of the inserts being mounted on the frame in such a way that it is horizontally displaceable, and at least one of the inserts being mounted on the frame in such a way that it is vertically displaceable. Displacement of an insert in a horizontal direction provides additional height for the dish rack located therebelow so as to allow, for example, larger glasses to be placed in this dish rack. The displaceable insert remains in the dishwasher and, in addition, may be loaded so that the amount of space available for cutlery or small dishware, such as cups, egg cups, etc. is the same as when the insert is in the undisplaced position. Thanks to the vertically displaceable insert, is also possible to make room for large dishware items in the center of the dish rack located therebelow.

2.4 Patent Application Fees

Go to the US Patent Office home page.

Patents

- 1 **Patents Process**
Visit the Patents Process page
- 2 **Search**
Search patent databases
- 3 **View Fee Schedule** ← (blue arrow)
- 4 **File Online**
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Under "Patents" > Click on "View Fee Schedule >

Patent

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- Patent Maintenance Fees**
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- Patent Extension of Time Fees**
- Patent Appeals/Interference Fees**
- Patent Petition Fees**
- Patent Service Fees**
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Click on "Patent Application Fees"

	Fee	Small Entity
Basic filing fee - Utility	\$330	\$165
Utility Search Fee	\$540	\$270
Utility Examination Fee	\$220	\$110
Utility issue fee	\$1,510	\$755
Issue fee for issuing each original patent, except a design or plant patent, or for issuing each reissue patent.		
Maintenance Fee at 3.5 yrs	\$980	\$490
Maintenance Fee at 7.5 yrs	\$2,480	\$1,240
Maintenance Fee at 11.5 yrs	\$4,110	\$2,055

For more about Patent fee regulations go to:

http://www.uspto.gov/web/offices/pac/mpep/documents/appxr_1_18.htm

§ 1.27 Definition of small entities

(a) Definition of small entities. A small entity as used in this chapter means any party (person, small business concern, or nonprofit organization) under paragraphs (a)(1) through (a)(3) of this section.

(1) Person. A person, as used in paragraph (c) of this section, means any inventor or other individual (e.g., an individual to whom an inventor has transferred some rights in the invention) who has not assigned, granted, conveyed, or licensed, and is under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention. An inventor or other individual who has transferred some rights in the invention to one or more parties, or is under an obligation to transfer some rights in the invention to one or more parties, can also qualify for small entity status if all the parties who have had rights in the invention transferred to them also qualify for small entity status either as a person, small business concern, or nonprofit organization under this section.

(2) Small business concern. A small business concern, as used in paragraph (c) of this section, means any business concern that:

(i) Has not assigned, granted, conveyed, or licensed, and is under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention to any person, concern, or organization which would not qualify for small entity status as a person, small business concern, or nonprofit organization; and

(ii) Meets the size standards set forth in 13 CFR 121.801 through 121.805 to be eligible for reduced patent fees. Questions related to standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW., Washington, DC 20416.

CAD drawings of the figures may be obtained for \$100 to \$200 each. Patent attorneys will supply the names of patent drawing draft-persons or they may be found on the internet.

The basic fee entitles the applicant to present twenty (20) claims, including not more than three (3) in independent form.

An additional fee is required for each claim in independent form which is in excess of three (3) and an additional fee is required for each claim (whether independent or dependent) which is in excess of a total of twenty (20) claims.

If the application contains multiple dependent claims, additional fees are required.

Patent attorney fees for the, “Dishwasher Trays” patent application below are in the range of \$18,000 to \$36,000.

3.0 Patent Specification Declaration

A copy of an application for a utility patent with the U.S. Patent Office written by John Andrew, P.E. author of this course, is presented below. It is an example containing typical elements of a complete patent specification.

a. Comments explaining this patent application have been inserted and are underlined.

b. Each topic in the patent application must begin on a separate page.

c. A customer number form was downloaded from www.uspto.gov, hard copy signed, and U.S. Post Office mailed to the Patent Office. The customer number, XXXXX, was then obtained by mail from the Patent Office.

d. The customer number is required when filing for a patent on-line.

e. If applying for a patent by US mail: The small entity fee for a patent application is double the online fee.

f. Each claim is one sentence specifying the features of the invention that are novel and useful.

g. The patent specification should be formatted:

Font: Arial.

Font size: 12.

Line spacing: Double

3.1 Patent Application

The patent application begins with a declaration naming the invention, identifying the Inventor, and the filing date.

CUSTOMER NUMBER XXXXX John Robert Andrew

DISHWASHER BASKETS METHOD AND APPARATUS

As below named inventor, I hereby declare that my residence, post office address, and citizenship are as sighted below next to my name and I believe that I am the original, first, and sole inventor of the subject matter which is clammed and for which a patent is sought on the invention, the specification of which is attached hereto under the following title:

“Dishwasher Baskets Method and Apparatus”

I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically refereed to in the oath and declaration. I acknowledge a duty to disclose information which is material to the examination of this application in accordance with Title 37, code of the Federal Regulations, Section 1.56 (a). I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, Section 1001, and that such willful false statements may jeopardize the validity of application or any patent issued thereon.

