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(54) Rotating dining table with automatic food waste collector

(57) The invention herein relates to a kind of rotating dining table with automatic food waste collector that is equipped with a number of drawer-type food waste containers underneath the table edges and the container bottoms are of double-layer plate construction and, furthermore, structurally configured such that the food waste containers are attached to high tensile coil springs (122) which provide for positioning and down-

ward pressure. The table leg (2) of the dining table is hollow column that is clipped onto the aforesaid table and which holds a garbage bucket (23) inside. On the table leg are numerous angled bands extending upward to the food waste containers that are enabled when the food waste containers are rotated.

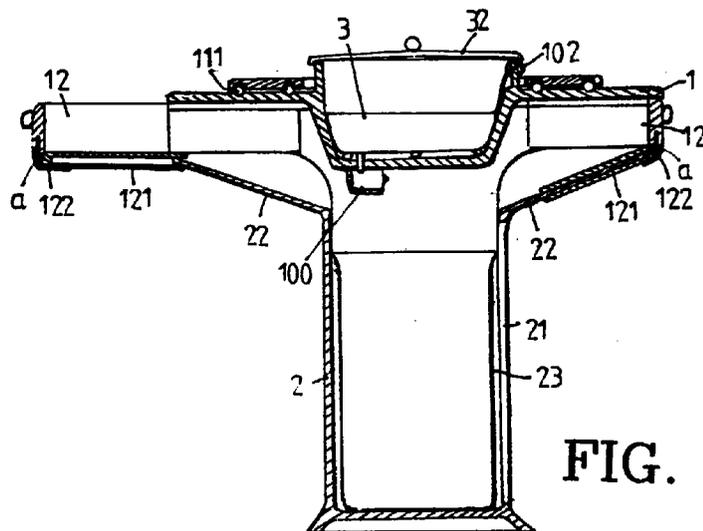


FIG. 3

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**Description**

**BACKGROUND OF THE INVENTION**

5 With the rise of living standards the opportunities for eating out have increased. Contributing to optimal conditions for eating out, the kitchen is not the only major point of consideration. Table arrangement is also decisive in importance. Conventional table arrangements mainly accommodate the placement of dishes as well as unwanted food, which is often scattered onto the table or even onto the floor. Generally unsightly, the latter situation does not actually comply with health requirements and is among the shortcomings of the conventional art.

10 Furthermore, there are two methods of placing settings on dining tables in restaurant management. The first method involves prior placement on the table, which is conducive to dust and insect contamination and does not meet sanitation standards. In the second method, dishes are piled on the table and arranged by service personnel when guests arrive. Although the latter approach is more hygienic, it is inconvenient and is yet another shortcoming of the conventional art.

15 In view of the foregoing situations, the inventor of the invention herein has devoted thought to improvement and following many years of experimentation, extensive testing and further modification finally developed a solution to the aforementioned shortcomings.

The invention herein is a rotating dining table with automatic food waste collector that consists of drawer-type food waste containers having double-level bottoms installed under the table edges and angled bands along the circumference of the supportive table leg, such that when the food waste containers are opened, the container bottoms slant downward and causes the food waste to be automatically collected into the garbage bucket inside the hollow column of the table leg, which is the major objective of the invention herein.

20 The invention herein is a rotating dining table with automatic food waste collector and the design of the table surface features a recess in the center for a dish drying machine that provides for the placement of dishes and, furthermore, offers convenience and sanitation functions, which is among the design objectives of the invention herein.

25 To enable a further understanding by the examination committee of the aforementioned objectives as well as the innovative structure and technological means encompassed by the invention herein, the brief description of the drawings and the detailed description of the invention herein are attached below.

30 **[1] BRIEF DESCRIPTION OF THE DRAWINGS**

- Figure 1 is an isometric drawing of the invention herein.
- Figure 2 is an exploded drawing of the invention herein.
- Figure 3 is a cross-sectional drawing of the invention herein.

35 **[2] PARTS OF THE DRAWINGS**

(1) Table surface	(11) Tabletop
(111) Ball bearing	(112) Center hole
(12) Food waste container	(121) Container bottom
(122) High tensile coil spring	(2) Table leg
(21) Door	(22) Angled band
(23) Garbage bucket	(3) Dish drying machine
(100) Water storage container	(32) Cover
(13) Slide track	

40 **DETAILED DESCRIPTION OF THE INVENTION**

The rotating dining table with automatic food waste collector of the invention herein consists of a table leg (2) that supports a tabletop (1) and, furthermore, integrates a dish drying machine (3), as indicated in FIG. 1 and FIG. 2, of which:

45 The tabletop (1) is comprised of a table leg (2) positioned in the center that has a level plate inside, with a slide track (13) facilitating contact between the ball bearing (111) and the tabletop (11) which enables easy rotation of the tabletop

(11), and positioned at the center is a recess (10) that accomodates the installation of the dish drying machine (3), and underneath the aforesaid recess (10) is a water storage container (100) and there is a small hole (101) through the top of the water storage container (100) that is directly connected to the water discharge pipe of the dish drying machine (3), and power connection switch (102) of the dish drying machine (3) is mounted in the upper rim of the recess (10); there is a center hole (112) in the middle of the tabletop (11) that holds the dish drying machine (3) and the slide track (13) along the table surface in positioned against the ball bearing (111); a number of drawer-type food waste containers (12) are installed laterally below the edge of the table surface (1), and have double-layer hollow container bottoms (121) that are clipped to the aforesaid drawer-type food waste containers (12); a hinge pin (a) is utilized in the container bottoms (121) as a component for fastening the food waste containers (12) to the high tensile coil springs (122) providing downward tension below the food waste containers (12) and functions to seal against water leakage.

The table leg (2) structurally consists of a hollow column of short length having a laterally installed door (21) and that holds a garbage bucket (23) and has angled bands (22) projecting upwards to the food waste containers (12); the pointed ends of the aforesaid angled bands (22) extend into the clip layers on the container bottoms (121) of the food waste containers (12) such that when the food waste containers (12) are closed, the lead tension of the angled bands (22) causes the container bottoms (121) to slant downward and the food waste consequently slides into the garbage bucket (23) inside the table leg (2).

The dish drying machine (3) is installed within the recess (10) at the center of the table surface (1) and the water discharge pipe is directly inserted into the small hole (101) of the recess (10) to drain the residue-laden water collected from the dishes washed and, furthermore, a round cover (32) is placed on the rim of recess (10) to maintain sanitation and cleanliness.

When the rotating dining table with automatic food waste collector of the invention herein is utilized, the food waste containers (12) can be drawn out for removal, a which time the pointed end of the angled bands (22) extend into the clip layers on the container bottoms (121) of the food waste containers (12), and the downward pressure of the high tensile coil springs (121) at the container bottoms (121) of the food waste containers (12) horizontally seals the undersides of the food waste containers (12) to prevent leakage of liquid food waste, as indicated at the left in FIG. 3; when the meal is completed, the food waste containers (12) are closed by pushing forward and the lead tension of the angled bands (22) causes the container bottoms (21) to slant downward, whereupon the food waste automatically slides into the garbage bucket (23) inside the table leg (2) and achieves the automatic collection function, as indicated at the right in FIG. 3.

The rotating dining table with automatic food waste collector of the invention herein consists of angled bands (22) on the table leg (2) that pull the container bottoms (121) of the food waste containers (12) into a slanted disposition to thereby enable the automatic collection of food waste, which is among the major design innovations of the invention herein.

The rotating dining table with automatic food waste collector of the invention herein consists of a table surface (1) that holds a dish drying machine (3) which ordinarily provides for the sanitary placement of dishes that can be conveniently retrieved and placed when guests arrive, and this also among the major design innovations of the invention herein.

In summation of the foregoing description, the rotating dining table with automatic food waste collector of the invention herein consists of a structure that enables the automatic collection of food waste, the convenient placement of dishes and other advantageous and, furthermore, the aforementioned structure has never been publically observed before and complies with the new invention requirements of "practicality" and "originality," and is hereby submitted in application to the examination committee for the granting of the commensure patent rights duly deserved by the inventor of the invention herein.

**Claims**

1. A rotating dining table with automatic food waste collector, comprising:

(a) a rotatable table top (11) supported by a fixed table part (1) and at least one table leg (2);

(b) a waste receptacle (23) within the table leg (2); and

(c) a plurality of waste containers (12) distributed about the periphery of the fixed table part (1) and openable outwardly to enable food waste to be placed therein, wherein the containers (12) are caused to slant downwardly when the containers (12) are closed so as to cause food waste collected in the containers (12) to be discharged into the waste receptacle (23).