Please send correspondence and make telephone calls to the inventor below:

Signature: Sole/First Inventor: _____

3.2 Similar Patents Compared

A list of patents, each specifying a similar apparatus follows below, starting on a separate page.

DISHWASHER BASKETS METHOD AND APPARATUS

Inventor: Andrew; John R. (Piedmont, SC)

Assignee: None

Appl. No.: XXXXX

Filed: Date

Current U.S. Class: 312/301 ; 312/311
Current International Class: A47L 15/50 (20060101)
Field of Search: 312/301,311,334.21,298,299

References Cited [Referenced By]**U.S. Patent Documents**

<u>2648588</u>	August 1953	Ruspino
<u>2739025</u>	March 1956	Stoddard
<u>3124251</u>	March 1964	Guth
<u>3126098</u>	March 1964	Geiger et al.
<u>3167183</u>	January 1965	Claywell et al.
<u>3181924</u>	May 1965	Guth
<u>3245742</u>	April 1966	Lampman
<u>3466109</u>	September 1969	Kauffman et al.
<u>3556625</u>	January 1971	Kauffman
<u>3727622</u>	April 1973	Jacobs
<u>3736037</u>	May 1973	Doepke
<u>3822085</u>	July 1974	Clark
<u>3837917</u>	September 1974	Jenkins et al.
<u>3861769</u>	January 1975	Jenkins
<u>4046261</u>	September 1977	Yake
<u>4183437</u>	January 1980	Crawford et al.
<u>4475656</u>	October 1984	Collier
<u>4917248</u>	April 1990	Friskney
<u>5462348</u>	October 1995	Ellingson et al.

3.3 Abstract of the Invention

Below is the "Abstract", a short one paragraph summary of the invention, on a separate page. Note the double line spacing.

DISHWASHER BASKETS METHOD AND APPARATUS

Inventor: John R. Andrew, 211 Easley Highway, Piedmont, S.C. 29602.

ABSTRACT OF THE INVENTION

[0001] The invention is directed to reduce the time and effort to unload dishwashers by providing baskets for holding all of the dishes, cups, glasses, knives, forks, spoons, and

utensils to be washed and dried. The same baskets filled with washed and dried items are carried by hand to and placed on conventional kitchen cupboard shelves. A duplicate set of empty baskets replace the full baskets removed from the dishwasher. The duplicate baskets may be used to collect dishes, glasses, etc. at a table, carry them, and load them more quickly and conveniently into a dishwasher.

3.4 Prior Art

“The Prior Art” refers a summary of the similar patents listed above. The unique features of each of these existing patents must be described. The features which make the present application novel or improved are also described. Note that each paragraph is numbered.

THE PRIOR ART

[0002] U.S. Patent No. 5,462,348, entitled “Dishwasher Utensil Tray,” relates to a utensil tray or basket for holding long utensils in a dishwasher. The utensil rack is supported on the upper perimeter edge of a conventional dish rack. The primary objective of the utensil tray is to hold spatulas and other long objects that a silverware basket will not conveniently hold. Another objective is the provision of a utensil tray that is slidably or rollably supported. Yet another objective is to provide a utensil tray that is easily removed from the dishwasher when it is not needed.

[0003] The present invention also provides a removable dishwasher tray or basket supported by a rack. However the method and apparatus of the present invention allows the basket filled with washed and dried items to be removed from the dishwasher and placed by hand quickly and conventional on a shelf and provides a second empty tray or basket to replace the aforesaid filled basket in the dishwasher rack. Furthermore the present invention provides a plurality of baskets for unloading all of the: dishes, cups, glasses, cutlery, and long utensils completely, quickly, and conveniently and place them on a conventional kitchen shelves and provides a duplicate plurality of empty baskets that replace the filled baskets removed from the racks of a dishwasher.

[0004] U.S. Patent No. 3,556,625, entitled “Rack for a Front-Opening Dishwasher” provides an upper dishwasher rack having one removable basket hooked on each side of the rack. The two removable baskets are vertically adjustable up and down. It is an object that each of the removable baskets may be removed, carried by hand to a dining table, filled with dishes or glasses, and carried back to the dishwasher and the two aforesaid baskets hooked to opposite sides of the rack.

[0005] The present invention also provides removable dishwasher baskets supported by a rack. However the method and apparatus of the present invention provides removable baskets filled with all washed and dried items to be removed from the dishwasher and the same baskets filled with washed items placed by hand quickly and conventional on a shelf. The present invention provides a second set of empty baskets to replace the aforesaid filled baskets in the dishwasher racks. The duplicate baskets of the present invention may be used to collect dishes, glasses, etc. at a table, carry them, and load them more quickly and conveniently into a dishwasher.

[0006] The twenty-two U.S. Patents listed below do not provide a method or apparatus for unloading a dishwasher completely, quickly, and conveniently as does the present invention.

3.5 Background of the Invention

The “Background of the Invention” below, describes the present state of the art listing needs that are not satisfied by existing patents.