2. A rotating dining table with automatic food waste collector, comprising a table leg (2) supporting a table surface (1)

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and a dish drying machine (3);

5 wherein a recess is provided at the center of the table surface (1) supported by the table leg, above which is the contact point between a ball bearing (111) and the table top (11), a hole being provided at the center of the table top (11), and, underneath the circumferential edge of the table surface (1), there are a number of drawer-type food waste containers (12), the bottoms of the containers (12) being connected by means of hinges to high tensile springs (122) which exert downward pressure to seal the containers (12), and the container bottoms being double-layer hollow clipped structures;

10 and wherein the table leg (2) consists of a hollow column of short length that holds a garbage bucket (23) inside and that has a laterally installed door (21) as well as angled bands (22) projecting upwards to the food waste containers (12), the pointed ends of the angled bands extending into the clip layers on the container bottoms, and, underneath the recess, is a water storage container (100), the power connection switch of the dish drying machine (3) being mounted in the upper rim of the recess.

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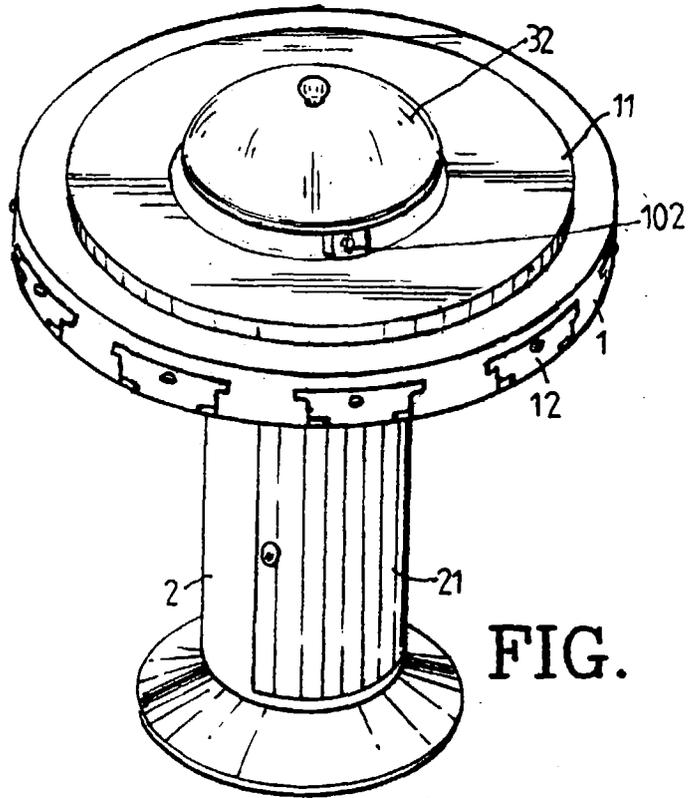