BACKGROUND OF THE INVENTION

[0029] Conventional dishwashers have a plurality of dish racks. The racks typically are of rectangular lattice structure adapted to hold dishes, cups, glasses, cookware, utensils, and cutlery. One of the racks is usually equipped with a removable silverware basket for holding knives, forks, and spoons. Some time after the dishwasher has completed its washing and drying process, each dish, cup, glass, cookware, utensil, and cutlery item is carried by hand to cupboards and placed on shelves. Typically the removable silverware basket for holding knives, forks, and spoons is removed from the dishwasher and carried by hand and placed near to a storage drawer. Each knife, fork, and spoon is then removed from the silverware basket and inserted into the storage drawer. Unloading dishes, cups, glasses, cookware, utensils, and cutlery, knives, forks, and spoons from a conventional dishwasher and placing them in storage cupboards and drawers is very time consuming. The present invention provides a method and apparatus for reducing the time and effort required to unload a dishwasher and place the washed items in storage areas rapidly.

3.6 Summary of the Invention

The “Summary of the Invention” describes in words, not drawings, the “embodiments” or “objects” of the present invention.

SUMMARY OF THE INVENTION

[0030] The first embodiment of the present invention is a plurality of removable rectangular open baskets resting on and filling the floor of upper and lower racks within a front loading dishwasher washing chamber holding items to be washed and dried and the same removable baskets transport and continue to hold all of the washed items on conventional kitchen cupboard shelves.

[0031] The second embodiment of the present invention is the provision of a second plurality of empty removable baskets of lattice construction for holding: dishes, glasses, cups, cutlery, utensils, and other washed items, the second set of baskets, stored temporarily within adjacent conventional cupboards, for replacing the first set of removable baskets within the washing chamber of the aforesaid dishwasher.

[0032] The third embodiment of the present invention is an improved front loading dishwasher having removable baskets hanging on at least one telescoping tube assembly in the washing machine washing chamber.

3.7 Brief Description of the Drawings

A brief description of the drawings is given below. Figure 1 should be an assembly drawing including all or most of the novel features. It will appear on the first page of the patent shown in the Patent Office web site. The drawings or figures, bring to practice or practical application the invention and replace the need for a prototype or working model.

BRIEF DESCRIPTION OF THE DRAWINGS

[0039] FIG. 1 is an isometric view of a conventional dishwasher having upper and lower racks supporting removable baskets and an adjacent conventional cupboard holding baskets full of washed items and empty baskets in accordance with the present invention.

[0040] FIG. 2 is an enlarged isometric view of cupboard of FIG. 1 holding baskets full of washed items and empty baskets.

[0041] FIG. 3 is an isometric view of a second embodiment of the present invention, a front loading dishwasher having removable baskets each hanging from telescoping tube assemblies in the uppermost portion of the washing chamber and additional removable baskets supported by a conventional rack in the bottom of the washing chamber.

[0042] FIG. 4A is a partial side section view of the dishwasher of FIG. 3 taken along line A-A.

[0043] FIG. 4B is an enlarged partial side section view of the uppermost portion of the washing machine chamber of FIG. 4A with telescoping tube assemblies extended beyond the washing chamber 6.

[0044] FIG. 4C is a partial side sectioned view along the central axis of the telescoping tube assembly of FIG. 4B.

[0045] FIG. 5 is a plan section view taken along line B-B of the dishwasher of FIG. 4A.

[0046] FIG. 6 is a plan section view taken along line C-C of the dishwasher of FIG. 4A.

[0047] FIG. 7 is an isometric view of the lower rack of the dishwasher of FIG. 1 and FIG. 3 having an open rectangular widely spaced lattice structure having one wheel adjacent to each of the four corners.

[0048] FIG. 8A is an isometric view of an embodiment of the present invention a dish frame, having inverted U-shaped wire members.

[0049] FIG. 8B is an isometric view of the dish fame of FIG. 8A holding three dishes.

[0050] FIG. 9 is an isometric view of a conventional upper dishwasher rack slide ably or roll ably supported by one conventional telescoping rail on each side said rack supporting the dish frame of FIG. 8A.

[0051] FIG. 10A is an isometric view of a rectangular open basket of lattice structure.

3.8 Preferred Embodiments

The Preferred Embodiments is a summary of improvements and needs satisfied by the invention. Each component of the invention is numbered in the drawings, called figures, and the FIT, FORM, and FUNCTION of each part is included. The wording should describe each item so completely that the figures are not required.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0061] In the drawings of the present invention, the reference numeral 1 generally designates a conventional front loading dishwasher improved by the addition of removable baskets of FIGURES: 8A, 10A, 10A, 12, 13, 15, 16A, 16b, and 16C, and a

telescoping tube assembly FIG. 4C for supporting the hanging baskets in the dishwasher of FIG. 3 and the cupboard of FIG. 2 described herein and in the attached figures.

[0062] Fig.1 illustrates a conventional front loading dishwasher 1 having a door 2 in the fully open position supporting a conventional lower rack FIG. 9, said rack having two wheels 16 on each side, two wheels 16 are supported and guided by one groove 3 on each side of the top surface of door 2, the two grooves 3 continue along the two sides of the washing chamber 6. The dishwasher is installed under a conventional kitchen counter 9 adjacent to a conventional cupboard FIG. 2.