FIG. 1

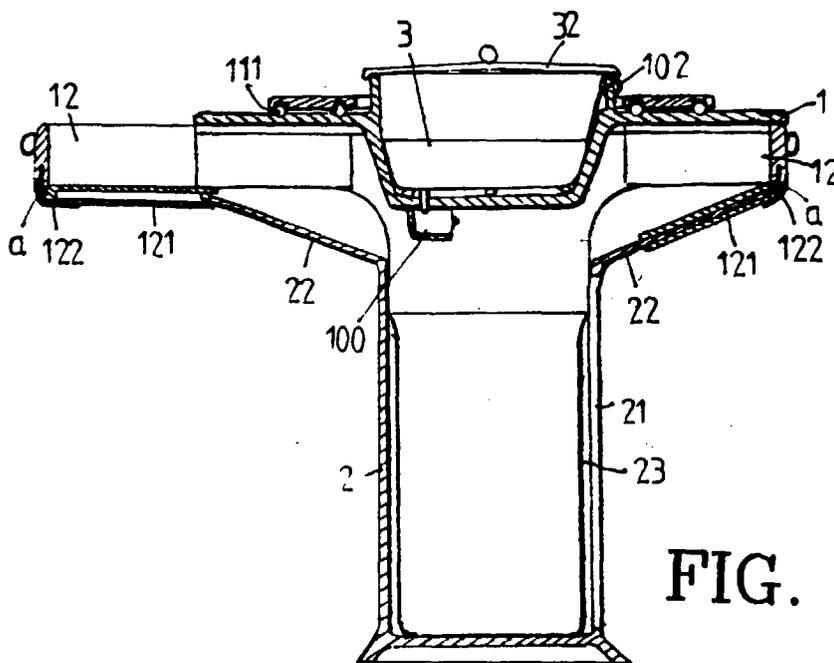


FIG. 3

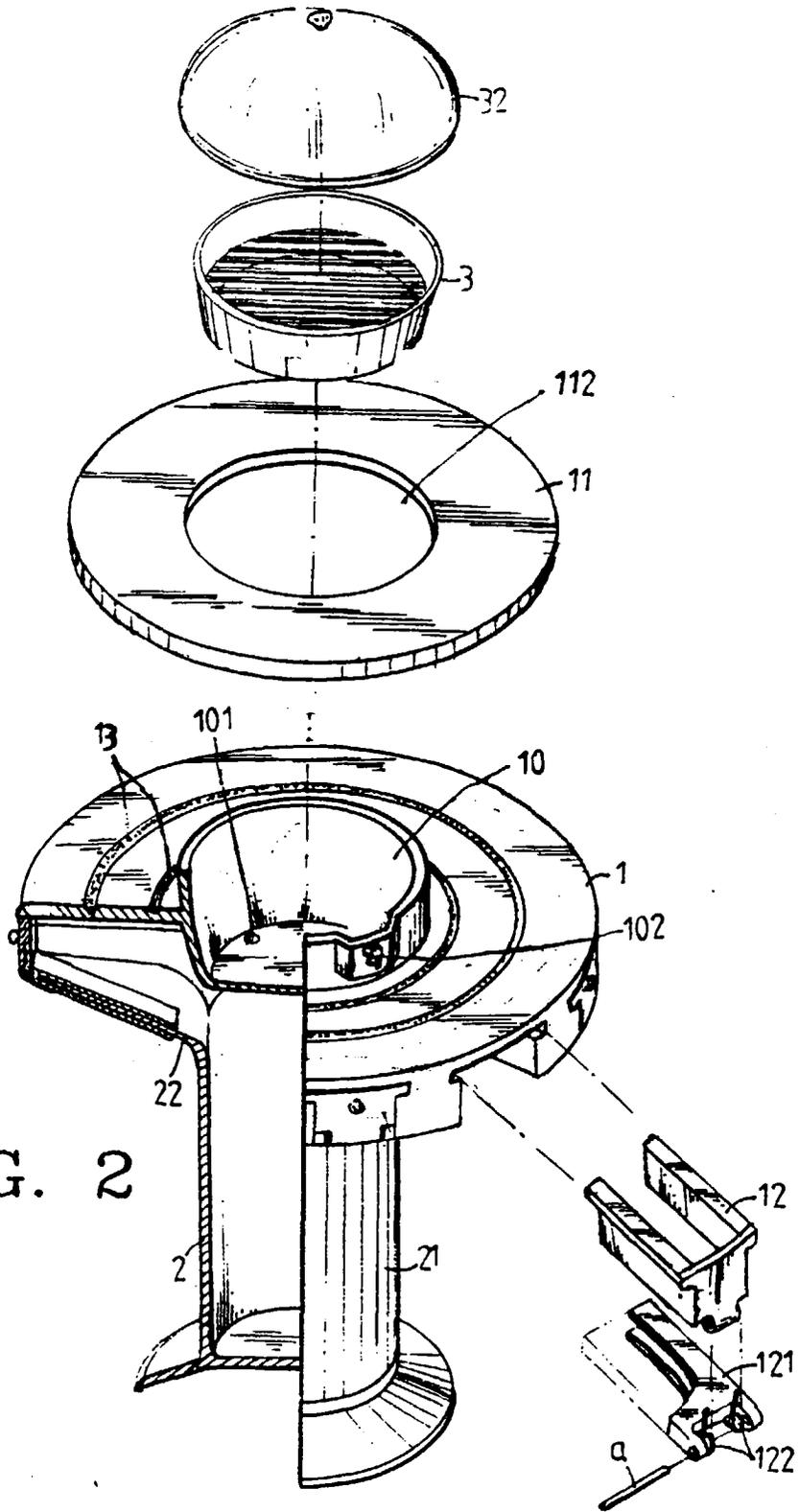


FIG. 2



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EUROPEAN SEARCH REPORT

Application Number  
EP 96 30 4552

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	DE-C-115 186 (UFFENHEIMER) * the whole document * ---	1	A47B37/00 B65F1/00
Y	US-A-1 385 762 (TOPOR) * figures 1-7 * ---	1	
A	US-A-3 851 599 (ALADDIN INDUSTRIES INCORPORATED) * the whole document * ---	1,2	
A	US-A-4 428 305 (CRESKE) * the whole document * ---	1	
A	DE-A-20 53 613 (FREYA-PLASTIC FRANZ DELBROUCK GMBH) * figures 1-12 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			A47B B65F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		19 November 1996	Noesen, R
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