[0063] FIG. 2 is a magnified view of the cupboard of FIG. 1. Fig. 8A is an empty dish frame hanging on a telescoping tube assembly of FIG. 4C. Fig. 13 is the pair of empty baskets nesting together and supported by a conventional shelf. Fig. 15 is four of empty baskets nesting together and supported by a conventional shelf. Fig. 10B is a basket filled with washed and dried glasses and supported by a conventional shelf. Fig. 8B is a frame with three washed and dried dishes and supported by a conventional shelf.

[0064] FIG. 3 is an isometric view of a novel dishwasher generally 10 in accordance with the present invention. Dishwasher 10 is conventional in all respects with exceptions X and Y:

Exception (A): the upper rack with telescoping rails FIG. 9 has been removed and in their place telescoping tube assembly 11 supports dish frame FIG. 8B holding dishes and telescoping tube assemblies 12, and 13 support a basket FIG. 16B filled with glasses. The construction of the telescoping tube assemblies 12, 13, and 14 is illustrated in FIG. 4C.

Exception (B): the lower rack FIG. 14, described in detail in FIG. 7, supporting the four baskets of FIG. 15, has a substantially flat bottom. Conventional dishwasher racks have upstanding structures for supporting dishes, glasses, etc. and cost more to manufacture than the flat bottom rack FIG. 7 of the present invention.

[0065] FIG. 4A is a side sectioned view along line A-A of the dishwasher generally 10 of FIG. 3 having conventional door 2 with two grooves 3. Telescoping tube assembly 12 is retracted into conventional washing chamber 6 of dishwasher 10. Suspended from telescoping tube assemblies 12 and 13 are two baskets holding glasses of FIG. 16B. The flat bottom rack FIG. 7 holds baskets FIG. 16A and FIG. 16C and is movable out of washing chamber 6 onto fully open door 3 by wheels 16 rolling means in two grooves 4.

[0066] FIG. 4B is an enlarged partial side sectioned view along line A-A of the dishwasher 10 of FIG. 3. Telescoping tube assembly FIG. 4C is extended beyond the front opening of washing chamber 6 and supports baskets FIG. 16A and FIG. 16C.

[0067] FIG. 4C is a side sectioned view along the central axis of the telescoping tube assembly of FIG. 4B. Inner tube 55 is fixedly attached to washing machine chamber wall 19 opposite the chamber front opening and is inserted into outer tube 56. Knob 57 is fixedly attached to the end of outer tube 56 at the end opposite to wall 19. Outer tube 56 slides freely on inner tube 55 when knob 57 is pulled or pushed manually. Ring 58 encircles outer tube 56 and is fixedly attached to the end nearest wall 19. Ring 58 engages a handle of the aforementioned hanging baskets ensuring that they move outwardly from the washing chamber when outer tube 56 slides away from wall 19. Detent 59 in inner tube 55 engages hole 60 in outer tube 56 preventing tube 56 from sliding off inner tube 55. Holes 62 through inner tube 55 and holes through outer tube 56 allow trapped water to escape.

[0068] FIG. 5 is a top sectioned view taken along line B-B of the dishwasher of FIG. 4A. The wheels 16 of bottom rack FIG. 7 are supported and guided in grooves 4 in the bottom of washing chamber 6. Grooves 4 continue in the top surface of door 3. Bottom

rack FIG. 7 supports the baskets of: Fig. 8A, FIG. 10A, and FIG. 15. Basket's Fig. 8A, FIG. 10A, and FIG. 15 are not shown in this figure for the added clarity.

[0069] FIG. 6 is a top sectioned view taken along line C-C of the dishwasher of FIG. 4A. Door 3 is in the open position revealing the two aforementioned grooves 4 below and lower rack FIG. 7 is removed for clarity. Two baskets of FIG. 16A hang on the two telescoping tube assemblies of FIG 4C. Also one telescoping tube assembly of FIG 4C is shown in the upper right portion of washing chamber 6.

3.9 Claims

The claim or claims are next. "I claim", "We claim", "What is claimed" are typical headings for this part of the patent application. Each claim is a single sentence specifying the benefits, improvements, and needs satisfied by the apparatus in this Utility Patent Application. The apparatus is described in words, not drawings.

CLAIMS

I claim:

- [0086] 1. In a conventional front loading dishwasher having a washing chamber containing upper and lower racks movable outside and inside the washing chamber, for reducing the time and effort to unload the washed and dried items comprising:
- (a) upper and lower racks, each of open rectangular lattice structure comprising a plurality of welded wire members having a flat bottom and upstanding walls on four sides, each of said upper and lower racks essentially filling the horizontal cross section of the washing chamber.
 - (b) a first plurality of removable baskets for holding all: dishes, cups, glasses, cutlery, and utensils to be washed, said baskets filling said upper and lower racks,
 - (c) a second duplicate plurality of empty removable baskets for replacing said first plurality of filled removable baskets in the aforesaid dishwasher upper and lower racks.
- [0087] 2. The plurality of removable baskets of claim 1 wherein one or more of the removable baskets have handles or hooks for carrying by hand and hanging on hooks or rods.
- [0088] 3. The plurality of removable baskets of claim 1 of lattice construction, each of said baskets after the largest basket having successively smaller lateral dimensions for stacking, or inserting into the next larger basket.
- [0088] 4. removable baskets of claim 1 having handles or hooks for hanging on said horizontal telescoping tubes.
- [0090] 5. a pair of baskets or dish frames of claim 1, each having a welded wire structure of inverted U-shaped wire members and one handle at each end, adapted for standing on a dishwasher rack, conventional kitchen shelf, or hanging from said handles. The bottom ends of each inverted U-shaped wire members are welded to a longitudinal base wire and a stiffening wire on each side of the structure.
- [0090] 6. An improved front loading dishwasher comprising:
- (a) at least one horizontal telescoping cantilever tube, fixedly attached to the washing chamber inside wall opposite from the door opening, extending essentially to the inside surface of the door, having a plurality of water drainage holes for supporting baskets hanging on said telescoping tube,

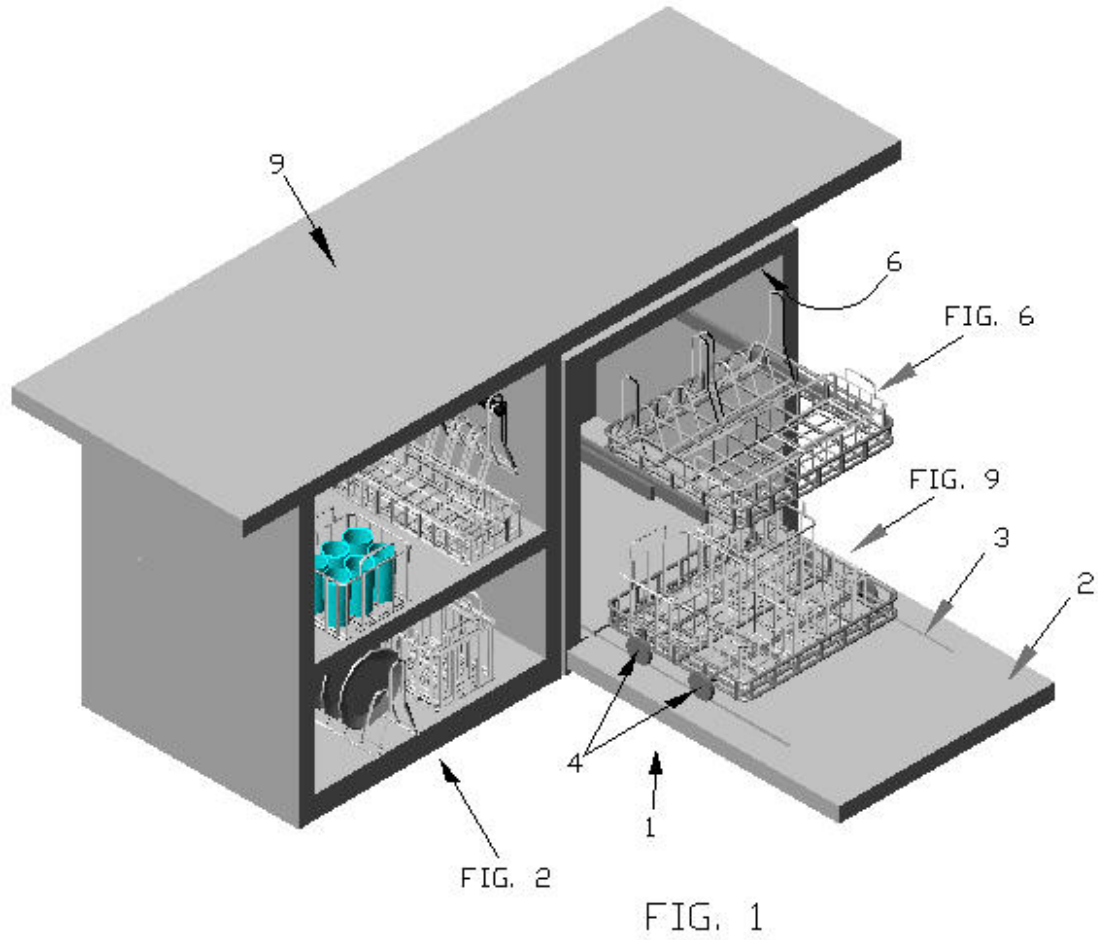
(b) a first plurality of removable baskets having handles or hooks for hanging on horizontal telescoping tubes, said baskets for holding: dishes, cups, glasses, cutlery, and utensils to be washed.

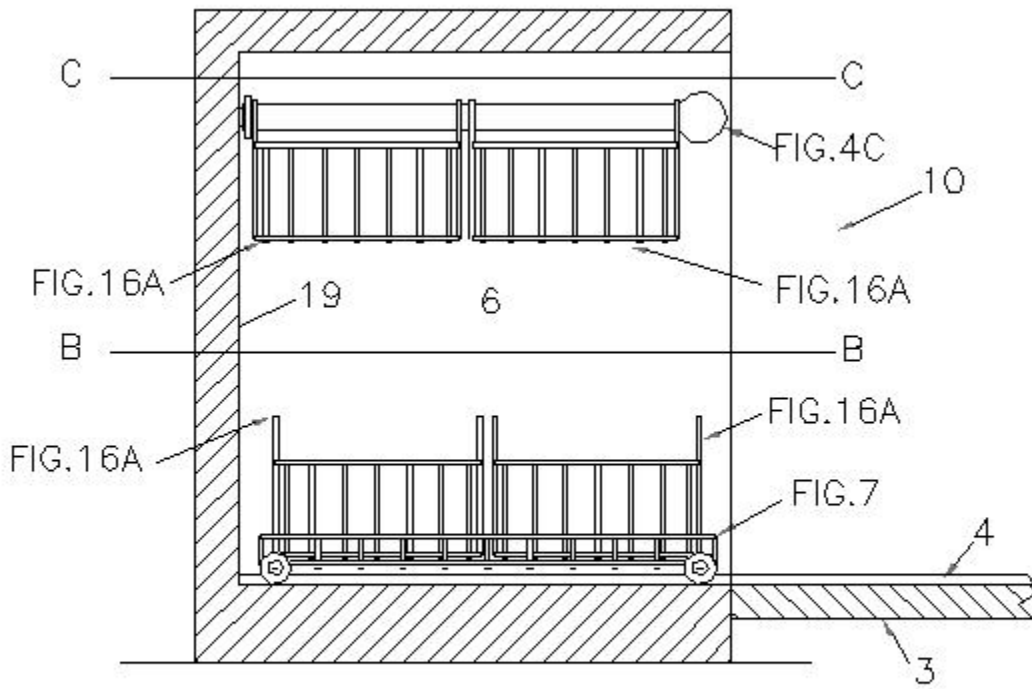
(c) a plurality of removable baskets having handles or hooks for replacing said first plurality of filled removable baskets hanging on said horizontal telescoping tubes.

3.10 Figures or Drawings

The drawings, called figures, “Reduce the Invention to Practice” and are the last part of this patent application. Each figure, abbreviated “FIG.” illustrate the apparatus and number each component. Arrows point “in general” to assemblies and short lines with numbers identify individual parts. The drawings or figures may be two or three dimensional. Cross sectional views are hatched and their location must be specified in other figures. Multiple figures of the same apparatus are used to illustrate door open, door closed, etc. There is no limit to the number of figures. Figures included illustrate there function in the patent application. Some figures add nothing to the course and have been omitted.

DISHWASHER BASKETS METHOD AND APPARATUS DRAWINGS





SECTION A-A
FIG. 4A

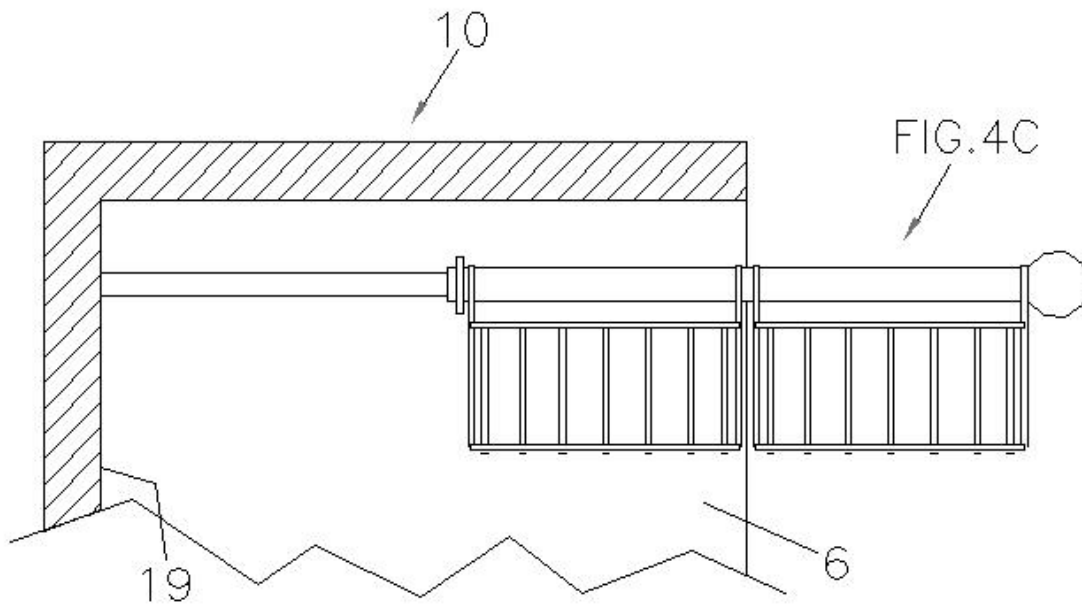
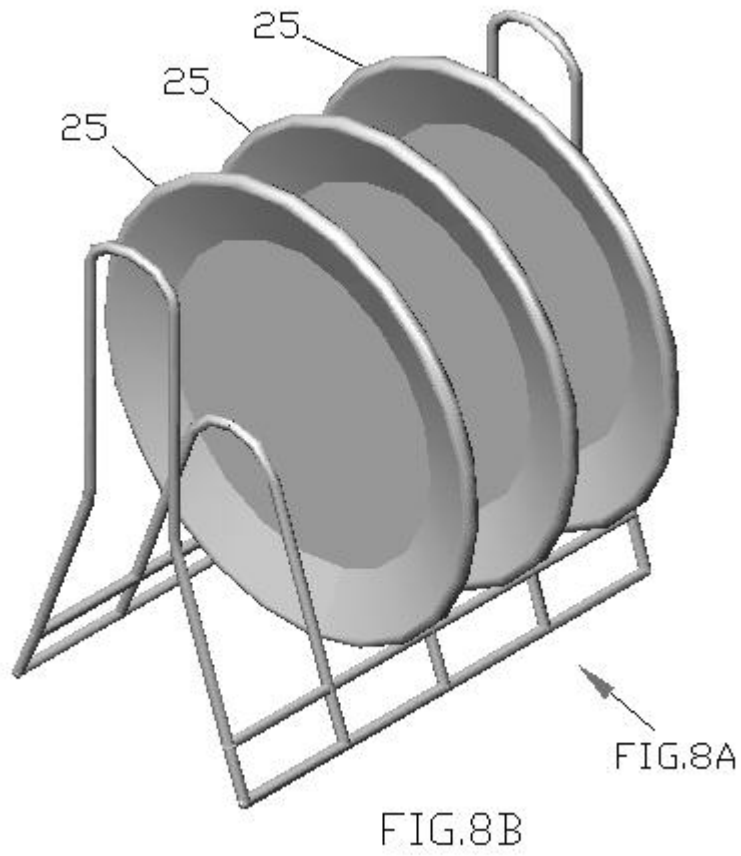


FIG. 4B



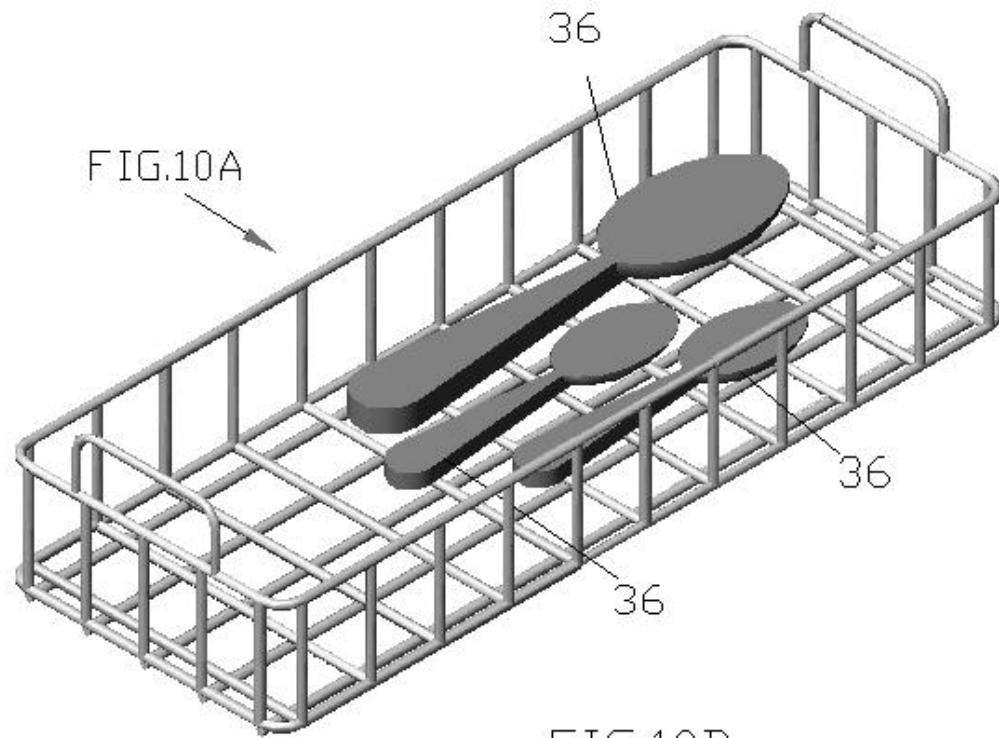
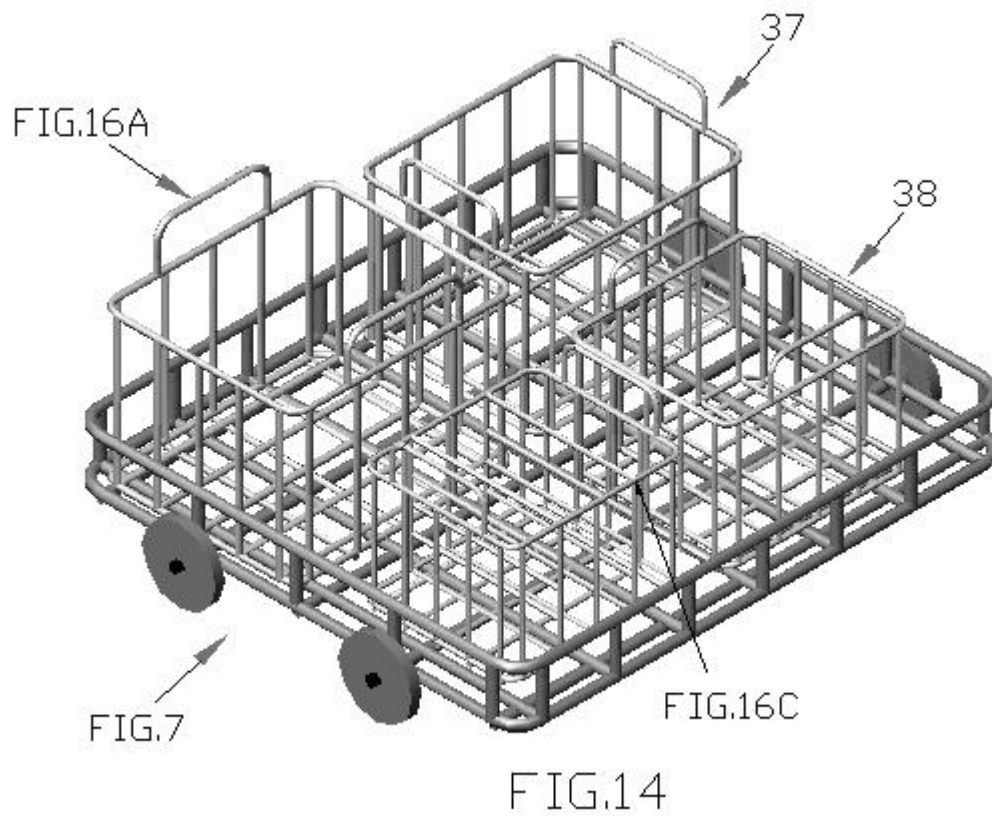
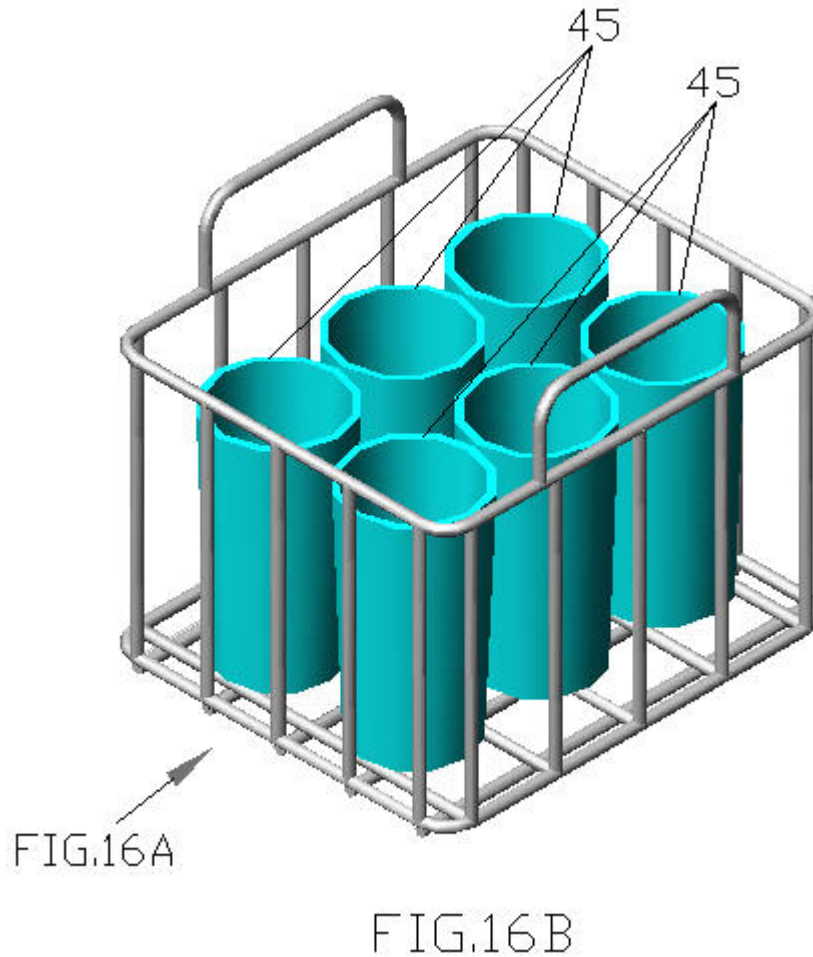


FIG.10B





4.0 Filing a Patent Online Summary

The online patent application steps below show that the Utility patent application fee for a small entity is \$75. A single person is a small entity. An individual or small group can be a “small entity”. A large corporation would have to pay a higher patent application fee.

- a. Filing a patent application on the Internet saves time and money.
- b. Please study the US Patent Office WEB pages to be found at www.uspto.gov and copied below.
- c. A customer number form must be downloaded from www.uspto.gov, signed, and mailed to the Patent Office. A customer number, XXXXXX, will then be obtained by mail from the Patent Office by mail.
- d. Select, “Patents, File, Search, View+” at the Patent Office Home Page.
- e. The page below will open.

f. Pick, “File, EFS-Web Unregistered eFilers (Basic initial filing)”

EFS Unregistered

Unregistered eFilers | Please Read Announcements | Application Data | Attach Documents | Review Documents | Calculate Fees | Confirm & Submit | Pay Fees | Receipt

Application Data

A submission has not been filed officially at the USPTO until the e-filer executes the Submit function and the documents are received at the USPTO. The Acknowledgement Receipt is evidence of this submission.
All items denoted by * are required.

* Title of Invention

Attorney Docket Number

First Named Inventor:

*First Name

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h. Pick, “Continue”.

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